SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
No. 14-107488- -00000-0000
Fecha: 2014-05-19 16:29:35 Dep. 2020 DIR.NUEVASCR
Tra. 11 PATENTEIYII Eve: 378 FASENACIONALI
Act. 411 PRESENTACION Folios: 11

Industria y Comercio

SUPERINTENDENCIA

DELEGATURA DE PROPIEDAD INDUSTRIAL

División de Nuevas Creaciones

SOLICITUD
PATENTE DE INVENCIÓN

21. **EXPEDIENTE No.** _____

54. **TÍTULO** PESTICIDAS HETEROCICLICOS SUSTITUIDOS CON 1,3-DIABILO

51. **CLASIFICACIÓN INTERNACIONAL** _____

71. **SOLICITANTE** E.I. DU PONT DE NEMOURS

DOMICILIO WILMINGTON, ESTADOS UNIDOS

74. **APODERADO** ALVARO CORREA

22. **BOGOTÁ, D.C.,** 19 de MAYO de 2014

Industria y Comercio
SUPERINTENDENCIA

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

No. 14-107488- -00000-0000

Fecha: 2014-05-19 16:29:35 Dep. 2020 DIR.NUEVASCR
Tra. 11 PATENTEIYII Eve: 378 FASENACIONALI
Act. 411 PRESENTACION Folios: 11

ivo de radicación

DIRECCIÓN DE NUEVAS CREACIONES
SOLICITUD FASE NACIONAL -PCT

1	**TIPO DE SOLICITUD**	☒ Patente de invención ☒ Capítulo I	☐ Patente de Modelo de Utilidad ☐ Capitulo II

2 DATOS SOLICITUD INTERNACIONAL PCT (86)

Solicitud Internacional No.	PCT/US2012/061948	**Fecha**	25/10/2012
Publicación Internacional No.	WO2013/063282	**Fecha**	02/05/2013

3 TÍTULO DE LA INVENCIÓN (200 caracteres o espacios máximos)

PESTICIDAS HETEROCICLICOS SUSTITUIDOS CON 1,3-DIARILO

4 CLASIFICACIÓN INTERNACIONAL (CIP)

A01N 43/56 (2006.01)

5 SOLICITANTE (S) ☐ Esta persona también es inventor. Para datos adicionales utilizar hoja de información complementaria

APELLIDOS O RAZÓN SOCIAL	NOMBRE	IDENTIFICACIÓN	TIPO
1. E. I. DU PONT DE NEMOURS AND COMPANY			

6 DATOS DEL SOLICITANTE

DIRECCIÓN	1007 Market Street Wilmington, Delaware 19899	No. TELÉFONO	6341500
CIUDAD	Wilmington	CORREO ELECTRÓNICO	Alvaro.correa@bakermckenzie.com
DEPARTAMENTO/ESTADO	Delaware	NACIONALIDAD O LUGAR DE CONSTITUCIÓN	Estados Unidos de América
PAÍS DE RESIDENCIA	Estados Unidos de América		

7 INVENTOR (ES) Para datos adicionales utilizar hoja de información complementaria

APELLIDOS	NOMBRES	NACIONALIDAD
1. PAHUTSKI,	Thomas Francis Jr.	Estados Unidos de América
2. LAHM,	George Philip	Estados Unidos de América
3. KAR,	Moumita	INDIA
4. AHMAD,	Omar Khaled	Estados Unidos de América

DIRECCIÓN DE CORREO ELECTRÓNICO:

8 DATOS INVENTOR (ES)

PAÍS RESIDENCIA	DEPARTAMENTO/ESTADO	CIUDAD	DIRECCIÓN
1. Estados Unidos de América	Maryland	Elkton	50 Gomer Court Elkton, Maryland 21921
2. Estados Unidos de América	Delaware	Wilmington	148 Fairhill Drive Wilmington, Delaware 19808
3. INDIA	Andhria Pradesh	Hyderabad	Saket Sriyam Flat No. 1308 Sumeru Block Saket Road Kapra Hyderabad Andhria Pradesh 500 062
4. Estados Unidos de América	Pennsylvania	Philadelphia	100 N. 17th Street, Apt. 1205 Philadelphia, Pennsylvania 19103

OTRO(S) SOLICITANTE(S) Y/O (OTRO(S)) INVENTOR(ES)

☐ Los demás solicitantes y/o (demás) inventores se indican en una hoja a continuación.

9 ☐ **REPRESENTANTE LEGAL** ☒ **APODERADO**

APELLIDOS	NOMBRES	IDENTIFICACIÓN
Correa	Alvaro	C.C . 79.143.366 T.P . 20.281

DIRECCIÓN	Av. 82 No. 10-62 Piso 5	No. TELÉFONO	6341500
CIUDAD	Bogotá	CORREO ELECTRÓNICO	Alvaro.correa@bakermckenzie.com
PAÍS	Colombia	No. RADICACIÓN DE PROTOCOLO DE PODER GENERAL	

10 DECLARACIONES DE PRIORIDAD ☒ SI ☐ NO

(33) PAÍS DE ORIGEN	CÓDIGO PAÍS	(31) NÚMERO	(32) FECHA (AAAA/MM/DD)
1. Estados Unidos de América	US	61/550,971	25/10/2011

11 DECLARACIÓN SOBRE USO DE RECURSOS GENÉTICOS O BIOLÓGICOS

Declaro que el objeto de la presente solicitud de patente fue obtenido a partir de recursos genéticos o biológicos de los que cualquiera de los países miembros de la Comunidad Andina es país de origen.

☐ SI ☒ NO

Nota: En caso afirmativo deberá anexar copia del contrato de acceso de recursos genéticos o productos derivados, o certificado o número de registro, expedido por la Autoridad competente.

12 DECLARACIÓN SOBRE USO DE CONOCIMIENTOS TRADICIONALES

Declaro que el objeto de la presente solicitud de patente fue obtenido a partir de conocimientos tradicionales de comunidades indígenas, afroamericanas o locales de países miembros de la Comunidad Andina.

☐ SI ☒ NO

Nota: En caso afirmativo deberá anexar la licencia o autorización de uso de conocimiento tradicional, o certificado, o número de registro expedido por la Autoridad competente.

13 REDUCCIÓN DE TASAS

Declaro que carezco de medios económicos para presentar la solicitud de patente.

☐ SI ☒ NO

Nota: En caso de ser persona natural y carecer de medios económicos, y por lo tanto, aplique la reducción de tasas a que se refiere la resolución vigente en tarifas, debe firmar la presente solicitud bajo la gravedad de juramento.

Micro, pequeñas y medianas empresas ☐

Universidades públicas o privadas ☐

Entidades sin ánimo de lucro ☐

Debe aportar los documentos que se indican en el numeral 17 de anexos

14 AUTORIZACIÓN DE NOTIFICACIÓN EN LÍNEA ☒ SI ☐ NO

Manifiesto que he leído y entendido perfectamente los términos y condiciones de uso de medios electrónicos para las notificaciones en línea a través de Internet de los actos administrativos proferidos por la Superintendencia de Industria y Comercio que deben ser notificados personalmente y, en consecuencia, autorizo el servicio de notificación a través de internet.

15	COMPROBANTE DE PAGO O PAGO ELECTRÓNICO	N°	Fecha

16 FIRMA DEL SOLICITANTE, DEL APODERADO O DEL REPRESENTANTE LEGAL

Junto a cada firma, indicar el nombre del firmante y su calidad (si tal calidad no es obvia al leer el petitorio)

17 ANEXOS

Documentación Técnica
Solicitud Internacional en castellano

1. ☒ Descripción — N° de folios:
2. ☒ Reivindicaciones — N° Reivindicaciones: 14
3. ☐ Dibujos y/o figuras — N° folios:

Documentación Jurídica

9. ☒ Poderes, si fuera el caso.
10. ☐ Documento que legalmente pruebe la cesión del inventor al solicitante o a su causante.
11. ☐ Copia del contrato de acceso de recursos genéticos o productos derivados, certificado o número de registro, si fuera el caso.

4. ☒ Resumen.
5. ☐ Certificado de depósito de material biológico si fuera el caso.
6. ☐ Listado de secuencias de nucleótidos y/o aminoácidos en forma digital si fuera el caso.
7. ☐ Arte final 12 x 12.
8. ☒ Anexo formato digital.

12. ☐ Copia de la licencia o autorización de Conocimientos Tradicionales, certificado o número de registro, si fuera el caso.
13. **Reducción de tasas**

Micro, pequeñas o medinas empresas

☐ Copia simple de la declaración de renta del año inmediatamente anterior, o en su defecto prueba documental idónea.

☐ Documento de constancia de cumplimiento con lo establecido en la ley 905 de 2004.

Universidades públicas o privadas

☐ Copia acto de reconocimiento institucional emitido por el Ministerio de Educación

Entidades sin ánimo de lucro

☐ Copia de registro vigente en Cámara de comercio.
☐ Hoja de información complementaria.
☐ Otros, especificar

14. ☒ Comprobante de pago de la tasa de presentación de la solicitud.
15. ☐ Comprobante de pago por reivindicación de prioridad.
16. ☐ Comprobante de pago de la tasa por concepto de excedente de palabras en la publicación.
17. ☒ Comprobante de pago por reivindicación adicional a 10.

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
NIT : 800.176.089-2
- / -

Industria y Comercio
SUPERINTENDENCIA

RECIBO DE CAJA

No. 13 - 0032744

Bogotá D.C., Abril 09 de 2013 - 12:10:39

RECIBIDO DE : BAKER NI 900.532.339

*** Soporte del Pago ***

TIPO PAGO	BANCO	CUENTA	No. PAGO	FECHA PAGO	VR PAGO
RECIBO DE CA	999999999	5524	18/01/2013		500.000.00
RECIBO DE CA	999999999	5525	18/01/2013		500.000.00
RECIBO DE CA	999999999	5526	18/01/2013		500.000.00
RECIBO DE CA	999999999	5527	18/01/2013		500.000.00
RECIBO DE CA	999999999	5528	18/01/2013		500.000.00
RECIBO DE CA	999999999	5529	18/01/2013		500.000.00
RECIBO DE CA	999999999	5530	18/01/2013		500.000.00
RECIBO DE CA	999999999	5531	18/01/2013		500.000.00
RECIBO DE CA	999999999	5532	18/01/2013		500.000.00
RECIBO DE CA	999999999	5533	18/01/2013		500.000.00
RECIBO DE CA	999999999	5534	18/01/2013		500.000.00
RECIBO DE CA	999999999	5535	18/01/2013		500.000.00
RECIBO DE CA	999999999	5536	18/01/2013		500.000.00
RECIBO DE CA	999999999	5537	18/01/2013		500.000.00
RECIBO DE CA	999999999	5538	18/01/2013		500.000.00
RECIBO DE CA	999999999	5539	18/01/2013		500.000.00
RECIBO DE CA	999999999	5540	18/01/2013		500.000.00
RECIBO DE CA	999999999	5541	18/01/2013		500.000.00
RECIBO DE CA	999999999	5542	18/01/2013		500.000.00

5

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
NIT : 800.176.089-2
- / -

Industria y Comercio
SUPERINTENDENCIA

RECIBO DE CAJA

RECIBO DE CA	999999999	5543	18/01/2013	500.000.00
RECIBO DE CA	999999999	5544	18/01/2013	500.000.00

*** Conceptos Pagados ***

CANT.	RENTISTICO	CONCEPTO	Vr.UNDITARIO	Vr.CONCEPTO
1	50005-01-03	CAMBIO DE MODALIDAD Y MODIFICACION EN N.CREACION CORRECCION A SOLICITUD EN TRAMITE / MODOFICA	124.000.00	124.000.00
				$124.000.00

SON: **CIENTO VEINTICUATRO MIL PESOS MONEDA CORRIENTE***

Responsable: _____

Recibo de Caja Aplicado al Expediente No. _____

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
No. 14-107488- -00000-0000
Fecha: 2014-05-19 16:29:35 Dep. 2020 DIR.NUEVASCR
Tra. 11 PATENTEIYII Eve: 378 FASENACIONALI
Act. 411 PRESENTACION Folios: 11

20141046

6

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
NIT : 800.176.089-2
- / -

Industria y Comercio
SUPERINTENDENCIA

RECIBO DE CAJA

No. 14 - 0050030

Bogotá D.C., Mayo 12 de 2014 - 16:37:13

RECIBIDO DE : BAKER NI 900.532.339

*** Soporte del Pago ***

TIPO PAGO	BANCO	CUENTA	No. PAGO	FECHA PAGO	VR.PAGO
CONSIGNACION	BANCO DE BOGOTA	062754387	587975964	08/05/2014	122.746.000.00

*** Conceptos Pagados ***

CANT.	RENTISTICO	CONCEPTO	Vr.UNDITARIO	Vr.CONCEPTO
1	50005-01-01 SOLICITUDES	1 TRAMITES DE SOL. DE PATENTE DE INVENCION	515.000.00	515.000.00
				$515.000.00

SON: **QUINIENTOSQUINCE MIL PESOS MONEDA CORRIENTE***

Responsable: _____
-********-

Recibo de Caja Aplicado al Expediente No. _____

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
No. 14-107488- -00000-0000
Fecha: 2014-05-19 16:29:35 Dep. 2020 DIR.NUEVASCR
Tra. 11 PATENTEIYII Eve: 378 FASENACIONALI
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Industria y Comercio
SUPERINTENDENCIA

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
DIVISION DE NUEVAS CREACIONES
EXTRACTO PARA PUBLICACIÓN
SOLICITUD DE PATENTE DE INVENCIÓN PCT

(21) N° de solicitud:

22) Fecha de solicitud:

(30) Prioridad (31) ***No.*** 32) ***Fecha*** (33) ***País***
61/550,971 25/10/2011 US

(51) Int Cl:

(71)Solicitante(s) E. I. DU PONT DE NEMOURS AND COMPANY

(72) Inventor(es): PAHUTSKI, Thomas Francis Jr.
LAHM, George Philip
KAR, Moumita
AHMAD, Omar Khaled

(74) Apoderado: ALVARO CORREA ORDOÑEZ

(85) Fecha limite inicio fase nacional: 25/05/2014
(86) Datos relativos a la presentación de la solicitud PCT
Fecha de presentación de la solicitud: 25/10/2012
No. de solicitud PCT/US2012/061948

(87) Publicación internacional
Fecha: 02/05/2013
N° publicación: WO2013/063282

(54) Titulo: PESTICIDAS HETEROCICLICOS SUSTITUIDOS CON 1,3-DIARILO

Resumen: En la presente invención se describen compuestos de la Fórmula **1**, *N*-óxidos, y sales de estos, en donde Q es y Z1, Z2, J1, J2, M, R1a, R1b, R2a, R2b, R2c, R2d y R14 son como se definió en la descripción. Se describen, además, composiciones que contienen los compuestos de la Fórmula 1 y los métodos para controlar una plaga invertebrada; el método comprende la etapa de poner la plaga invertebrada o su ambiente en contacto con cantidad biológicamente eficaz de un compuesto o una composición de la presente invención.

Industria y Comercio
SUPERINTENDENCIA

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
DIVISION DE NUEVAS CREACIONES
TARJETA ARCHIVO PROPIETARIOS

PATENTE DE INVENCION ____ PCT X MODELO DE UTILIDAD ____ DISEÑO INDUSTRIAL ___

(21) N° de solicitud: (22) Fecha de solicitud:
(51) Clasificación Internacional :

(71)Solicitante(s)
E. I. DU PONT DE NEMOURS AND COMPANY

(72) Inventor(es)
PAHUTSKI, Thomas Francis Jr., LAHM, George Philip, KAR, Moumita, AHMAD, Omar Khaled.

(74) Apoderado: Alvaro Correa Ordoñez

(30) Prioridad	(31) ***No. Prioridad***	32) ***Fecha***	(33) ***País***
	61/550,971	25/10/2011	US

(85) Fecha inicio fase nacional: 25/05/14
(86) Datos relativos a la presentación de la solicitud PCT
Fecha de presentación de la solicitud: 25/10/2012
No. de solicitud PCT/US2012/061948

(87) Publicación internacional
Fecha: 02/05/2013
N° publicación: WO2013/063282

(54) Titulo: PESTICIDAS HETEROCICLICOS SUSTITUIDOS CON 1,3-DIARILO

Industria y Comercio
SUPERINTENDENCIA

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
DIVISION DE NUEVAS CREACIONES
TARJETA ARCHIVO TEMATICO

PATENTE DE INVENCIÓN ____ PCT _X_ MODELO DE UTILIDAD ____ DISEÑO INDUSTRIAL ___

(21) N° de solicitud: (22) Fecha de solicitud:
(51) Clasificación Internacional :

(71)Solicitante(s)
E. I. DU PONT DE NEMOURS AND COMPANY

(72) Inventor(es)
PAHUTSKI, Thomas Francis Jr., LAHM, George Philip, KAR, Moumita, AHMAD, Omar Khaled

(74) Apoderado: Alvaro Correa Ordoñez

(30) Prioridad	(31) ***No. Prioridad***	32) ***Fecha***	(33) ***País***
	61/550,971	25/10/11	US

(85) Fecha límite inicio fase nacional: 25/05/14
(86) Datos relativos a la presentación de la solic. PCT
Fecha de presentación de la solicitud: 25/10/2012
No. de solicitud PCT/US2012/061948

(87) Publicación internacional:
Fecha: 02/05/2013
No. Publicación : WO2013/063282

(54) Titulo:
PESTICIDAS HETEROCICLICOS SUSTITUIDOS CON 1,3-DIARILO

(57) Resumen: En la presente invención se describen compuestos de la Fórmula 1, N-óxidos, y sales de estos, en donde Q es y Z1, Z2, J1, J2, M, R1a, R1b, R2a, R2b, R2c, R2d y R14 son como se definió en la descripción. Se describen, además, composiciones que contienen los compuestos de la Fórmula 1 y los métodos para controlar una plaga invertebrada; el método comprende la etapa de poner la plaga invertebrada o su ambiente en contacto con cantidad biológicamente eficaz de un compuesto o una composición de la presente invención.

CONTINUA AL RESPALDO ...

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Industria y Comercio
SUPERINTENDENCIA

PLANILLA DE RADICACIÓN - DIGITALIZACIÓN DIARIA
RELACIÓN DE ANEXOS

Dependencia:	Fecha: ____/____/____ AAAA MM DD	Recorrido:
2020	2014 5 19	4

Tipo de Radicación: Entrada: X Salida: □ Traslado: □ Convenio: □

Radicador: | Planilla:

ID	No. Radicación	Consecutivo	Item
1	14-107488-	0	7
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			

Item	Unidad de Conservación
1	Bolsa
2	Caja
3	Libro
4	Sobre
5	Tomo
6	Otro
Item	**Soporte Documental**
X	CD
8	Disquete
9	DVD
10	Folleto
11	Foto
12	Periódico
13	Plano
14	Publicación Periódica
15	USB
16	Otro

Observaciones:
EL CD ANEXO CONTIENE UN TOTAL DE 5 ARCHIVOS!
5 EN FORMATO PDF, LOS CUALES FUERON PROCESADOS.
EL CD SE ENCUENTRA EN EL FOLIO (10)

Industria y Comercio
SUPERINTENDENCIA

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

RAD: 13-251602- -1-0 **FECHA:** 2013-10-24 10:12:42
DEP: 101 GRUPO CENTRO DE DOCUMENTACION E INFO **EVE:** 322 PRESENTACI
TRA: 212 ANTECMARCA **FOLIOS:** 2
ACT: 440 RESPUESTA

Bogotá D.C.

101

Señor
SERGIO ANDRES GOMEZ PEREZ
marcelarueda02@hotmail.com
BUCARAMANGA-SANTANDER-COLOMBIA

Asunto: Radicación: 13-251602- -1-0
Trámite: 212
Evento: 322
Actuación: 440
Folios: 2

Apreciado Señor:

De acuerdo con su solicitud radicada bajo el número del asunto, de manera atenta le informo que la respuesta se realizó el 23 de octubre del 2013 donde usted puede verificar esta información con el radicado 13 251602 generando el listado de los antecedentes nominativos y enviados por correo electrónico de los mismos, correspondiente a la marca AGUARDIENTE SUPERIOR para la clase 30.

Atentamente,

EMMA RUTH BIBIANA MORALES ROA
COORDINADORA GRUPO TRABAJO CENTRO DE DOCUMENTACION E INFORMACION

Elaboró:Eliana Ladino Romero
Revisó: EMMA RUTH BIBIANA MORALES ROA
Aprobó: EMMA RUTH BIBIANA MORALES ROA

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SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

No. 14-107488- -00000-0000

Fecha: 2014-05-19 16:29:35 Dep. 2020 DIR.NUEVASCR
Tra. 11 PATENTEIYII Eve: 378 FASENACIONALI
Act. 411 PRESENTACION Folios: 11

E CHEQUEO
E – NUEVAS CREACIONES

PATENTE DE INVENCIÓN **Art 33 Decisión 486/00**

- ☐ Indicación que se solicita una patente.
- ☐ Datos de identificación del solicitante o de la persona que presenta la solicitud
- ☐ Descripción de la invención
- ☐ Dibujos de ser estos pertinentes
- ☐ Comprobante de pago de las tasas establecidas (De ser el caso formato de descuento)

Completa ☐ Incompleta ☐

PATENTE DE INVENCIÓN PCT ■ **MODELO DE UTILIDAD PCT** ☐ **Art.33 Decisión 486/00, Circular Única**

- ■ Indicación que se solicita una PCT
- ■ Copia de la solicitud en español, tal como fue presentada inicialmente (capítulo descriptivo, reivindicatorio, resumen)
- ■ Dibujos de ser estos pertinentes
- ■ Comprobante de pago de las tasas establecidas (de ser el caso formato de descuento)

Completa ■ Incompleta ☐

DISEÑO INDUSTRIAL ☐ **(Art. 119 Decisión 486/00)**

- ☐ Indicación que se solicita Diseño industrial
- ☐ Datos de identificación del solicitante o de la persona que presenta la solicitud
- ☐ Representación gráfica y fotográfica del Diseño industrial o muestra del material que incorpora el diseño
- ☐ Comprobante de pago de las tasas establecidas

Completa ☐ Incompleta ☐

ESQUEMA DE TRAZADO ☐ **(Art. 92 Decisión 486/00)**

- ☐ Indicación que se solicita un esquema de trazado
- ☐ Datos de identificación del solicitante o de la persona que presenta la solicitud
- ☐ Representación gráfica de un esquema de trazado
- ☐ Comprobante de pago de las tasas establecidas

Completa ☐ Incompleta ☐

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
2 May 2013 (02.05.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/063282 A1

(51) **International Patent Classification**:
A01N 43/56 (2006.01)

(21) **International Application Number**:
PCT/US2012/061948

(22) **International Filing Date**:
25 October 2012 (25.10.2012)

(25) **Filing Language**: English

(26) **Publication Language**: English

(30) **Priority Data**:
61/550,971 25 October 2011 (25.10.2011) US

(71) **Applicant**: **E. I. DU PONT DE NEMOURS AND COMPANY** [US/US]; 1007 Market Street, Wilmington, Delaware 19899 (US).

(72) **Inventors**: **PAHUTSKI, Thomas Francis Jr.**; 50 Gomer Court, Elkton, Maryland 21921 (US). **LAHM, George Philip**; 148 Fairhill Drive, Wilmington, Delaware 19808 (US). **KAR, Moumita**; H. No: 1-12-160/3, Flat No. S-2, Jaya Residency, J.J. Nagar Colony, Alwal, Secunderabad, Secunderabab, Andhria Pradesh 500 010 (IN). **AHMAD, Omar Khaled**; 1835 Arch Street, Apt. 504, Philadelphia, Pennsylvania 19103 (US).

(74) **Agent**: **KUCHARCZYK, Roman**; E. I. du Pont de Nemours and Company, Legal Patent Records Center, 4417 Lancaster Pike, Wilmington, Delaware 19805 (US).

(81) **Designated States** *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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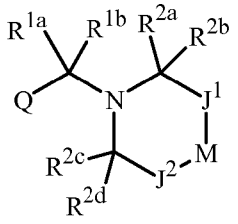
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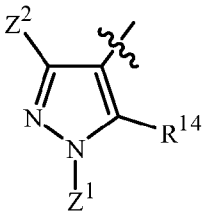
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WO 2013/063282 A1

(54) **Title**: 1,3-DIARYL-SUBSTITUTED HETEROCYCLIC PESTICIDES



1



Q-1

(57) **Abstract**: Disclosed are compounds of Formula 1, *N*-oxides, and salts thereof, wherein Q is and Z^1, Z^2, J^1, J^2, M, R^{1a}, R^{1b}, R^{2a}, R^{2b}, R^{2c}, R^{2d} and R_{14} are as defined in the disclosure. Also disclosed are compositions containing the compounds of Formula 1 and methods for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biologically effective amount of a compound or a composition of the invention.

TITLE

1,3-DIARYL-SUBSTITUTED HETEROCYCLIC PESTICIDES

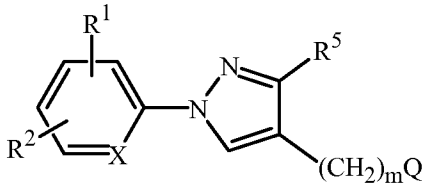
FIELD OF THE INVENTION

This invention relates to certain 1,3-diaryl-substituted heterocyclic compounds, their *N*-oxides, salts and their compositions suitable for agronomic and nonagronomic uses, and methods of their use for controlling invertebrate pests such as arthropods in both agronomic and nonagronomic environments.

BACKGROUND OF THE INVENTION

The control of invertebrate pests is extremely important in achieving high crop efficiency. Damage by invertebrate pests to growing and stored agronomic crops can cause significant reduction in productivity and thereby result in increased costs to the consumer. The control of invertebrate pests in forestry, greenhouse crops, ornamentals, nursery crops, stored food and fiber products, livestock, household, turf, wood products, and public health is also important. Many products are commercially available for these purposes, but the need continues for new compounds that are more effective, less costly, less toxic, environmentally safer or have different sites of action.

U.S. Patent No. 7,566,709 B2 discloses pyrazole compounds of Formula **i** as 5-HT receptor antagonists for the treatment of psychoses and neurological disorders

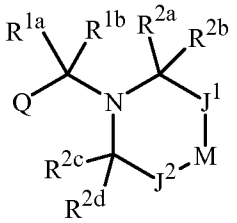


i

wherein, *inter alia*, R^1 and R^2 are independently H, A or halogen, X is N or CH, R^5 is alkyl or an aromatic ring, A is alkyl, and Q is NR^3R^4 or a heteroatom-containing radical.

SUMMARY OF THE INVENTION

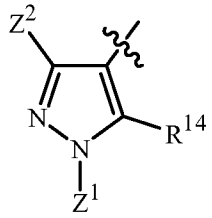
This invention is directed to a composition comprising a compound of Formula **1** (including all stereoisomers), *N*-oxides, and salts thereof:



1

wherein

Q is



Q-1 ;

R^{1a} is H, cyano, C_1–C_6 alkyl, C_3–C_6 cycloalkyl, C_1–C_6 haloalkyl, C(O)OH, $C(O)R^{5a}$, $C(O)OR^{6a}$ or $C(O)NR^{7a}R^{8a}$;

R^{1b} is H or C_1–C_6 alkyl;

R^{2a} and R^{2c} are each independently H, halogen, cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ or $S(O)_nR^{11}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$;

R^{2b} and R^{2d} are each independently H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

J^1 is a direct bond, $–C(R^{3a}R^{3b})–$ or $–C(R^{3a}R^{3b})C(R^{3a}R^{3b})–$;

J^2 is a direct bond or $–C(R^{3c}R^{3d})–$;

M is $–C(R^{3e})(A)–$, $–N(A^1)–$, –O– or $–S(O)_n–$;

A is halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, C_1–C_4 alkyl, C_1–C_4 haloalkyl, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a} and $S(O)_nR^{11a}$; or phenyl, a 5- or 6-membered heteroaromatic ring or a 7- to 11-membered heteroaromatic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^4;

A^1 is cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, C_1–C_4 alkyl, C_1–C_4 haloalkyl, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a} and $S(O)_nR^{11a}$; or phenyl, a 5- or 6-membered heteroaromatic ring or a 7- to 11-membered heteroaromatic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^4; or benzyl unsubstituted or substituted with 1 to 3 R^4;

each R^{3a} and R^{3c} are each independently H, halogen, cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, OR^{12} or $S(O)_nR^{11}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$;

each R^{3b} and R^{3d} are each independently H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

R^{3e} is H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4; or

R^{3e} and A can be taken together with the carbon atom to which they are attached to form a 3- to 7-membered ring containing ring members selected from carbon atoms and up to 2 heteroatoms independently selected from one oxygen atom, one sulfur atom, and up to 2 nitrogen atoms, wherein up to 2 carbon atom ring members are independently selected from C(=O) and C(=S) and the sulfur atom ring member is selected from S, S(O) or $S(O)_2$, said ring being unsubstituted or substituted with up to 4 substituents independently selected from the group consisting of halogen, cyano and C_1–C_4 alkyl; or

or when any two substituents independently selected from the group consisting of R^{2a}, R^{2b}, R^{2c}, R^{2d}, R^{3a}, R^{3b}, R^{3c}, R^{3d} and R^{3e} are C_1–C_4 alkyl, then said two substituents can be taken together to form a ring;

Z^1 is phenyl substituted with 1 to 4 R^{4a}; or Z^1 is a 5- or 6-membered heteroaromatic ring or an 8- to 10-membered heteroaromatic bicyclic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^{4a};

Z^2 is phenyl, unsubstituted or substituted with 1 to 4 R^{4b}; or Z^2 is a 5- or 6-membered heteroaromatic ring or an 8- to 10-membered heteroaromatic bicyclic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^{4b};

each R^4, R^{4a} and R^{4b} is independently halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13}; and when two R^4, two R^{4a} or two R^{4b} groups are attached to adjacent carbon atoms, then said two R^4, two R^{4a} or two R^{4b} groups can be taken together with the carbon atoms to which they are attached to form a ring;

each R^5 is independently H; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{5a} is independently C_1–C_4 alkyl, C_1–C_4 haloalkyl or C_3–C_7 cycloalkyl;

each R^6 is independently C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{6a} is independently C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^7 and R^8 is independently H; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or

substituted with 1 to 3 R^{13}; or R^7 and R^8 can be taken together with the nitrogen atom to which they are attached to form a 5-, 6- or 7-membered ring;

each R^{7a} and R^{8a} is independently H, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

R^{7b} is $N(R^{7a})_2$, OH or OR^{12a};

each R^9 and R^{10} is independently H, $C(X)R^5$, $C(O)OR^6$ or $C(X)NR^7R^8$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13}; or R^9 and R^{10} can be taken together with the nitrogen atom to which they are attached to form a 5-, 6- or 7-membered ring;

each R^{9a} and R^{10a} is independently H, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^{11} is independently C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{11a} is independently C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^{12} is independently H; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{12a} is independently H, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^{13} is independently halogen, cyano, nitro, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a}, $S(O)_nR^{11a}$ or $SO_2NR^{9a}R^{10a}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; provided that when two R^{13} groups are attached to adjacent carbon atoms, then said two R^{13} groups can be taken together with the carbon atoms to which they are attached to form a ring;

R^{14} is H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7

cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$;

each X is independently O or S; and

each n is independently 0, 1 or 2;

and at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents. In one embodiment, this invention also provides a composition for controlling an invertebrate pest comprising a compound of Formula **1**, an *N*-oxide, or a salt thereof, and at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents, said composition further comprising at least one additional biologically active compound or agent.

This invention also provides a method for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biologically effective amount of a compound of Formula **1**, an *N*-oxide, or a salt thereof (e.g., as a composition described herein). This invention also relates to such method wherein the invertebrate pest or its environment is contacted with a composition comprising a biologically effective amount of a compound of Formula **1**, an *N*-oxide, or a salt thereof, and at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents, said composition optionally further comprising a biologically effective amount of at least one additional biologically active compound or agent.

This invention also provides a method for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biologically effective amount of any of the aforesaid compositions wherein the environment is a plant.

This invention also provides a method for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biologically effective amount of any of the aforesaid compositions wherein the environment is an animal.

This invention also provides a method for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biologically effective amount of any of the aforesaid compositions wherein the environment is a seed.

This invention also provides a method for protecting a seed from an invertebrate pest comprising contacting the seed with a biologically effective amount of a compound of Formula **1**, an *N*-oxide, or a salt thereof (e.g., as a composition described herein). This invention also relates to the treated seed.

This invention is also directed to compounds of Formula **1** (including all stereoisomers), *N*-oxides, and salts thereof, as described above, wherein

J^1 is $–C(R^{3a}R^{3b})–$;

J^2 is $–C(R^{3c}R^{3d})–$; and

M is –C(R^{3e})(A)– ;

provided that when A is C(X)NR^7R^8 and X is O, then both R^7 and R^8 are not H.

This invention is also directed to compounds of Formula **1** (including all stereoisomers), *N*-oxides, and salts thereof, as described above, wherein

R^{1a} and R^{1b} are H;

J^1 is –C($R^{3a}R^{3b}$)– ;

J^2 is a direct bond;

M is –C(R^{3e})(A)– ;

R^{2a} and R^{2c} are H;

R^{2b} and R^{2d} are each independently H, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

R^{3a} and R^{3b} are H;

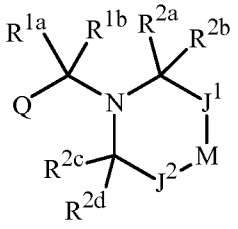
R^{3e} is H, halogen, cyano, nitro, C(X)R^5, C(O)OR^6, C(X)NR^7R^8, NR^9R^{10}, S(O)$_n$$R^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and S(O)$_n$$R^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

A is cyano, C(X)R^5, C(O)OR^6, C(X)NR^7R^8, C(X)N$R^{7b}R^8$, NR^9R^{10}, S(O)$_n$$R^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, C_1–C_4 alkyl, C_1–C_4 haloalkyl, C(O)R^{5a}, C(O)OR^{6a}, C(O)N$R^{7a}R^{8a}$, N$R^{9a}R^{10a}$ and S(O)$_n$$R^{11a}$; or phenyl, a 5- or 6-membered heteroaromatic ring or a 7- to 11-membered heteroaromatic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^4; provided that when A is NHC(O)CH_3 and R^{3e} is H, then Z^1 is other than 2-fluorophenyl, 3-methylphenyl, 4-methylphenyl or 2,5-dimethylphenyl; or

R^{3e} and A can be taken together with the carbon atom to which they are attached to form a 3- to 7-membered ring containing ring members selected from carbon atoms and up to 2 heteroatoms independently selected from one oxygen atom, one sulfur atom, and up to 2 nitrogen atoms, wherein up to 2 carbon atom ring members are independently selected from C(=O) and C(=S) and the sulfur atom ring member is selected from S, S(O) or $S(O)_2$, said ring being unsubstituted or substituted with up to 4 substituents independently selected from the group consisting of halogen, cyano and C_1–C_4 alkyl;

provided that R^{3e} and A are each other than $N(CH_3)_2$.

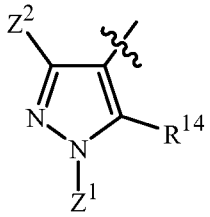
This invention is also directed to compounds of Formula **1p** (including all stereoisomers), *N*-oxides, and salts thereof:



1p

wherein

Q is



Q-1 ;

R^{1a} is H, cyano, C_1–C_6 alkyl, C_3–C_6 cycloalkyl, C_1–C_6 haloalkyl, C(O)OH, $C(O)R^{5a}$, $C(O)OR^{6a}$ or $C(O)NR^{7a}R^{8a}$;

R^{1b} is H or C_1–C_6 alkyl;

R^{2a} and R^{2c} are each independently H, halogen, cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, OR^{12} or $S(O)_nR^{11}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$;

R^{2b} and R^{2d} are each independently H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

J^1 is $–C(R^{3a}R^{3b})–$;

J^2 is $–C(R^{3c}R^{3d})–$;

M is $–C(R^{3e})(A)–$;

A is cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, C_1–C_4 alkyl, C_1–C_4 haloalkyl, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a} and $S(O)_nR^{11a}$; or phenyl, a 5- or 6-membered heteroaromatic ring or a 7- to 11-membered heteroaromatic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^4; provided that when A is $C(X)NR^7R^8$ and X is O, then both R^7 and R^8 are not H;

R^{3a} and R^{3c} are each independently H, halogen, cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, OR^{12} or $S(O)_nR^{11}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$;

R^{3b} and R^{3d} are each independently H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

R^{3e} is H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

or when any two substituents independently selected from the group consisting of R^{2a}, R^{2b}, R^{2c}, R^{2d}, R^{3a}, R^{3b}, R^{3c}, R^{3d} and R^{3e} are C_1–C_4 alkyl, then said two substituents can be taken together to form a ring;

Z^1 is phenyl substituted with 1 to 4 R^4; or Z^1 is a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

Z^2 is phenyl substituted with 1 to 4 R^4; or Z^2 is a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

each R^4 is independently halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6

alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$;

each R^5 is independently H; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{5a} is independently C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^6 is independently C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{6a} is independently C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^7 and R^8 is independently H; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{7a} and R^{8a} is independently H, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^{7b} is independently $N(R^{7a})_2$, OH or OR^{12a};

each R^9 and R^{10} is independently H, $C(X)R^5$, $C(O)OR^6$ or $C(X)NR^7R^8$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{9a} and R^{10a} is independently H, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^{11} is independently C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a

5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{11a} is independently C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^{12} is independently H; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{12a} is independently H, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^{13} is independently halogen, cyano, nitro, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a}, $S(O)_nR^{11a}$ or $SO_2NR^{9a}R^{10a}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$;

R^{14} is H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$;

each X is independently O or S; and

each n is independently 0, 1 or 2.

An embodiment of this invention also provides a composition comprising a compound of Formula **1p**, an *N*-oxide, or a salt thereof, and at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents. In one embodiment, this invention also provides a composition for controlling an invertebrate pest comprising a compound of Formula **1p**, an *N*-oxide, or a salt thereof, and at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents, said composition further comprising at least one additional biologically active compound or agent.

An embodiment of this invention provides a method for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biologically effective amount of a compound of Formula **1p**, an *N*-oxide, or a salt thereof (e.g., as a composition described herein). This invention also relates to such method wherein the invertebrate pest or its environment is contacted with a composition comprising a biologically effective amount of a compound of Formula **1p**, an *N*-oxide, or a salt thereof,

and at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents, said composition optionally further comprising a biologically effective amount of at least one additional biologically active compound or agent.

DETAILS OF THE INVENTION

As used herein, the terms "comprises", "comprising", "includes", "including", "has", "having", "contains", "containing", "characterized by" or any other variation thereof, are intended to cover a non-exclusive inclusion, subject to any limitation explicitly indicated. For example, a composition, mixture, process or method that comprises a list of elements is not necessarily limited to only those elements but may include other elements not expressly listed or inherent to such composition, mixture, process or method.

The transitional phrase "consisting of" excludes any element, step or ingredient not specified. If in the claim, such would close the claim to the inclusion of materials other than those recited except for impurities ordinarily associated therewith. When the phrase "consisting of" appears in a clause of the body of a claim, rather than immediately following the preamble, it limits only the element set forth in that clause; other elements are not excluded from the claim as a whole.

The transitional phrase "consisting essentially of" is used to define a composition or method that includes materials, steps, features, components or elements, in addition to those literally disclosed, provided that these additional materials, steps, features, components or elements do not materially affect the basic and novel characteristic(s) of the claimed invention. The term "consisting essentially of" occupies a middle ground between "comprising" and "consisting of".

Where applicants have defined an invention or a portion thereof with an open-ended term such as "comprising", it should be readily understood that (unless otherwise stated) the description should be interpreted to also describe such an invention using the terms "consisting essentially of" or "consisting of".

Further, unless expressly stated to the contrary, "or" refers to an inclusive or and not to an exclusive or. For example, a condition A or B is satisfied by any one of the following: A is true (or present) and B is false (or not present), A is false (or not present) and B is true (or present), and both A and B are true (or present).

Also, the indefinite articles "a" and "an" preceding an element or component of the invention are intended to be nonrestrictive regarding the number of instances (i.e. occurrences) of the element or component. Therefore "a" or "an" should be read to include one or at least one, and the singular word form of the element or component also includes the plural unless the number is obviously meant to be singular.

As referred to in this disclosure, the term "invertebrate pest" includes arthropods, gastropods and nematodes of economic importance as pests. The term "arthropod" includes insects, mites, spiders, scorpions, centipedes, millipedes, pill bugs and symphylans. The

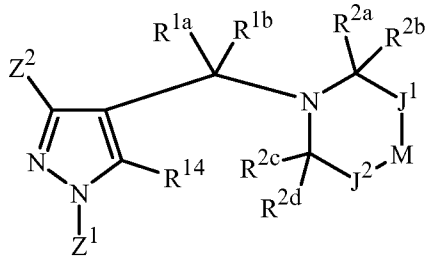
term "gastropod" includes snails, slugs and other Stylommatophora. The term "nematode" refers to a living organism of the Phylum Nematoda. The term "helminths" includes roundworms, heartworms, phytophagous nematodes (Nematoda), flukes (Tematoda), Acanthocephala and tapeworms (Cestoda).

In the context of this disclosure "invertebrate pest control" means inhibition of invertebrate pest development (including mortality, feeding reduction, and/or mating disruption), and related expressions are defined analogously.

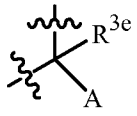
The term "agronomic" refers to the production of field crops such as for food and fiber and includes the growth of corn, soybeans and other legumes, rice, cereal (e.g., wheat, oats, barley, rye, rice, maize), leafy vegetables (e.g., lettuce, cabbage, and other cole crops), fruiting vegetables (e.g., tomatoes, pepper, eggplant, crucifers and cucurbits), potatoes, sweet potatoes, grapes, cotton, tree fruits (e.g., pome, stone and citrus), small fruit (berries, cherries) and other specialty crops (e.g., canola, sunflower, olives).

The term "nonagronomic" refers to other than field crops, such as horticultural crops (e.g., greenhouse, nursery or ornamental plants not grown in a field), residential, agricultural, commercial and industrial structures, turf (e.g., sod farm, pasture, golf course, lawn, sports field, etc.), wood products, stored product, agro-forestry and vegetation management, public health (i.e. human) and animal health (e.g., domesticated animals such as pets, livestock and poultry, undomesticated animals such as wildlife) applications.

A wavy line in a structure fragment denotes the attachment point of the fragment to the remainder of the molecule. For example, when the variable Q in Formula **1** is defined as Q-1, the wavy line bisecting the bond in the 4-position of the pyrazole Q-1 means that the pyrazole Q-1 is attached to the remainder of the structure of Formula **1** at said 4-position, as shown below.



When the variable M is defined as –C(R^{3e})(A)– , this is equivalent to a carbon atom ring member substituted with one R^{3e} and one A as shown below.



In the above recitations, the term "alkyl", used either alone or in compound words such as "haloalkyl" includes straight-chain or branched alkyl, such as, methyl, ethyl, *n*-propyl,

i-propyl, or the different butyl, pentyl or hexyl isomers. "Alkenyl" includes straight-chain or branched alkenes such as ethenyl, 1-propenyl, 2-propenyl, and the different butenyl, pentenyl and hexenyl isomers. "Alkenyl" also includes polyenes such as 1,2-propadienyl and 2,4-hexadienyl. "Alkynyl" includes straight-chain or branched alkynes such as ethynyl, 1-propynyl, 2-propynyl and the different butynyl, pentynyl and hexynyl isomers. "Alkynyl" can also include moieties comprised of multiple triple bonds such as 2,5-hexadiynyl.

"Cycloalkyl" includes, for example, cyclopropyl, cyclobutyl, cyclopentyl and cyclohexyl. The term "cycloalkylalkyl" denotes cycloalkyl substitution on an alkyl moiety. Examples of "cycloalkylalkyl" include cyclopropylmethyl, cyclopentylethyl, and other cycloalkyl moieties bonded to straight-chain or branched alkyl groups. "Cycloalkenyl" includes groups such as cyclopentenyl and cyclohexenyl as well as groups with more than one double bond such as 1,3- and 1,4-cyclohexadienyl. The formula "$C(O)CH(CH_2)_2$" represents a carbonyl group substituted with a cyclopropyl group.

The term "halogen", either alone or in compound words such as "haloalkyl", or when used in descriptions such as "alkyl substituted with halogen" includes fluorine, chlorine, bromine or iodine. Further, when used in compound words such as "haloalkyl", or when used in descriptions such as "alkyl substituted with halogen" said alkyl may be partially or fully substituted with halogen atoms which may be the same or different. Examples of "haloalkyl" or "alkyl substituted with halogen" include CF_3, CH_2Cl, CH_2CF_3 and CCl_2CF_3.

The chemical abbreviations S(O) and S(=O) as used herein represent a sulfinyl moiety. The chemical abbreviations SO_2, $S(O)_2$ and $S(=O)_2$ as used herein represent a sulfonyl moiety. The chemical abbreviations C(O) and C(=O) as used herein represent a carbonyl moiety. The chemical abbreviations CO_2, C(O)O and C(=O)O as used herein represent an oxycarbonyl moiety. "CHO" means formyl.

When A^1 is benzyl substituted with 1 to 3 R^4, the R^4 substituent(s) may be attached to any available carbon atom of the benzyl group (i.e. the R^4 substituent(s) may be attached to the benzylic carbon atom or to any available carbon atom of the phenyl group).

The compounds of Formula **1p** are a subset of the compounds of Formula **1**.

The total number of carbon atoms in a substituent group is indicated by the "C_i–C_j" prefix where i and j are numbers from 1 to 8. For example, C_1–C_4 alkyl designates methyl through butyl.

When a group contains a substituent which can be hydrogen, for eample R^{1a} or R^{1b}, then when this substituent is taken as hydrogen, it is recognized that this is equivalent to said group being unsubstituted. When a variable group is shown to be optionally attached to a position, for example $(R^v)_r$ in U-36 of Exhibit 1 wherein r may be 0, then hydrogen can be at the position even if not recited in the variable group definition. When one or more positions on a group are said to be "not substituted" or "unsubstituted", then hydrogen atoms are attached to take up any free valency.

Unless otherwise indicated, a "ring" or "ring system" as a component of Formula **1** is carbocyclic or heterocyclic. The term "ring system" denotes two or more connected rings. The term "bicyclic ring system" denotes a ring system consisting of two rings sharing two or more common atoms.

A ring or a bicyclic ring system can be part of an extended ring system containing more than two rings wherein substituents on the ring or bicyclic ring system are taken together to form the additional rings, which may be in bicyclic relationships with other rings in the extended ring system.

The term "aromatic" indicates that each of the ring atoms is essentially in the same plane and has a *p*-orbital perpendicular to the ring plane, and that (4n + 2) π electrons, where n is a positive integer, are associated with the ring or ring system to comply with Hückel's rule.

The terms "heterocyclic ring" or "heterocycle" denotes a ring wherein at least one of the atoms forming the ring backbone is other than carbon. Unless otherwise indicated, a heterocyclic ring can be a saturated, partially unsaturated, or fully unsaturated ring. "Saturated heterocyclic ring" refers to a heterocyclic ring containing only single bonds between ring members. "Partially saturated heterocyclic ring" refers a heterocyclic ring containing at least one double bond but which is not aromatic. The term "heteroaromatic ring" denotes a fully unsaturated aromatic ring in which at least one atom forming the ring backbone is not carbon. Typically a heteroaromatic ring contains no more than 4 nitrogens, no more than 1 oxygen and no more than 1 sulfur. Unless otherwise indicated, heteroaromatic rings can be attached through any available carbon or nitrogen by replacement of a hydrogen on said carbon or nitrogen. The term "heteroaromatic bicyclic ring system" denotes a ring system consisting of two fused rings, in which at least one of the two rings is a heteroaromatic ring as defined above.

When a radical is optionally substituted with listed substituents with the number of substituents stated (e.g., "up to 5"), then the radical may be unsubstituted or substituted with a number of substituents ranging up to the high number stated (e.g., "5"), and the attached substituents are independently selected from the substituents listed.

When a substituent is a ring or ring system, it can be attached to the remainder of Formula **1** through any available ring member, unless otherwise described.

The term "unsubstituted" in connection with a group such as a ring or ring system means the group does not have any substituents other than its one or more attachments to the remainder of Formula **1**.

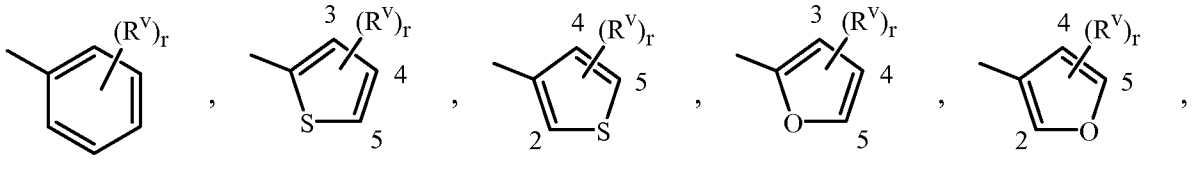
The phrase "phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4" means that each phenyl ring is unsubstituted or substituted with 1 to 3 R^4, each 5-membered heteroaromatic ring is unsubstituted or substituted with 1

to 3 R^4, and each 6-membered heteroaromatic ring is unsubstituted or substituted with 1 to 3 R^4.

When the number of optional substituents is not restricted by an expressed limitation (e.g., the phrase "unsubstituted or substituted with at least one substituent independently selected from"), it is understood to mean that the number of optional substituents can range from 0 up to the number of positions available. One skilled in the art will appreciate that while some substituents such as halogen can be present at every available position (for example, the C_2F_5 substituent is a C_2 alkyl group substituted with the maximum number of 5 fluorine atoms), practical factors such as cost and synthetic accessibility can limit the number of occurences of other substituents. These limitations are part of the general synthetic knowledge known to those skilled in the art. Of note are embodiments wherein in the absence of expressed limitation of number of optional substituents, the number of optional substituents is up to 3 (i.e. 0, 1, 2 or 3) if accommodated by the number of available positions.

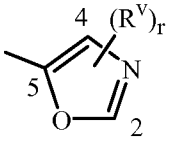
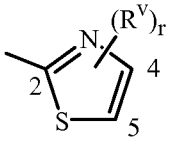
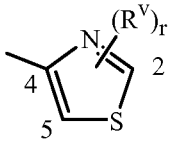
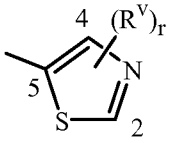
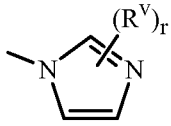
As noted above, substituents such as A, Z^1 or Z^2 can be (among others) a 5- or 6-membered heteroaromatic ring, optionally substituted with one or more substituents selected from a group of substituents as defined in the Summary of Invention. Examples of a 5- or 6-membered heteroaromatic ring optionally substituted with one or more substituents include the rings U-2 through U-61 illustrated in Exhibit 1 wherein R^v is any substituent as defined in the Summary of the Invention (e.g., for R^1) and r is an integer from 0 to 5, limited by the number of available positions on each U group. As U-29, U-30, U-36, U-37, U-38, U-39, U-40, U-41, U-42 and U-43 have only one available position, for these U groups r is limited to the integers 0 or 1, and r being 0 means that the U group is unsubstituted and a hydrogen is present at the position indicated by $(R^v)_r$.

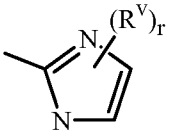
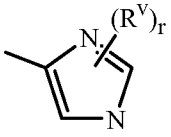
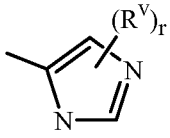
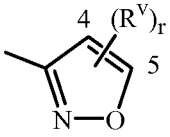
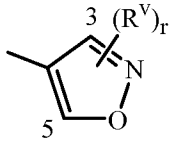
Exhibit 1

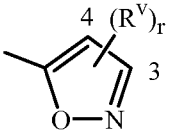
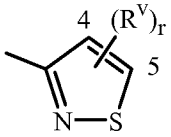
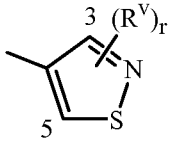
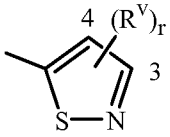
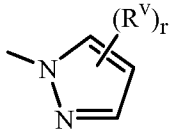


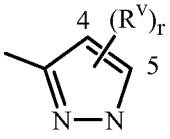
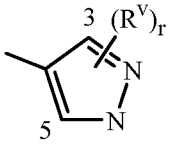
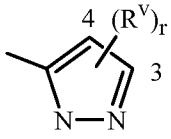
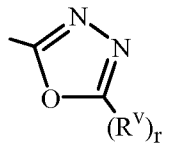
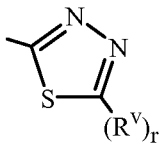
U-1, U-2, U-3, U-4, U-5

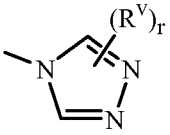
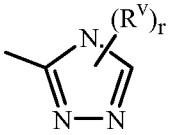
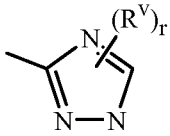
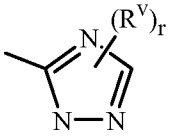
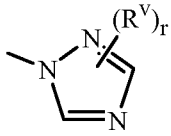
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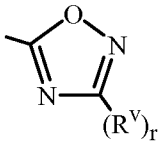
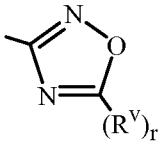
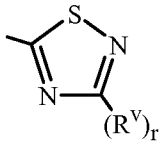
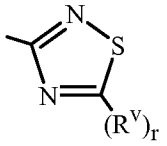
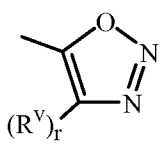

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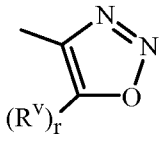
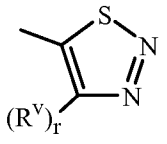
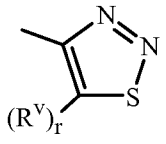
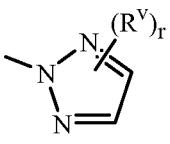
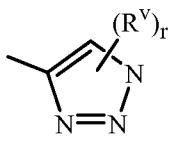

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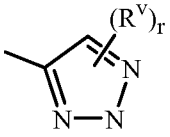
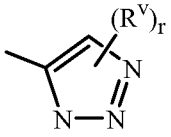
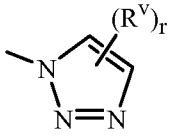
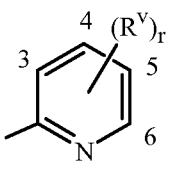
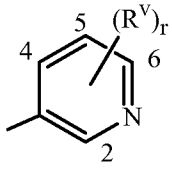

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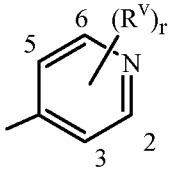
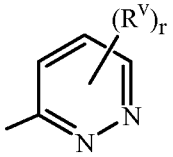
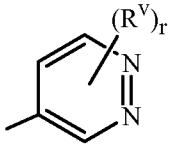
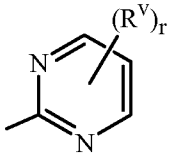
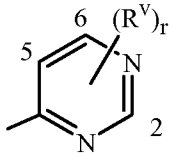
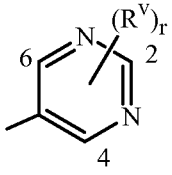
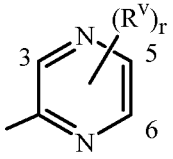
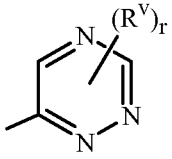
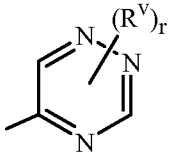
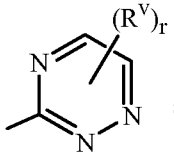
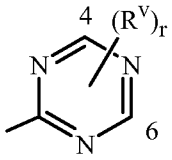

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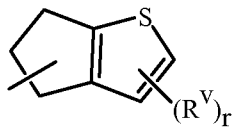
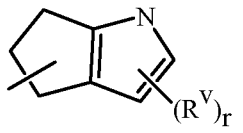
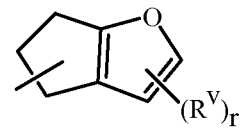
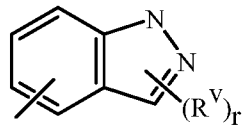
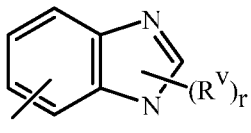
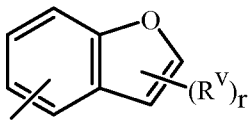
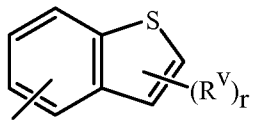
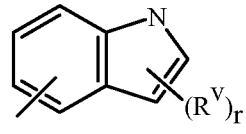
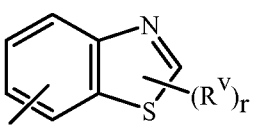
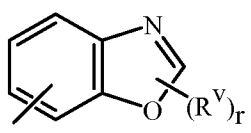
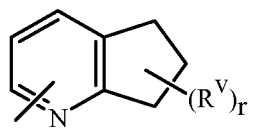
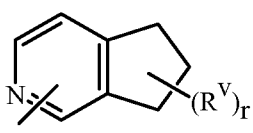

U-41 ,

U-42 ,

U-43 ,

U-44 ,

U-45 ,

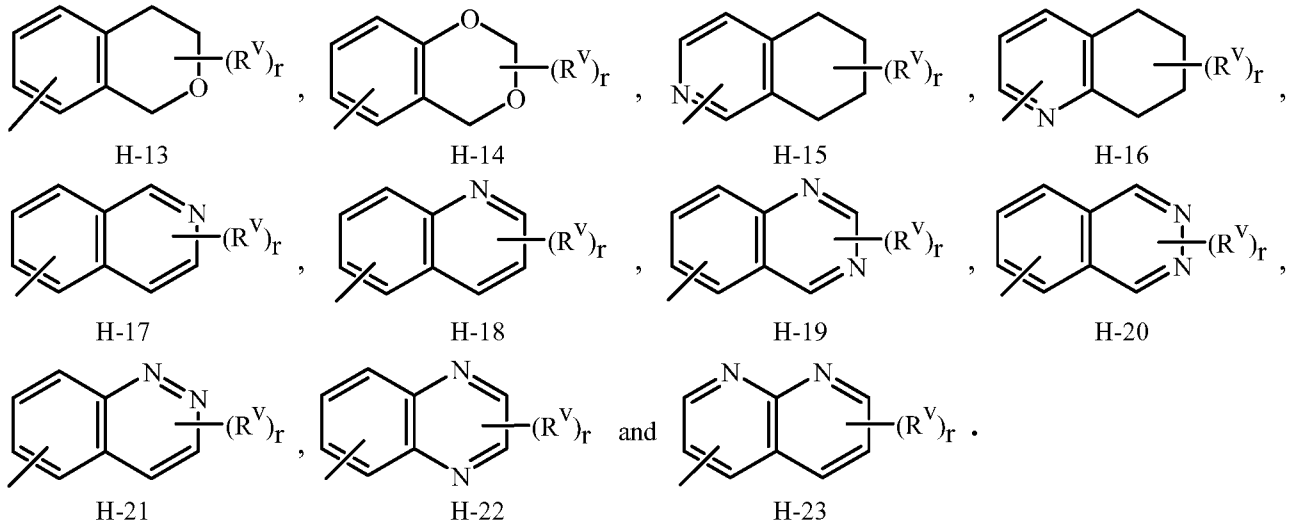

U-46 ,

U-47 ,

U-48 ,

U-49 ,

U-50 ,


U-51 ,

U-52 ,

U-53 ,

U-54 ,

U-55 ,

U-56 ,

U-57 ,

U-58 ,

U-59 ,

U-60 and

U-61 .

As noted above, substituents such as A can be (among others) a 7-, 8-, 9-, 10- or 11-membered heteroaromatic bicyclic ring system optionally substituted with up to 3 substituents selected from a group of substituents as defined in the Summary of Invention. Examples of an 8-, 9- or 10-membered heteroaromatic bicyclic ring system optionally substituted with up to 3 substituents include the ring systems H-1 through H-23 illustrated in Exhibit 2 wherein R^V is any substituent as defined in the Summary of the Invention (e.g., for A) and r is an integer from 0 to 3, limited by the number of available positions on each H group.

Exhibit 2


H-1 ,

H-2 ,

H-3 ,

H-4 ,

H-5 ,

H-6 ,

H-7 ,

H-8 ,

H-9 ,

H-10 ,

H-11 ,

H-12 ,



Although R^V groups are shown in the structures U-1 through U-61 and H-1 through H-23, it is noted that they do not need to be present since they are optional substituents. The nitrogen atoms that require substitution to fill their valence are substituted with H or R^V. Note that when the attachment point between $(R^V)_r$ and the U or H group is illustrated as floating, $(R^V)_r$ can be attached to any available carbon atom or nitrogen atom of the U or H group. Note that when the attachment point on the U or H group is illustrated as floating, the U or H group can be attached to the remainder of Formula **1** through any available carbon or nitrogen of the U or H group by replacement of a hydrogen atom.

A wide variety of synthetic methods are known in the art to enable preparation of aromatic and nonaromatic heterocyclic rings and ring systems; for extensive reviews see the eight volume set of *Comprehensive Heterocyclic Chemistry*, A. R. Katritzky and C. W. Rees editors-in-chief, Pergamon Press, Oxford, 1984 and the twelve volume set of *Comprehensive Heterocyclic Chemistry II*, A. R. Katritzky, C. W. Rees and E. F. V. Scriven editors-in-chief, Pergamon Press, Oxford, 1996.

Compounds of this invention can exist as one or more stereoisomers. The various stereoisomers include enantiomers, diastereomers, atropisomers and geometric isomers. One skilled in the art will appreciate that one stereoisomer may be more active and/or may exhibit beneficial effects when enriched relative to the other stereoisomer(s) or when separated from the other stereoisomer(s). Additionally, the skilled artisan knows how to separate, enrich, and/or to selectively prepare said stereoisomers. The compounds of the invention may be present as a mixture of stereoisomers, individual stereoisomers or as an optically active form.

Compounds of this invention can exist as one or more conformational isomers due to restricted bond rotation caused by steric hinderance. This invention comprises mixtures of conformational isomers. In addition, this invention includes compounds that are enriched in one conformer relative to others.

Compounds selected from Formula **1** (including all stereoisomers, *N*-oxides, and salts thereof) typically exist in more than one form, and Formula **1** thus includes all crystalline and non-crystalline forms of the compounds that Formula **1** represents. Non-crystalline forms include embodiments which are solids such as waxes and gums as well as embodiments which are liquids such as solutions and melts. Crystalline forms include embodiments which represent essentially a single crystal type and embodiments which represent a mixture of polymorphs (i.e. different crystalline types). The term "polymorph" refers to a particular crystalline form of a chemical compound that can crystallize in different crystalline forms, these forms having different arrangements and/or conformations of the molecules in the crystal lattice. Although polymorphs can have the same chemical composition, they can also differ in composition due to the presence or absence of co-crystallized water or other molecules, which can be weakly or strongly bound in the lattice. Polymorphs can differ in such chemical, physical and biological properties as crystal shape, density, hardness, color, chemical stability, melting point, hygroscopicity, suspensibility, dissolution rate and biological availability. One skilled in the art will appreciate that a polymorph of a compound represented by Formula **1** can exhibit beneficial effects (e.g., suitability for preparation of useful formulations, improved biological performance) relative to another polymorph or a mixture of polymorphs of the same compound represented by Formula **1**. Preparation and isolation of a particular polymorph of a compound represented by Formula **1** can be achieved by methods known to those skilled in the art including, for example, crystallization using selected solvents and temperatures.

One skilled in the art will appreciate that not all nitrogen-containing heterocycles can form *N*-oxides since the nitrogen requires an available lone pair for oxidation to the oxide; one skilled in the art will recognize those nitrogen-containing heterocycles which can form *N*-oxides. One skilled in the art will also recognize that tertiary amines can form *N*-oxides. Synthetic methods for the preparation of *N*-oxides of heterocycles and tertiary amines are very well known by one skilled in the art including the oxidation of heterocycles and tertiary amines with peroxy acids such as peracetic and 3-chloroperbenzoic acid (MCPBA), hydrogen peroxide, alkyl hydroperoxides such as *t*-butyl hydroperoxide, sodium perborate, and dioxiranes such as dimethyldioxirane. These methods for the preparation of *N*-oxides have been extensively described and reviewed in the literature, see for example: T. L. Gilchrist in *Comprehensive Organic Synthesis*, vol. 7, pp 748–750, S. V. Ley, Ed., Pergamon Press; M. Tisler and B. Stanovnik in *Comprehensive Heterocyclic Chemistry*, vol. 3, pp 18–20, A. J. Boulton and A. McKillop, Eds., Pergamon Press; M. R. Grimmett and B. R. T. Keene in *Advances in Heterocyclic Chemistry*, vol. 43, pp 149–161, A. R. Katritzky, Ed., Academic Press; M. Tisler and B. Stanovnik in *Advances in Heterocyclic Chemistry*, vol. 9, pp 285–291, A. R. Katritzky and A. J. Boulton, Eds., Academic Press; and

G. W. H. Cheeseman and E. S. G. Werstiuk in *Advances in Heterocyclic Chemistry*, vol. 22, pp 390–392, A. R. Katritzky and A. J. Boulton, Eds., Academic Press.

One skilled in the art recognizes that because in the environment and under physiological conditions salts of chemical compounds are in equilibrium with their corresponding nonsalt forms, salts share the biological utility of the nonsalt forms. Thus a wide variety of salts of the compounds of Formula **1** are useful for control of invertebrate pests. The salts of the compounds of Formula **1** include acid-addition salts with inorganic or organic acids such as hydrobromic, hydrochloric, nitric, phosphoric, sulfuric, acetic, butyric, fumaric, lactic, maleic, malonic, oxalic, propionic, salicylic, tartaric, 4-toluenesulfonic or valeric acids. When a compound of Formula **1** contains an acidic moiety such as a carboxylic acid or phenol, salts also include those formed with organic or inorganic bases such as pyridine, triethylamine or ammonia, or amides, hydrides, hydroxides or carbonates of sodium, potassium, lithium, calcium, magnesium or barium. Accordingly, the present invention relates to compounds selected from Formula **1**, *N*-oxides, and salts thereof.

Embodiments of the present invention as described in the Summary of the Invention include those described below. In the following Embodiments Formula **1** includes stereoisomers, *N*-oxides, and salts thereof, and reference to "a compound of Formula **1**" includes the definitions of substituents specified in the Summary of the Invention unless further defined in the Embodiments.

Embodiment 1. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, wherein R^{1a} is H, cyano, C_1–C_6 alkyl, C_3–C_6 cycloalkyl, C_1–C_6 haloalkyl, C(O)OH, $C(O)R^{5a}$, $C(O)OR^{6a}$ or $C(O)NR^{7a}R^{8a}$.

Embodiment 1a. A compound or composition of Embodiment 1 wherein R^{1a} is H, cyano or C_1–C_6 alkyl.

Embodiment 1b. A compound or composition of Embodiment 1a wherein R^{1a} is H, cyano or methyl.

Embodiment 1c. A compound or composition of Embodiment 1b wherein R^{1a} is H.

Embodiment 2. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 1c wherein wherein R^{1b} is H or methyl.

Embodiment 2a. A compound or composition of Embodiment 2 wherein R^{1b} is H.

Embodiment 3. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, wherein R^{1a} and R^{1b} are H.

Embodiment 4. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 3 wherein R^{2a}, R^{2b}, R^{2c}, and R^{2d} are each independently cyano, C_1–C_6 alkyl, $C(O)OR^6$, $NHC(O)R^{5a}$ or $NHC(O)OR^{6a}$.

Embodiment 4a. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 3 wherein R^{2a} and R^{2c} are H; and R^{2b} and R^{2d} are each independently H, C_1–C_4 alkyl or C_1–C_4 haloalkyl.

Embodiment 4b. A compound or composition of Embodiment 4 wherein R^{2a}, R^{2b}, R^{2c}, and R^{2d} are each H.

Embodiment 5. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 4b wherein J^1 is $-C(R^{3a}R^{3b})-$ and J^2 is a direct bond or $-C(R^{3c}R^{3d})-$.

Embodiment 5a. A compound or composition of Embodiment 5 wherein J^1 is $-C(R^{3a}R^{3b})-$ and J^2 is a direct bond.

Embodiment 5b. A compound or composition of Embodiment 5 wherein J^1 is $-C(R^{3a}R^{3b})-$ and J^2 is $-C(R^{3c}R^{3d})-$.

Embodiment 6. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 5b wherein R^{3a}, R^{3b}, R^{3c}, and R^{3d} are each independently H, halogen or C_1–C_6 alkyl.

Embodiment 6a. A compound or composition of Embodiment 6 wherein R^{3a}, R^{3b}, R^{3c}, and R^{3d} are each independently H, F, Cl, Br or methyl.

Embodiment 6b. A compound or composition of Embodiment 6a wherein R^{3a} and R^{3b} are H.

Embodiment 6c. A compound or composition of Embodiment 6a wherein R^{3a}, R^{3b}, R^{3c}, and R^{3d} are H.

Embodiment 7. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 6c wherein M is $-C(R^{3e})(A)-$ or $-O-$.

Embodiment 7a. A compound or composition of Embodiment 7 wherein M is $-C(R^{3e})(A)-$.

Embodiment 7b. A compound or composition of Embodiment 7a wherein M is $-C(R^{3e})(A)-$; provided that when A is $C(X)NR^7R^8$ and X is O, then both R^7 and R^8 are not H.

Embodiment 7c. A compound or composition of Embodiment 7 wherein M is $-O-$.

Embodiment 8. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 7b wherein A is cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, C_1–C_4 alkyl, C_1–C_4 haloalkyl, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$ and $S(O)_nR^{11a}$; or phenyl, a 5- or 6-membered

heteroaromatic ring or a 7- to 11-membered heteroaromatic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^4; provided that when A is $NHC(O)CH_3$ and R^{3e} is H, then Z^1 is other than 2-fluorophenyl, 3-methylphenyl, 4-methylphenyl or 2,5-dimethylphenyl; or R^{3e} and A can be taken together with the carbon atom to which they are attached to form a 3- to 7-membered ring containing ring members selected from carbon atoms and up to 2 heteroatoms independently selected from one oxygen atom, one sulfur atom, and up to 2 nitrogen atoms, wherein up to 2 carbon atom ring members are independently selected from C(=O) and C(=S) and the sulfur atom ring member is selected from S, S(O) or $S(O)_2$, said ring being unsubstituted or substituted with up to 4 substituents independently selected from the group consisting of halogen, cyano and C_1–C_4 alkyl; provided that R^{3e} and A are each other than $N(CH_3)_2$.

Embodiment 8a. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 7b wherein A is cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ or NR^9R^{10}; or C_1–C_6 alkyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$ and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

Embodiment 8b. A compound or composition of Embodiment 8a wherein A is cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ or NR^9R^{10}; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

Embodiment 8c. A compound or composition of Embodiment 8a wherein A is cyano, $C(X)R^5$, $C(O)OR^6$ or NR^9R^{10}; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

Embodiment 8d. A compound or composition of Embodiment 8c wherein A is cyano, $C(X)R^5$, $C(O)OR^6$ or NR^9R^{10}.

Embodiment 8e. A compound or composition of Embodiment 8d wherein A is cyano, $C(O)OR^{6a}$, $NHC(O)R^{5a}$ or $NHC(O)OR^{6a}$.

Embodiment 8f. A compound or composition of Embodiment 8c wherein A is cyano, $C(O)OR^{6a}$ or $NHC(O)R^{5a}$; or a 5-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^4.

Embodiment 8g. A compound or composition of Embodiment 8c wherein A is $NHC(O)R^{5a}$; or a 5- or 6-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^4.

Embodiment 8h. A compound or composition of Embodiment 8c wherein A is cyano, $NHC(O)R^{5a}$ or 1,3,4-oxadiazol-2-yl.

Embodiment 9. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 8h wherein R^{3e} is H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

Embodiment 9a. A compound or composition of Embodiment 9 wherein R^{3e} is H, halogen, $C(X)R^5$ or $C(O)OR^6$; or C_1–C_6 alkyl, C_2–C_6 alkenyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, OR^{12a}, C_1–C_4 alkyl and C_1–C_4 haloalkyl; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

Embodiment 9b. A compound or composition of Embodiment 9a wherein R^{3e} is H or halogen; or C_1–C_6 alkyl or C_2–C_6 alkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen and C_1–C_4 haloalkyl; or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

Embodiment 9c. A compound or composition of Embodiment 9b wherein R^{3e} is H, halogen or C_1–C_6 alkyl.

Embodiment 9c1. A compound or composition of Embodiment 9c wherein R^{3e} is H.

Embodiment 9d. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 8h wherein R^{3e} and A can be taken together with the carbon atom to which they are attached to form a 3- to 7-membered ring containing ring members selected from carbon atoms and up to 2 heteroatoms independently selected from one oxygen atom, one sulfur atom, and up to 2 nitrogen atoms, wherein up to 2 carbon atom ring members are independently selected from C(=O) and C(=S) and the sulfur atom ring member is selected from S, S(O) or $S(O)_2$, said ring being unsubstituted or substituted with up to 4 substituents independently selected from the group consisting of halogen, cyano and C_1–C_4 alkyl.

Embodiment 10. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 9d wherein Z^1 is phenyl substituted with 1 to 4 R^{4a}.

Embodiment 10a. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 9d wherein Z^1 is a 5-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^{4a}.

Embodiment 10b. A compound or composition of Embodiment 10a wherein Z^1 is furanyl, thienyl, oxazolyl or thiazolyl, each unsubstituted or substituted with 1 to 3 R^{4a}.

Embodiment 10c. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 9d wherein Z^1 is a 6-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^{4a}.

Embodiment 10d. A compound or composition of Embodiment 10c wherein Z^1 is pyridinyl or pyrimidinyl, each unsubstituted or substituted with 1 to 3 R^{4a}.

Embodiment 11. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 9d wherein Z^2 is phenyl substituted with 1 to 4 R^{4b}.

Embodiment 11a. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 9d wherein Z^2 is a 5-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^{4b}.

Embodiment 11b. A compound or composition of Embodiment 11a wherein Z^2 is furanyl, thienyl, oxazolyl or thiazolyl, each unsubstituted or substituted with 1 to 3 R^{4b}.

Embodiment 11c. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 9d wherein Z^2 is a 6-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^{4b}.

Embodiment 11d. A compound or composition of Embodiment 11c wherein Z^2 is pyridinyl or pyrimidinyl, each unsubstituted or substituted with 1 to 3 R^{4b}.

Embodiment 12. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 11d wherein each R^{4a} and each R^{4b} is independently halogen, cyano, C_1–C_6 alkyl, C_1–C_6 haloalkyl or C_1–C_6 haloalkoxy.

Embodiment 12a. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 11d wherein Z^1 is phenyl or pyridinyl, each substituted with 1 to 3 R^{4a}.

Embodiment 12b. A compound or composition of Embodiment 12a wherein each R^{4a} is independently halogen, C_1–C_4 alkyl or C_1–C_4 haloalkyl.

Embodiment 12c. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 11d wherein Z^2 is phenyl substituted with 1 to 3 R^{4b}.

Embodiment 12d. A compound or composition of Embodiment 12c wherein each R^{4b} is independently halogen, C_1–C_4 alkyl or C_1–C_4 haloalkyl.

Embodiment 12e. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 11d wherein Z^1 is phenyl or pyridinyl, each substituted with 1 to 3 R^{4a}; Z^2 is phenyl substituted with 1 to 3 R^{4b}; and each R^{4a} and each R^{4b} is independently halogen, C_1–C_4 alkyl or C_1–C_4 haloalkyl.

Embodiment 13. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 12e wherein X is O.

Embodiment 13a. A compound of Formula **1**, or a composition comprising a compound of Formula **1**, or any one of Embodiments 1 through 12e wherein X is S.

Embodiments of this invention, including Embodiments 1–13a above as well as any other embodiments described herein, can be combined in any manner, and the descriptions of variables in the embodiments pertain not only to the compounds of Formula **1** but also to the starting compounds and intermediate compounds useful for preparing the compounds of Formula **1**. In addition, embodiments of this invention, including Embodiments 1–13a above as well as any other embodiments described herein, and any combination thereof, pertain to the compositions and methods of the present invention.

Combinations of Embodiments 1–13a are illustrated by:

Embodiment A. A compound of Formula **1**, or a composition comprising a compound of Formula **1** wherein

J^1 is $–C(R^{3a}R^{3b})–$;

J^2 is $–C(R^{3c}R^{3d})–$; and

M is $–C(R^{3e})(A)–$;

provided that when A is $C(X)NR^7R^8$ and X is O, then both R^7 and R^8 are not H.

Embodiment B. The compound or composition of Embodiment A wherein

X is O;

R^{1a} is H; and

R^{1b} is H.

Embodiment C. The compound or composition of Embodiment B wherein

R^{2a}, R^{2b}, R^{2c} and R^{2d} are H;

R^{3e} is H, halogen or C_1–C_6 alkyl; and

A is cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ or NR^9R^{10}; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

Embodiment D. The compound or composition of Embodiment C wherein

A is cyano, $C(O)OR^{6a}$ or $NHC(O)R^{5a}$; or a 5-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^4.

Embodiment E. A compound of Formula **1**, or a composition comprising a compound of Formula **1** wherein

R^{1a} and R^{1b} are H;

J^1 is $–C(R^{3a}R^{3b})–$;

J^2 is a direct bond;

M is $–C(R^{3e})(A)–$;

R^{2a} and R^{2c} are H;

R^{2b} and R^{2d} are each independently H, $C_1–C_4$ alkyl or $C_1–C_4$ haloalkyl;

R^{3a} and R^{3b} are H;

R^{3e} is H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or $C_1–C_6$ alkyl, $C_2–C_6$ alkenyl, $C_2–C_6$ alkynyl, $C_3–C_7$ cycloalkyl, $C_4–C_8$ cycloalkylalkyl or $C_3–C_6$ cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, $C_1–C_4$ alkyl, $C_1–C_4$ haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

A is cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or $C_1–C_6$ alkyl, $C_2–C_6$ alkenyl, $C_2–C_6$ alkynyl, $C_3–C_7$ cycloalkyl, $C_4–C_8$ cycloalkylalkyl or $C_3–C_6$ cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, $C_1–C_4$ alkyl, $C_1–C_4$ haloalkyl, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$ and $S(O)_nR^{11a}$; or phenyl, a 5- or 6-membered heteroaromatic ring or a 7- to 11-membered heteroaromatic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^4; provided that when A is $NHC(O)CH_3$ and R^{3e} is H, then Z^1 is other than 2-fluorophenyl, 3-methylphenyl, 4-methylphenyl or 2,5-dimethylphenyl; or

R^{3e} and A can be taken together with the carbon atom to which they are attached to form a 3- to 7-membered ring containing ring members selected from carbon atoms and up to 2 heteroatoms independently selected from one oxygen atom, one sulfur atom, and up to 2 nitrogen atoms, wherein up to 2 carbon atom ring members are independently selected from C(=O) and C(=S) and the sulfur atom ring member is selected from S, S(O) or $S(O)_2$, said ring being unsubstituted or

substituted with up to 4 substituents independently selected from the group consisting of halogen, cyano and C_1–C_4 alkyl;

provided that R^{3e} and A are each other than $N(CH_3)_2$.

Embodiment F. The compound or composition of Embodiment E wherein

R^{3e} is H, halogen, $C(X)R^5$ or $C(O)OR^6$; or C_1–C_6 alkyl, C_2–C_6 alkenyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, OR^{12a}, C_1–C_4 alkyl and C_1–C_4 haloalkyl; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

Embodiment G. The compound or composition of Embodiment F wherein

R^{3e} is H or halogen; or C_1–C_6 alkyl or C_2–C_6 alkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen and C_1–C_4 haloalkyl; or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

Embodiment H. The compound or composition of Embodiment G wherein

A is $NHC(O)R^{5a}$; or a 5- or 6-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^4.

Embodiment I. A compound of Formula **1**, or a composition comprising a compound of Formula **1** wherein

J^1 is $-C(R^{3a}R^{3b})-$ and J^2 is a direct bond;

M is $-C(R^{3e})(A)-$;

R^{3e} is H;

A is cyano, $C(O)OR^{6a}$, $NHC(O)R^{5a}$ or $NHC(O)OR^{6a}$;

Z^1 is phenyl or pyridinyl, each substituted with 1 to 3 R^{4a};

each R^{4a} is independently halogen, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

Z^2 is phenyl substituted with 1 to 4 R^{4b}; and

each R^{4b} is independently halogen, C_1–C_4 alkyl or C_1–C_4 haloalkyl.

Embodiment J. A compound of Formula **1**, or a composition comprising a compound of Formula **1** wherein

J^1 is $-C(R^{3a}R^{3b})-$ and J^2 is $-C(R^{3c}R^{3d})-$;

M is $-C(R^{3e})(A)-$;

R^{3e} is H;

A is cyano, $C(O)OR^{6a}$ or $NHC(O)R^{5a}$; or a 5-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^4;

Z^1 is phenyl or pyridinyl, each substituted with 1 to 3 R^{4a};

each R^{4a} is independently halogen, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

Z^2 is phenyl substituted with 1 to 4 R^{4b}; and

each R^{4b} is independently halogen, C_1–C_4 alkyl or C_1–C_4 haloalkyl.

Embodiment K. A compound of Formula **1**, or a composition comprising a compound of Formula **1** wherein

J^1 is $–C(R^{3a}R^{3b})–$ and J^2 is $–C(R^{3c}R^{3d})–$;

M is –O– ;

Z^1 is phenyl or pyridinyl, each substituted with 1 to 3 R^{4a};

each R^{4a} is independently halogen, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

Z^2 is phenyl substituted with 1 to 4 R^{4b}; and

each R^{4b} is independently halogen, C_1–C_4 alkyl or C_1–C_4 haloalkyl.

Specific embodiments include compounds of Formula **1** selected from the group consisting of:

methyl 1-[[3-(4-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarboxylate;

1-[[3-(4-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(3,4-dichlorophenyl)-3-(4-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[3-(2-fluorophenyl)-1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[3-(2,4-difluorophenyl)-1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(4-chlorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(3-chloro-4-fluorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(4-bromophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[3-(2-fluorophenyl)-1-[4-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[3-(2-fluorophenyl)-1-[5-(trifluoromethyl)-2-pyridinyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[3-(2,6-difluorophenyl)-1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

N-[(3*S*)-1-[[1-(3,4-dichlorophenyl)-3-(4-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-3-pyrrolidinyl]cyclopropanecarboxamide;

1-[[1-(3-chloro-4-fluorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-(1,3,4-oxadiazol-2-yl)piperidine;

1-[[1-(3,4-dichlorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-(1,3,4-oxadiazol-2-yl)piperidine;
1-[[1-(5-chloro-2-pyridinyl)-3-(2,4,6-trifluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[1-(4-chlorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-(1,3,4-oxadiazol-2-yl)piperidine;
1-[[1-(3-chloro-4-fluorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[1-(4-chloro-3-fluorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
N-[(3*S*)-1-[[1-(3,4-dichlorophenyl)-3-(4-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-3-pyrrolidinyl]acetamide;
1-[[1-(4-chlorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[1-(5-chloro-2-pyridinyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[3-(2-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-(1,3,4-oxadiazol-2-yl)piperidine;
1-[[1-(3-bromophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-(1,3,4-oxadiazol-2-yl)piperidine;
1-[[1-(5-bromo-2-pyridinyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[1-(5-chloro-2-pyridinyl)-3-(2,4-difluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile; and
1-[[3-(2-fluorophenyl)-1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-(1,3,4-oxadiazol-2-yl)piperidine.

Of note are compounds of Embodiment I wherein when A is $NHC(O)R^{5a}$, then the carbon atom to which A and R^{3e} are attached has the (*S*)-stereochemistry.

Embodiments of the present invention as described in the Summary of the Invention also include those described below. In the following Embodiments Formula **1p** includes stereoisomers, *N*-oxides, and salts thereof, and reference to "a compound of Formula **1p**" includes the definitions of substituents specified in the Summary of the Invention unless further defined in the Embodiments. The group R^2 represents instances of R^{2a}, R^{2b}, R^{2c} and R^{2d}. The group R^3 represents instances of R^{3a}, R^{3b}, R^{3c} and R^{3d}.

Embodiment 1. A compound of Formula **1p** wherein R^{1a} is H, cyano, C_1–C_6 alkyl, C_3–C_6 cycloalkyl, C_1–C_6 haloalkyl, C(O)OH, $C(O)R^{5a}$, $C(O)OR^{6a}$ or $C(O)NR^{7a}R^{8a}$.

Embodiment 1a. A compound of Embodiment 1 wherein R^{1a} is H, cyano or C_1–C_6 alkyl.

Embodiment 1b. A compound of Embodiment 1a wherein R^{1a} is H, cyano or methyl.

Embodiment 1c. A compound of Embodiment 1b wherein R^{1a} is H.

Embodiment 2. A compound of Formula **1p** or any one of Embodiments 1 through 1c wherein wherein R^{1b} is H or methyl.

Embodiment 2a. A compound of Embodiment 2 wherein R^{1b} is H.

Embodiment 3. A compound of Formula **1p** or any one of Embodiments 1 through 2a wherein A is cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ or NR^9R^{10}; or C_1–C_6 alkyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$ and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

Embodiment 3a. A compound of Embodiment 3 wherein A is cyano, $C(X)R^5$, $C(O)OR^6$ or NR^9R^{10}; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

Embodiment 3b. A compound of Embodiment 3a wherein A is cyano, $C(X)R^5$, $C(O)OR^6$ or NR^9R^{10}.

Embodiment 3c. A compound of Embodiment 3b wherein A is cyano, $C(O)OR^{6a}$, $NHC(O)R^{5a}$ or $NHC(O)OR^{6a}$.

Embodiment 4. A compound of Formula **1p** or any one of Embodiments 1 through 3c wherein each R^2 is independently cyano, C_1–C_6 alkyl, $C(O)OR^6$, $NHC(O)R^{5a}$ or $NHC(O)OR^{6a}$.

Embodiment 5. A compound of Formula **1p** or any one of Embodiments 1 through 4 wherein R^3 is H, halogen or C_1–C_6 alkyl.

Embodiment 5a. A compound of Embodiment 5 wherein R^3 is H, F, Cl, Br or methyl.

Embodiment 5b. A compound of Embodiment 5a wherein R^3 is H.

Embodiment 6. A compound of Formula **1p** or any one of Embodiments 1 through 5b wherein Z^1 is phenyl substituted with 1 to 4 R^4.

Embodiment 6a. A compound of Formula **1p** or any one of Embodiments 1 through 5b wherein Z^1 is a 5-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^4.

Embodiment 6b. A compound of Embodiment 6a wherein Z^1 is furanyl, thienyl, oxazolyl or thiazolyl, each unsubstituted or substituted with 1 to 3 R^4.

Embodiment 6c. A compound of Formula **1p** or any one of Embodiments 1 through 5b wherein Z^1 is a 6-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^4.

Embodiment 6d. A compound of Embodiment 6c wherein Z^1 is pyridinyl or pyrimidinyl, each unsubstituted or substituted with 1 to 3 R^4.

Embodiment 7. A compound of Formula **1p** or any one of Embodiments 1 through 5b wherein Z^2 is phenyl substituted with 1 to 4 R^4.

Embodiment 7a. A compound of Formula **1p** or any one of Embodiments 1 through 5b wherein Z^2 is a 5-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^4.

Embodiment 7b. A compound of Embodiment 6a wherein Z^2 is furanyl, thienyl, oxazolyl or thiazolyl, each unsubstituted or substituted with 1 to 3 R^4.

Embodiment 7c. A compound of Formula **1p** or any one of Embodiments 1 through 5b wherein Z^2 is a 6-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^4.

Embodiment 7d. A compound of Embodiment 6c wherein Z^2 is pyridinyl or pyrimidinyl, each unsubstituted or substituted with 1 to 3 R^4.

Embodiment 8. A compound of Formula **1p** or any one of Embodiments 1 through 7d wherein each R^4 is independently halogen, cyano, C_1–C_6 alkyl, C_1–C_6 haloalkyl or C_1–C_6 haloalkyl.

Embodiment 9. A compound of Formula **1p** or any one of Embodiments 1 through 8 wherein Z^1 is phenyl and one R^4 is in the 3- or 4-position.

Embodiment 9a. A compound of Embodiment 9 wherein R^4 is halogen, cyano, C_1–C_6 alkyl, C_1–C_6 haloalkyl or C_1–C_6 haloalkyl.

Embodiment 10. A compound of Formula **1p** or any one of Embodiments 1 through 8 wherein Z^2 is phenyl and one R^4 is in the 2-position.

Embodiment 10a. A compound of Embodiment 10 wherein R^4 is halogen or methyl.

Embodiment 11. A compound of Formula **1p** or any one of Embodiments 1 through 10a wherein X is O.

Embodiment 11a. A compound of Formula **1p** or any one of Embodiments 1 through 10a wherein X is S.

Embodiment 12. A compound of Formula **1p** or any one of Embodiments 1 through 11a wherein m is 0, 1 or 2.

Embodiment 12a. A compound of Embodiment 12 wherein m is 1 or 2.

Embodiment 12b. A compound of Embodiment 12 wherein m is 0.

Embodiments of this invention, including Embodiments 1–12b above as well as any other embodiments described herein, can be combined in any manner, and the descriptions of variables in the embodiments pertain not only to the compounds of Formula **1p** but also

to the starting compounds and intermediate compounds useful for preparing the compounds of Formula **1p**. In addition, embodiments of this invention, including Embodiments 1–12b above as well as any other embodiments described herein, and any combination thereof, pertain to the compositions and methods of the present invention.

Combinations of Embodiments 1–12b are illustrated by:

Embodiment A. A compound of Formula **1p** wherein

X is O;

R^{1a} is H; and

R^{1b} is H.

Embodiment B. A compound of Embodiment A wherein

R^3 is H, halogen or C_1–C_6 alkyl;

A is cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ or NR^9R^{10}; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4; and

each R^2 is independently cyano, C_1–C_6 alkyl, $NHC(O)R^{5a}$ or $NHC(O)OR^{6a}$.

Embodiment C. A compound of Embodiment B wherein

A is cyano, $C(O)OR^{6a}$, $NHC(O)R^{5a}$ or $NHC(O)OR^{6a}$.

Specific embodiments include compounds of Formula **1p** selected from the group consisting of:

methyl 1-[[3-(4-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarboxylate;

1-[[3-(4-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(3,4-dichlorophenyl)-3-(4-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[3-(2-fluorophenyl)-1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[3-(2,4-difluorophenyl)-1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(4-chlorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(3-chloro-4-fluorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(4-bromophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[3-(2-fluorophenyl)-1-[4-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[3-(2-fluorophenyl)-1-[5-(trifluoromethyl)-2-pyridinyl]-1*H*-pyrazol-4-

yl]methyl]-4-piperidinecarbonitrile; and
1-[[3-(2,6-difluorophenyl)-1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile.

Of note is that compounds of this invention are characterized by favorable metabolic and/or soil residual patterns and exhibit activity controlling a spectrum of agronomic and nonagronomic invertebrate pests.

Of particular note, for reasons of invertebrate pest control spectrum and economic importance, protection of agronomic crops from damage or injury caused by invertebrate pests by controlling invertebrate pests are embodiments of the invention. Compounds of this invention because of their favorable translocation properties or systemicity in plants also protect foliar or other plant parts which are not directly contacted with a compound of Formula **1** or a composition comprising the compound.

Also noteworthy as embodiments of the present invention are compositions comprising a compound of any of the preceding Embodiments, as well as any other embodiments described herein, and any combinations thereof, and at least one additional component selected from the group consisting of a surfactant, a solid diluent and a liquid diluent, said compositions optionally further comprising at least one additional biologically active compound or agent.

Further noteworthy as embodiments of the present invention are compositions for controlling an invertebrate pest comprising a compound (i.e. in a biologically effective amount) of any of the preceding Embodiments, as well as any other embodiments described herein, and any combinations thereof, and at least one additional component selected from the group consisting of a surfactant, a solid diluent and a liquid diluent, said compositions optionally further comprising at least one additional biologically active compound or agent (i.e. in a biologically effective amount).

Embodiments of the invention further include methods for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biologically effective amount of a compound of any of the preceding Embodiments (e.g., as a composition described herein).

Embodiments of the invention also include a composition comprising a compound of any of the preceding Embodiments in the form of a soil drench liquid formulation. Embodiments of the invention further include methods for controlling an invertebrate pest comprising contacting the soil with a liquid composition as a soil drench comprising a biologically effective amount of a compound of any of the preceding Embodiments.

Embodiments of the invention also include a spray composition for controlling an invertebrate pest comprising a compound (i.e. in a biologically effective amount) of any of the preceding Embodiments and a propellant. Embodiments of the invention further include a bait composition for controlling an invertebrate pest comprising a compound (i.e. in a

biologically effective amount) of any of the preceding Embodiments, one or more food materials, optionally an attractant, and optionally a humectant. Embodiments of the invention also include a device for controlling an invertebrate pest comprising said bait composition and a housing adapted to receive said bait composition, wherein the housing has at least one opening sized to permit the invertebrate pest to pass through the opening so the invertebrate pest can gain access to said bait composition from a location outside the housing, and wherein the housing is further adapted to be placed in or near a locus of potential or known activity for the invertebrate pest.

Embodiments of the invention also include a method for protecting a seed from an invertebrate pest comprising contacting the seed with a biologically effective amount of a compound of any of the preceding Embodiments (e.g., as a composition described herein).

Embodiments of the invention also include methods for protecting an animal from an invertebrate parasitic pest comprising administering to the animal a parasiticidally effective amount of a compound of any of the preceding Embodiments.

Embodiments of the invention also include methods for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biologically effective amount of a compound of Formula **1**, an *N*-oxide, or a salt thereof, (e.g., as a composition described herein), provided that the methods are not methods of medical treatment of a human or animal body by therapy.

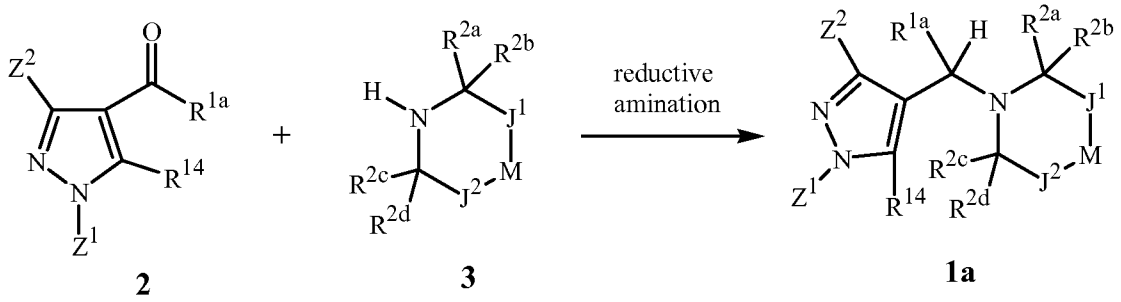
This invention also relates to such methods wherein the invertebrate pest or its environment is contacted with a composition comprising a biologically effective amount of a compound of Formula **1**, an *N*-oxide, or a salt thereof, and at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents, said composition optionally further comprising a biologically effective amount of at least one additional biologically active compound or agent, provided that the methods are not methods of medical treatment of a human or animal body by therapy.

One or more of the following methods and variations as described in Schemes 1–11 can be used to prepare the compounds of Formula **1**. The definitions of R^{1a}, R^{1b}, R^{2a}, R^{2b}, R^{2c}, R^{2d}, R^{14}, Z^1, Z^2, J^1, J^2 and M in the compounds of Formulae **1**–**10** below are as defined above in the Summary of the Invention unless otherwise noted. Ambient or room temperature is defined as about 20–25 °C.

Compounds of Formula **1a** (compounds of Formula **1** wherein R^{1a} is H, alkyl, cycloalkyl or haloalkyl, and R^{1b} is H) can be prepared by reductive amination of appropriately substituted carbonyl compounds of Formula **2** with optionally substituted cyclic amines of Formula **3** in the presence of reducing reagents such as sodium triacetoxyborohydride (see, for example, Li, J. et al. *Bioorganic & Medicinal Chemistry Letters* **2010**, *20*(16), pages 4932-4935). The reaction is typically carried out in an inert

organic solvent such as dichloromethane at room temperature. This method is shown in Scheme 1 and exemplified in Step C of Synthesis Example 2.

Scheme 1

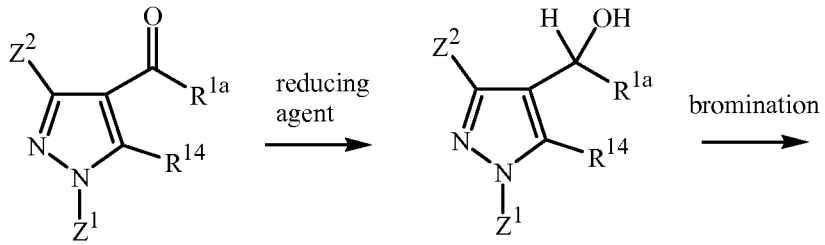


2 **3** **1a**

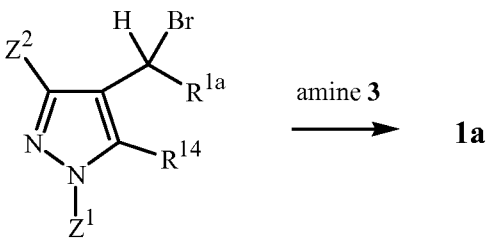
R^{1a} is H, alkyl, cycloalkyl or haloalkyl

Compounds of Formula **1a** can also be prepared by the method shown in Scheme 2. In this method, an appropriately substituted carbonyl compound of Formula **2** is reduced with a reducing agent such as lithium aluminum hydride in an inert solvent such as diethyl ether (see, for example, De Luca, Lidia; et al. *Synlett* **2004**, *13*, pages 2299-2302) to yield an intermediate alcohol of Formula **4a**. The alcohol is converted to the corresponding bromide of Formula **5** by treatment with a reagent such as HBr or PBr_3 (see, for example, Toja, Emilio; et al. *European Journal of Medicinal Chemistry* **1982**, *17*(3), pages 223-227). Reaction of the bromide of Formula **5** with an amine of Formula **3** provides the compound of Formula **1a** (see, for example, Lee, Suk Ho, et al. *Journal of Medicinal Chemistry* **2008**, *51*(22), pages 7216-7233). This method is exemplified in Step C of Synthesis Example 1.

Scheme 2



2 **4a**

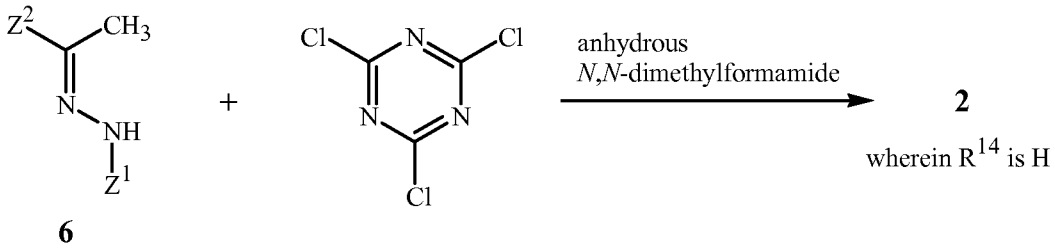


1a

5

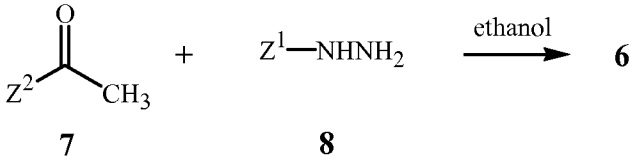
Compounds of Formula **2** wherein R^{14} is H can be prepared by treating the appropriately substituted hydrazone of Formula **6** under anhydrous conditions with cyanuric chloride and *N*,*N*-dimethylformamide (see, for example, De Luca, Lidia; et al. *Synlett* **2004**, *13*, pages 2299-2302). This method is shown in Scheme 3 and exemplified in Step B of Synthesis Example 1 and Step B of Synthesis Example 2.

Scheme 3



Compounds of Formula **6** can be prepared by a variety of methods known in the art, such as the condensation of an acetophenone of Formula **7** with an aryl hydrazine of Formula **8** in refluxing ethanol (see, for example, Goeker, Hakan; et al. *Journal of Heterocyclic Chemistry* **2009**, *46*(5), pages 936-948). This method is shown in Scheme 4 and exemplified in Step A of Synthesis Example 1 and Step A of Synthesis Example 2.

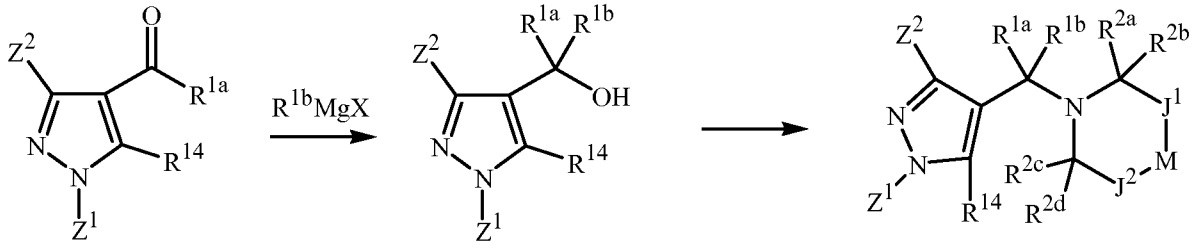
Scheme 4



Compounds of Formulae **3**, **7** and **8** are either commercially available or can be prepared by well-established methods known in the art.

Compounds of Formula **1b** (compounds of Formula **1** wherein R^{1a} is H, alkyl, cycloalkyl or haloalkyl, and R^{1b} is alkyl) can be prepared from compounds of Formula **2** by the method shown in Scheme 5. In this method, treatment of a compound of Formula **2** with a Grignard reagent (i.e. $R^{1b}MgX$) under reaction conditions known in the art provides the intermediate compound of Formula **4b** (see, for example, *Journal of Medicinal Chemistry* **2008**, *51*(22), pages 7216-7233). Conversion of the compound of Formula **4b** to the compound of Formula **1b** is as described in Scheme 2.

Scheme 5

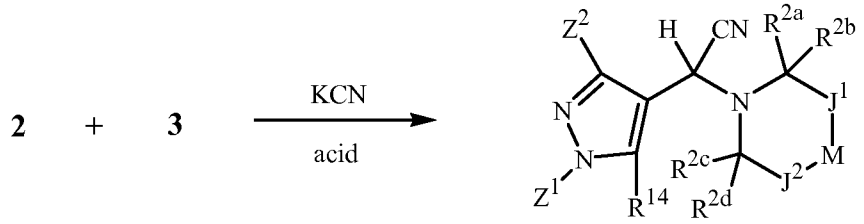


R^{1a} is H, alkyl, cycloalkyl or haloalkyl

R^{1b} is alkyl

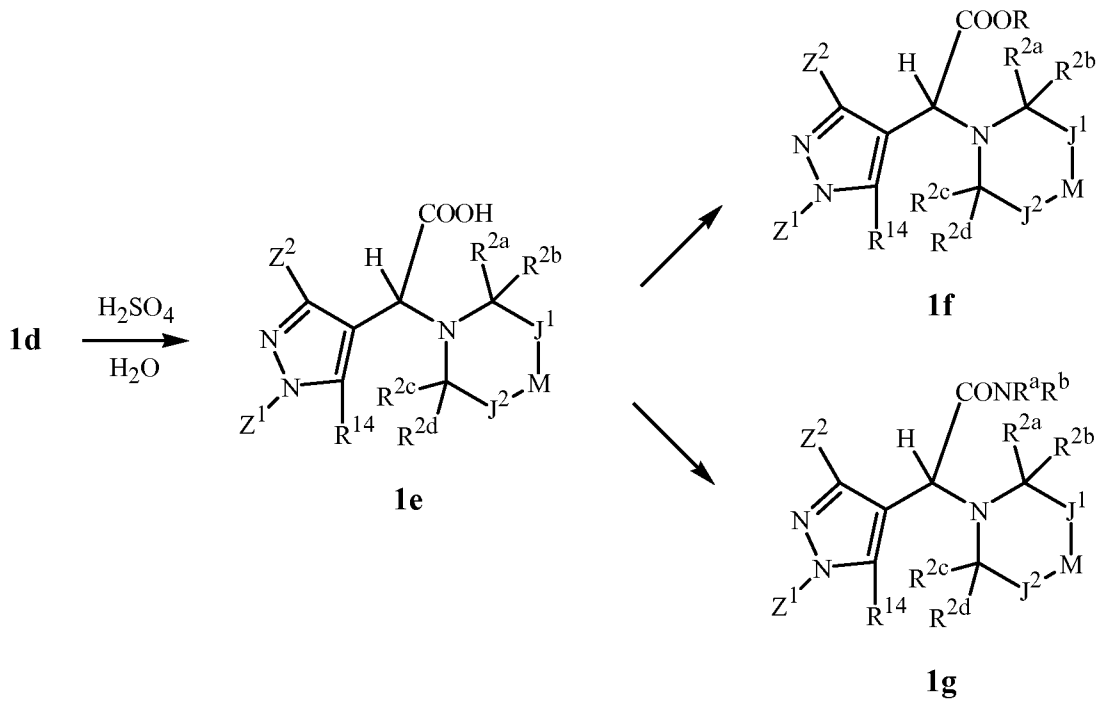
Compounds of Formula **1d** (compounds of Formula **1** wherein R^{1a} is CN and R^{1b} is H) can be prepared from compounds of Formula **2** by the method shown in Scheme 6. In this method, treatment of a compound of Formula **2** with KCN in the presence of an amine of Formula **3** and an acid such as *p*-toluenesulfonic acid provides the compound of Formula **1d**.

Scheme 6



The compounds of Formula **1d** are useful in the preparation of carboxylic acid, ester and amide derivatives (see, for example, *Arzneimittel-Forschung* **1981**, *31*(4), pages 649-655). Scheme 7 illustrates the preparation of a carboxylic acid derivative of Formula **1e** from the compound of Formula **1d** by treatment with aqueous sulfuric acid; the compound of Formula **1e** can in turn be transformed into an ester of Formula **1f** or an amide of Formula **1g** by methods known in the art.

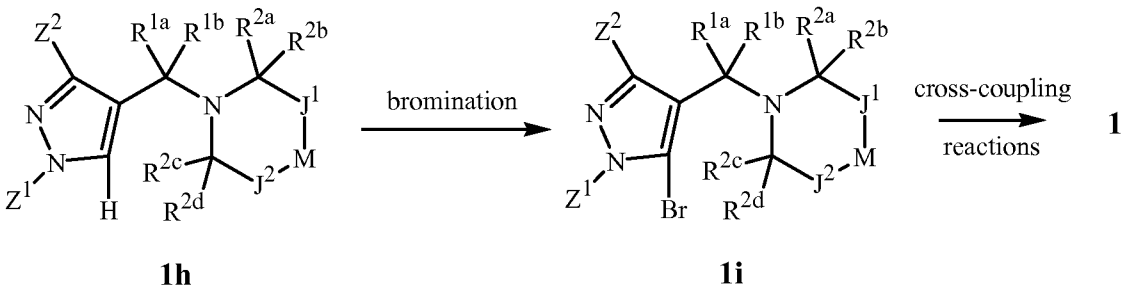
Scheme 7



Compounds of Formula **1** wherein R^{1a} is a cyano, ester or amide group and R^{1b} is alkyl can be prepared by alkylation of the corresponding compounds wherein R^{1b} is H by treatment with a strong base followed by an alkylating agent (see, for example, WO 2006/134459).

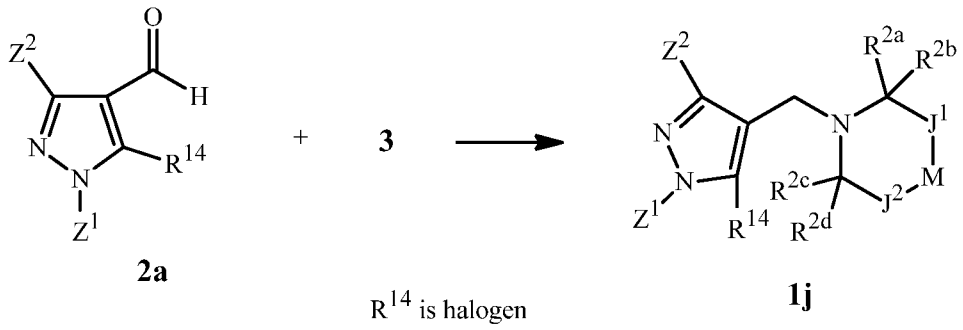
Compounds of Formula **1i** (compounds of Formula **1** wherein R^{14} is Br) can be prepared from compounds of Formula **1h** (compounds of Formula **1** wherein R^{14} is H) by bromination at the R^{14} position of the pyrazole as shown in Scheme 8. Typical bromination methods include reaction with bromine and sodium carbonate in dichloromethane at temperatures below 0 °C (see, for example, *Bioorganic Medicinal Chemistry Letters* **2008**, *18*(2), pages 509-512). The intermediate bromide of Formula **1i** can be further transformed to a variety of other functional groups by methods known in the art such as cross-coupling reactions (see, for example, *Journal of Medicinal Chemistry* **2005**, *48*(4), pages 1132-1144).

Scheme 8



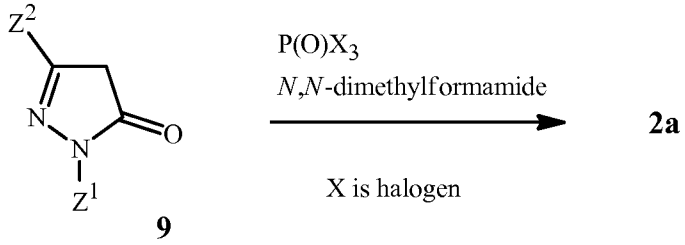
Compounds of Formula **1j** (compounds of Formula **1** wherein R^{14} is halogen) can be prepared by reductive amination of compounds of Formula **2a** (compounds of Formula **2** wherein R^{14} is halogen) with cyclic amines of Formula **3** and reducing agents such as sodium triacetoxyborohydride (see, for example, *Bioorganic & Medicinal Chemistry Letters* **2010**, *20*(16), pages 4932-4935). The reaction is typically carried out at room temperature in an inert organic solvent such as dichloromethane. This method is shown in Scheme 9.

Scheme 9



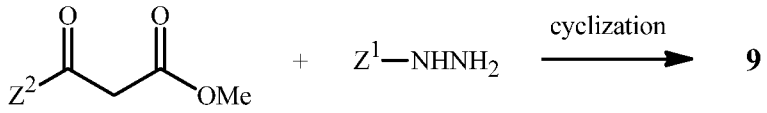
Compounds of Formula **2a** can be prepared from compounds of Formula **9** by the method shown in Scheme 10. In this method, treatment of a compound of Formula **9** with a phosphorus oxyhalide in the presence of *N*,*N*-dimethylformamide provides compounds of Formula **2a** (see, for example, Bulgarian Chemical Communications **2009**, *41*(3), pages 241-247).

Scheme 10



Scheme 11 illustrates the preparation of compounds of Formula **9** by cyclization of compounds of Formulae **8** and **10**. This method typically consists of two steps: initial condensation typically carried out in an inert solvent such as dichloromethane and in the presence of a base such as triethylamine, followed by treatment with an acid such as acetic acid, heating, and removal of the volatile organics (see, for example, *Bioorganic & Medicinal Chemistry* **2010**, *18*(22), pages 7849-7854). Compounds of Formulae **8** and **10** are either commercially available or can be prepared by well-established methods known in the art.

Scheme 11



10 8

Compounds of Formula **1** containing the groups $C(X)R^5$, $C(X)R^{5a}$, $C(X)NR^7R^8$ and $C(X)NR^{7a}R^{8a}$ wherein X is S can be prepared from corresponding compounds of Formula **1** wherein X is O by general methods known in the art involving treatment with thionating reagents such as P_4S_{10} or Lawessen's Reagent (2,4-bis(4-methoxyphenyl)-1,3-dithia-2,4-diphosphetane 2,4-disulfide).

Schemes 1 through 11 illustrate methods to prepare compounds of Formula **1** having a variety of substituents. Compounds of Formula **1** having substituents other than those particularly noted for Schemes 1 through 11 can be prepared by general methods known in the art of synthetic organic chemistry, including methods analogous to those described for Schemes 1 to 11.

It is recognized that some reagents and reaction conditions described above for preparing compounds of Formula **1** may not be compatible with certain functionalities present in the intermediates. In these instances, the incorporation of protection/deprotection sequences or functional group interconversions into the synthesis will aid in obtaining the desired products. The use and choice of the protecting groups will be apparent to one skilled in chemical synthesis (see, for example, Greene, T. W.; Wuts, P. G. M. *Protective Groups in Organic Synthesis*, 2nd ed.; Wiley: New York, 1991). One skilled in the art will recognize that, in some cases, after the introduction of a given reagent as it is depicted in any individual scheme, it may be necessary to perform additional routine synthetic steps not described in detail to complete the synthesis of compounds of Formula **1**. One skilled in the art will also recognize that it may be necessary to perform a combination of the steps illustrated in the above schemes in an order other than that implied by the particular sequence presented to prepare the compounds of Formula **1**.

One skilled in the art will also recognize that compounds of Formula **1** and the intermediates described herein can be subjected to various electrophilic, nucleophilic, radical, organometallic, oxidation, and reduction reactions to add substituents or modify existing substituents.

Without further elaboration, it is believed that one skilled in the art using the preceding description can utilize the present invention to its fullest extent. The following Synthesis Examples are, therefore, to be construed as merely illustrative, and not limiting of the disclosure in any way whatsoever. Steps in the following Synthesis Examples illustrate a procedure for each step in an overall synthetic transformation, and the starting material for

each step may not have necessarily been prepared by a particular preparative run whose procedure is described in other Examples or Steps. Ambient or room temperature is defined as about 20–25 °C. Percentages are by weight except for chromatographic solvent mixtures or where otherwise indicated. Parts and percentages for chromatographic solvent mixtures are by volume unless otherwise indicated. MPLC refers to medium pressure liquid chromatography on silica gel. ^{1}H NMR spectra are reported in ppm downfield from tetramethylsilane; "s" means singlet, "d" means doublet, "dd" means doublet of doublets, "ddd" means doublet of doublet of doublets, "t" means triplet, "m" means multiplet, and "br s" means broad singlet. Compound numbers refer to compounds in Index Tables A-E.

SYNTHESIS EXAMPLE 1

Preparation of 1-[[3-(4-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile (compound number 12)

Step A: Preparation of 1-(4-fluorophenyl)ethanone 2-[3-(trifluoromethyl)phenyl]hydrazone

To a solution of 4-fluoroacetophenone (5.0 g, 36 mmol) in 200 mL of ethanol (200 mL) was added 3-(trifluoromethyl)phenyl hydrazine (6.370 g, 36.20 mmol). The reaction mixture was stirred for 18 hours, after which time the volatile materials were removed under reduced pressure, and the resulting crude reaction mixture was added to water (100 mL) and extracted with diethyl ether (3 x 200 mL). The combined organic extracts were dried over $MgSO_4$ and concentrated under reduced pressure. The resulting solid residue was purified by chromatography on silica gel (ethyl acetate/hexanes) to afford the title compound as a solid (4.78 g). ^{1}H NMR ($CDCl_3$) δ 7.75-7.78 (dd, 2H), 7.42 (d, 2H), 7.36 (d, 1H), 7.32 (br s, NH), 7.06-7.15 (m, 3H), 2.25 (s, 3H).

Step B: Preparation of 3-(4-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazole-4-carboxaldehyde

Cyanuric chloride (15.0 g, 81.3 mmol) was added in one portion to anhydrous *N*,*N*-dimethylformamide (100 mL) under a nitrogen atmosphere. The reaction mixture was stirred at room temperature until the cyanuric chloride could no longer be detected by UV. After complete consumption of the cyanuric chloride, a solution of 1-(4-fluorophenyl)ethanone 2-[3-(trifluoromethyl)phenyl]hydrazone (4.78 g, 16.1 mmol) in anhydrous *N*,*N*-dimethylformamide (25 mL) was added to the reaction mixture. The reaction mixture was then stirred for 18 hours at room temperature, after which time the reaction mixture was added to aqueous sodium bicarbonate solution (200 mL) and extracted with diethyl ether (3 x 200 mL). The combined organic extracts were washed once with water (100 mL), dried over $MgSO_4$, and concentrated under reduced pressure. The resulting solid residue was purified by chromatography on silica gel (ethyl acetate/hexanes) to afford

the title compound as a solid (1.74 g). ^{1}H NMR ($CDCl_3$) δ 10.06 (s, 1H), 8.59 (s, 1H), 8.11 (s, 1H), 7.95-8.00 (m, 1H), 7.86-7.89 (m, 2H), 7.66 (d, 2H), 7.21 (t, 2H).

Step C: Preparation of 1-[[3-(4-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile

To a suspension of lithium aluminum hydride (1.0 g, 26 mmol) in tetrahydrofuran (25 mL) was added a solution of 3-(4-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazole-4-carboxaldehyde (1.74 g, 5.21 mmol) in tetrahydrofuran (25 mL). The reaction mixture was allowed to stir for 18 hours, after which time aqueous 50% NaOH solution (1 mL) was added, followed by water (1 mL). The reaction mixture was allowed to stir for 1 hour, magnesium sulfate was added, and the reaction mixture was filtered. The filtrate was concentrated under reduced pressure to yield the crude intermediate alcohol (1.58 g). This alcohol was dissolved in diethyl ether (100 mL) and phosphorous tribromide (1.276 g, 4.714 mmol) was added dropwise. The reaction mixture was allowed to stir for 18 hours at room temperature under nitrogen. The reaction mixture was then added to water (100 mL) and extracted with diethyl ether (3 x 125 mL). The combined organic extracts were dried ($MgSO_4$), concentrated under reduced pressure, and the resulting solid residue was purified by chromatography on silica gel (ethyl acetate/hexanes) to afford the intermediate bromide (632 mg). A portion of the intermediate bromide (200 mg, 0.504 mmol) and piperidine-4-carbonitrile (300 mg, 2.73 mmol) were combined in acetonitrile (20 mL) with potassium carbonate (365 mg, 2.73 mmol). The reaction mixture was stirred at room temperature for 18 hours. The reaction mixture was then added to water (100 mL) and extracted with ethyl acetate (3 x 100 mL). The combined organic extracts were dried ($MgSO_4$), concentrated under reduced pressure, and the resulting solid residue was purified by chromatography on silica gel (ethyl acetate/hexanes) to afford the title compound (203 mg), a compound of this invention. ^{1}H NMR ($CDCl_3$) δ 8.03 (s, 1H), 7.90-7.94 (m, 4H), 7.52-7.61 (m, 2H), 7.14 (t, 2H), 3.49 (s, 2H), 2.71 (m, 3H), 2.43 (m, 2H), 1.86-1.97 (m, 4H).

SYNTHESIS EXAMPLE 2

Preparation of methyl 1-[[1-(2,4-difluorophenyl)-3-(2-fluoro-4-methylphenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarboxylate (compound number 16)

Step A: Preparation of 1-(2-fluoro-4-methylphenyl)ethanone 2-(2,4-difluorophenyl)hydrazone

To a solution of 2-fluoro-4-methylacetophenone (4.210 g, 27.70 mmol) in ethanol (200 mL) was added 2,4-difluorophenyl hydrazine HCl salt (5.0 g, 28 mmol). To this reaction mixture was added sodium acetate (2.044, 24.93 mmol) in one portion. This reaction mixture was stirred for 18 hours, after which time the volatile materials were removed under reduced pressure, and the resulting crude reaction mixture was added to water (100 mL) and extracted with diethyl ether (3 x 200 mL). The organic extracts were combined, dried

($MgSO_4$), evaporated under reduced pressure, and the solid residue was purified by chromatography on silica gel (ethyl acetate/hexanes) to afford the title compound as a solid (7.417 g). ^{1}H NMR ($CDCl_3$) δ 7.49-7.56 (m, 2H), 7.34 (br s, NH) 6.97 (d, 1H), 6.80-6.91 (m, 3H), 2.37 (s, 3H), 2.28 (s, 3H).

Step B: Preparation of 1-(2,4-difluorophenyl)-3-(2-fluoro-4-methylphenyl)-1*H*-pyrazole-4-carboxaldehyde

Cyanuric chloride (15.0 g, 81.3 mmol) was added in one portion to anhydrous *N*,*N*-dimethylformamide (75 mL) under a nitrogen atmosphere. The reaction mixture was allowed to stir at room temperature until the cyanuric chloride could no longer be detected by UV. After complete consumption of the cyanuric chloride, 1-(2-fluoro-4-methylphenyl)ethanone 2-(2,4-difluorophenyl)hydrazone (7.417 g, 26.68 mmol) was added in anhydrous *N*,*N*-dimethylformamide (25 mL). The reaction mixture was allowed to stir for 18 hours at room temperature, after which time the reaction mixture was added to aqueous sodium bicarbonate solution (200 mL) and extracted with diethyl ether (3 x 200 mL). The combined organic extracts were washed once with water (100 mL), dried ($MgSO_4$), evaporated under reduced pressure, and the solid residue was purified by chromatography on silica gel (ethyl acetate/hexanes) to afford the title compound as a solid (6.877 g). ^{1}H NMR ($CDCl_3$) δ 9.85 (s, 1H), 8.49 (s, 1H), 7.89-7.96 (m, 1H), 7.49 (t, 1H), 6.99-7.06 (m, 4H), 2.39 (s, 3H).

Step C: Preparation of methyl 1-[[1-(2,4-difluorophenyl)-3-(2-fluoro-4-methylphenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarboxylate

To a solution of piperidine-4-carboxylic acid methyl ester (300 mg, 1.80 mmol) in dichloromethane (25 mL) was added 1-(2,4-difluorophenyl)-3-(2-fluoro-4-methylphenyl)-1*H*-pyrazole-4-carboxaldehyde (300 mg, 0.949 mmol). The reaction mixture was allowed to stir for 1 hour, and then sodium triacetoxyborohydride (358 mg, 1.90 mmol) was added in one portion. The reaction mixture was stirred for 18 hours, and was then added to 100 mL of water (100 mL) and extracted with dichloromethane (3 x 100 mL). The combined organic extracts were dried ($MgSO_4$), evaporated under reduced pressure, and the residue was purified by chromatography on silica gel (ethyl acetate/hexanes) to afford the title compound (144.3 mg), a compound of this invention. ^{1}H NMR ($CDCl_3$) δ 7.98 (d, 1H), 7.90-7.94 (m, 1H), 7.48 (t, 1H), 6.96-7.03 (m, 4H), 3.65 (s, 3H), 3.46 (s, 2H), 2.84-2.87 (m, 2H), 2.41 (s, 3H) 2.24-2.31 (m, 1H), 1.96-2.01 (m, 2H), 1.83-1.86 (m, 2H), 1.67-1.74 (m, 2H).

SYNTHESIS EXAMPLE 3

Preparation of *N*-[(3*S*)-1-[[1-(3,4-dichlorophenyl)-3-(4-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-3-pyrrolidinyl]cyclopropanecarboxamide (compound number 869)

Step A: Preparation of *N*-[(3*S*)-pyrrolidinyl]cyclopropanecarboxamide

To a solution of cyclopropanecarboxylic acid (5.0 g, 58 mmol) in dichloromethane (100 mL) was added oxalyl chloride (36.918 g, 290.70 mmol), followed by the addition of 100 mg of *N*,*N*-dimethylformamide. Bubbling occurred and the reaction was allowed to stir at room temperature for 3 hours, after which time the reaction mixture was concentrated under reduced pressure to provide a white oily solid. This crude solid was dissolved in dichloromethane (100 mL), and this solution was added dropwise to a solution of (3*S*)-amino-1-(phenylmethyl)pyrrolidine (5.0 g, 28 mmol) in dichloromethane (100 mL) at 10 °C over the course of 15 minutes. Triethylamine (6.459 g, 63.95 mmol) was then added to the reaction mixture, the cold bath was removed, and the reaction mixture was stirred for 18 hours. The reaction mixture was then added to an aqueous saturated solution of sodium bicarbonate and extracted with dichloromethane (3 x 100 mL). The organic layers were combined and dried over magnesium sulfate, filtered, and concentrated under reduced pressure to yield a brown solid which was recrystallized from 1-chlorobutane to give 2.546 g of the intermediate *N*-[(3*S*)-1-(phenylmethyl)-3-pyrrolidinyl]cyclopropanecarboxamide. This intermediate (2.546 g, 10.43 mmol) was added to a nitrogen-purged solution of ethanol (100 mL) and water (3 mL), followed by the addition of 5% Pd/C (500 mg, containing 63.79% water). The reaction mixture was stirred for 1 minute, and then ammonium formate (3.100 g, 50.0 mmol) was added in one portion. The reaction mixture was then heated to reflux for 3 hours, cooled to room temperature, and filtered through Celite®. The Celite® pad was washed with dichloromethane (200 mL), and the organic filtrate was dried over magnesium sulfate, filtered, and concentrated under reduced pressure to yield the title compound as a clear oily solid (1.521 g). ^{1}H NMR ($CDCl_3$): δ 6.38 (br s, 2H), 4.40-4.45 (m, 1H), 3.10-3.14 (m, 2H), 2.95-2.99 (m, 2H), 2.86-2.95 (m, 1H) 2.12-2.18 (m, 1H), 1.67-1.70 (m, 1H), 0.93-0.96 (m, 2H), 0.70-0.73 (m, 2H).

Step B: Preparation of 1-(3,4-dichlorophenyl)-3-(4-fluorophenyl)-1*H*-pyrazole-4-carboxaldehyde

3,4-Dichlorophenylhydrazine hydrochloride (5.86 g, 27.4 mmol) and sodium acetate (2.025 g, 24.70 mmol) were suspended in ethanol (100 mL), and the reaction mixture was stirred at room temperature for 5 minutes. 4-Fluoroacetophenone (3.79 g, 27.4 mmol) was added to the reaction mixture in one portion, and the reaction mixture was stirred at room temperature for 18 hours. The reaction mixture was then added to water (100 mL) and extracted with dichloromethane (3 x 200 mL). The combined organic extracts were dried over magnesium sulfate, filtered, and concentrated under reduced pressure to give the intermediate hydrazine (7.976 g). This hydrazone was added to *N*,*N*-dimethylformamide (50 mL). Seperately, cyanuric chloride (14.866 g, 80.574 mmol) was added in one portion to *N*,*N*-dimethylformamide (100 mL) and the reaction mixture stirred for 20 minutes. To this thick white suspension was added in one portion the previously prepared *N*,*N*-

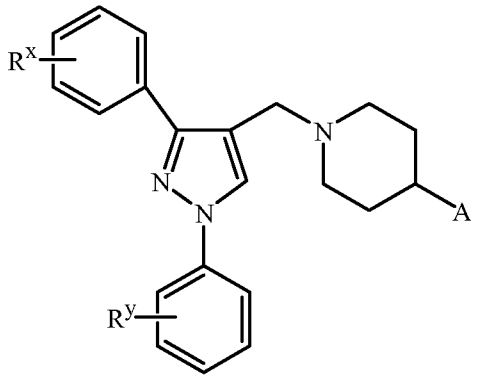
dimethylformamide hydrazine solution. The reaction mixture was vigorously stirred at under a nitrogen atmosphere at room temperature for 18 hours. The reaction mixture was then added to an aqueous suspension of sodium bicarbonate until the reaction mixture reached pH 8.0. The aqueous suspension was then extracted with diethyl ether (2 x 500 mL). The combined ether extracts were washed with water (2 x 200 mL), dried over magnesium sulfate, filtered, and concentrated under reduced pressure to yield a crude product, which was triturated with diethyl ether and collected by filtration to give the title compound as a white solid (8.179 g). ^{1}H NMR ($CDCl_3$): δ 10.04 (s, 1H), 8.51 (s, 1H), 7.98 (s, 1H), 7.84-7.87 (m, 2H), 7.58-7.65 (m, 2H), 7.20 (t, 2H).

Step C: Preparation of *N*-[(3*S*)-1-[[1-(3,4-dichlorophenyl)-3-(4-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-3-pyrrolidinyl]cyclopropanecarboxamide

1-(3,4-Dichlorophenyl)-3-(4-fluorophenyl)-1*H*-pyrazole-4-carboxaldehyde (2.34 g, 6.99 mmol) was dissolved in dichloromethane (50 mL) and *N*-[(3*S*)-pyrrolidinyl]cyclopropanecarboxamide (1.18 g, 7.683 mmol) was added. The reaction mixture was stirred for 1 hour, and then sodium triacetoxyborohydride (4.88 g, 23.0 mmol) was added in one portion. The reaction mixture was allowed to stir for 18 hours, and was then added to water (100 mL) and extracted with dichloromethane (3 x 100 mL). The organic extracts were combined, dried over magnesium sulfate, concentrated under reduced pressure, and the residue was purified by chromatography on silica gel (ethyl acetate/hexane) to afford the title compound (1.841 g), a compound of this invention. ^{1}H NMR ($CDCl_3$): δ 7.87-7.91 (m, 4H), 7.59 (d, 1H), 7.52 (d, 1H), 7.15 (t, 2H), 5.81 (br d, 1H), 4.46-4.48 (m, 1H), 3.45 (ab quartet, 2H), 2.91-2.95 (m, 1H), 2.56-2.66 (m, 2H), 2.28-2.34 (m, 2H), 1.60-1.65 (m, 1H), 1.21-1.26 (m, 1H), 0.92-0.95 (m, 2H), 0.69-0.73 (m, 2H).

By the procedures described herein together with methods known in the art, the following compounds of Tables 1 to 6b can be prepared. The following abbreviations are used in Tables 1 to 6b which follow: Me means methyl and Et means ethyl. R^x and R^y represent one or a combination of substituents.

TABLE 1



A is cyano

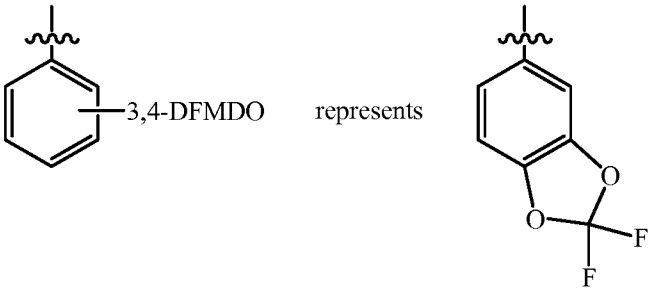
R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3

2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3

2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F

2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

* 3,4-DFMDO is 3,4-difluoromethylenedioxy as shown below:



A is CO_2Me

R^X	R^Y	R^X	R^Y	R^X	R^Y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl

2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F

4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl

2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A is CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl

2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F

2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl

2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl

2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br

2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl

4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A is C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y

2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br

2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl

2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*

2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A is NHC(O)OMe

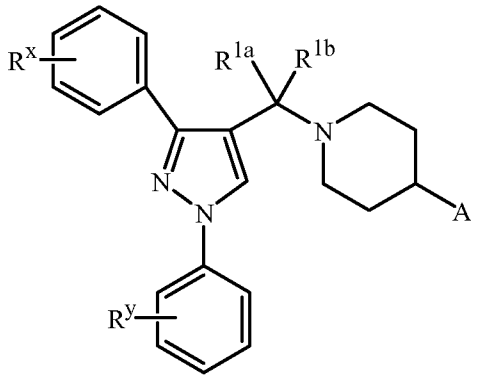
R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br

2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3

2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl

2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

TABLE 2



R^{1a} is H, R^{1b} is cyano, A is cyano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl

2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is cyano, A is CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is cyano, A is CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is cyano, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3

2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is cyano, A is C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is cyano, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3

2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is cyano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3

2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is CO_2Me, A is cyano

R^x	R^y	R^x	R^y	R^x	R^y

2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is CO_2Me, A is CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is CO_2Me, A is CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is CO_2Me, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is CO_2Me, A is C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is CO_2Me, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl

2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is cyano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl

2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3

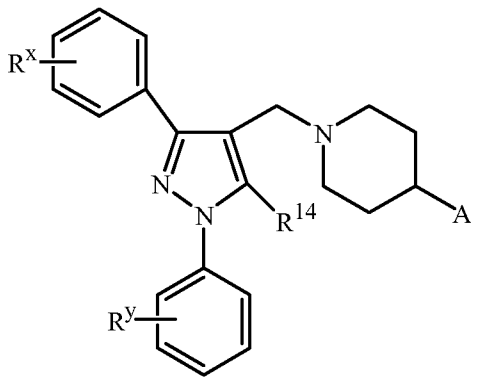
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3

2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

TABLE 3



R^{14} is F, A is cyano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is F, A is CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is F, A is CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is F, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is F, A is C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl

2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is F, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl

2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is cyano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3

2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3

2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Br, A is cyano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Br, A is CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Br, A is CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Br, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3

2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Br, A is C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Br, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is cyano

R^x	R^y	R^x	R^y	R^x	R^y

2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl

2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is cyano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl

2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3

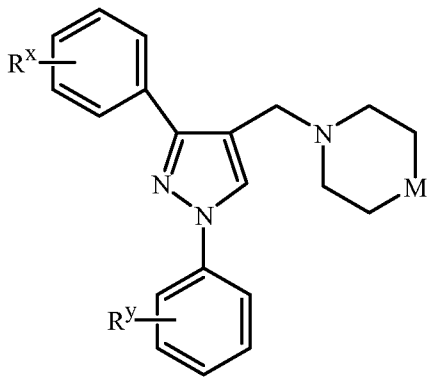
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3

2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

TABLE 4



M is O

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is S

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl

2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is S(O)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is $S(O)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is NMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(phenyl)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl

2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(Me)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl

2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is $CH(CF_3)$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(OC(O)Me)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(SMe)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3

2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(S(O)Me)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is $CH(S(O)_2Me)$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3

2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(OS(O)$_2$Me)

R^X	R^Y	R^X	R^Y	R^X	R^Y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(C≡CH)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(CH=CH_2)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(2-pyridinyl)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3

2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(3-pyridinyl)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(5-pyrimidinyl)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(2-imidazolyl)

R^x	R^y	R^x	R^y	R^x	R^y

2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(1-(1,2,4-triazolyl))

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

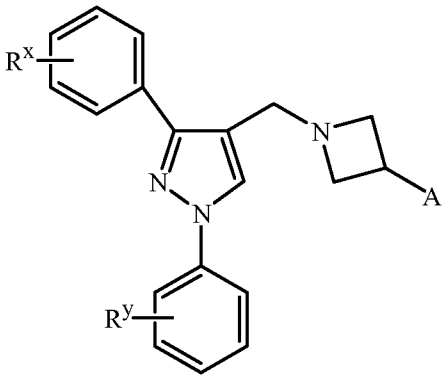
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(2-(1,3,4-oxadiazolyl))

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

TABLE 5a

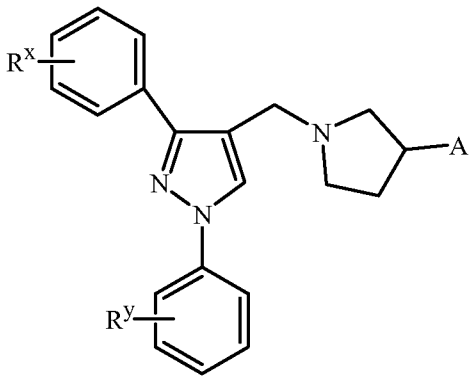


A is cyano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

TABLE 5b-1



A is NHC(O)Me

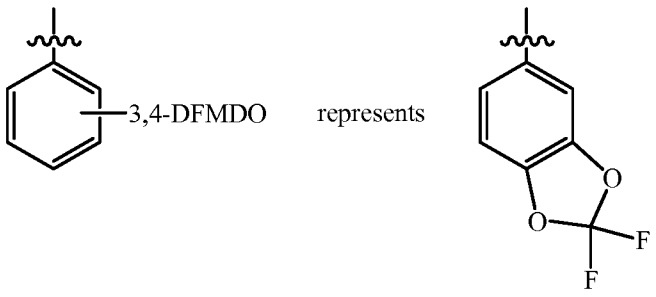
R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl

2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F

2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl

2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

* 3,4-DFMDO is 3,4-difluoromethylenedioxy as shown below:



A is $NHC(O)CH(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
$2\text{-}CF_3$	2-F	$2\text{-}CF_3$	3-F	$2\text{-}CF_3$	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	$3\text{-}CF_3$	2-F	$3\text{-}OCF_3$
2-Cl	3-Br	2-Cl	$3\text{-}CF_3$	2-Cl	$3\text{-}OCF_3$
2-Br	3-Br	2-Br	$3\text{-}CF_3$	2-Br	$3\text{-}OCF_3$
2-Me	3-Br	2-Me	$3\text{-}CF_3$	2-Me	$3\text{-}OCF_3$
$2\text{-}CF_3$	3-Br	$2\text{-}CF_3$	$3\text{-}CF_3$	$2\text{-}CF_3$	$3\text{-}OCF_3$
4-F	3-Br	4-F	$3\text{-}CF_3$	4-F	$3\text{-}OCF_3$
4-Cl	3-Br	4-Cl	$3\text{-}CF_3$	4-Cl	$3\text{-}OCF_3$
4-Br	3-Br	4-Br	$3\text{-}CF_3$	4-Br	$3\text{-}OCF_3$
2-F, 4-F	3-Br	2-F, 4-F	$3\text{-}CF_3$	2-F, 4-F	$3\text{-}OCF_3$
2-Cl, 4-F	3-Br	2-Cl, 4-F	$3\text{-}CF_3$	2-Cl, 4-F	$3\text{-}OCF_3$
2-Me, 4-F	3-Br	2-Me, 4-F	$3\text{-}CF_3$	2-Me, 4-F	$3\text{-}OCF_3$
2-F, 6-F	3-Br	2-F, 6-F	$3\text{-}CF_3$	2-F, 6-F	$3\text{-}OCF_3$
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	$3\text{-}CF_3$	2-Cl, 6-Cl	$3\text{-}OCF_3$
2-Me, 6-Me	3-Br	2-Me, 6-Me	$3\text{-}CF_3$	2-Me, 6-Me	$3\text{-}OCF_3$
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	$3\text{-}CF_3$	2-F, 4-F, 6-F	$3\text{-}OCF_3$
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
$2\text{-}CF_3$	4-F	$2\text{-}CF_3$	4-Cl	$2\text{-}CF_3$	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br

4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3

2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*

2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A is $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br

2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3

2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl

2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A is $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3

2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3

4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F

2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A is NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3

2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3

2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F

2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A is NHC(O)OMe

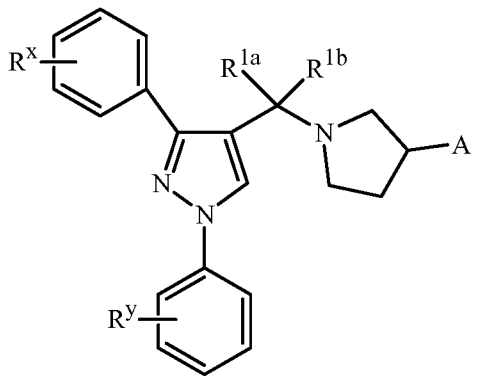
R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3

4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F

2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F

4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

TABLE 5b-2



R^{1a} is H, R^{1b} is cyano, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3

2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is cyano, A is $NHC(O)CH(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3

2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is cyano, A is $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is cyano, A is $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is cyano, A is NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is cyano, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3

2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is $NHC(O)CH(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y

2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is H, R^{1b} is Me, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is $NHC(O)CH(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl

2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl

2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

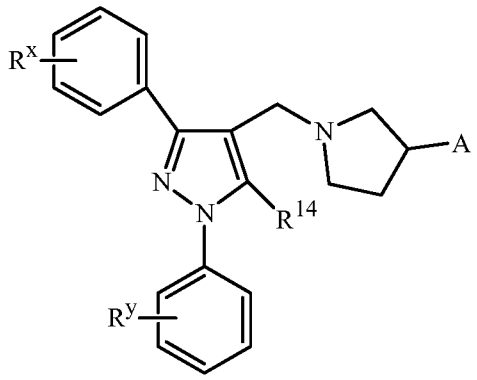
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} is Me, R^{1b} is Me, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

TABLE 5b-3



R^{14} is F, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is F, A is $NHC(O)CH(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is F, A is $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y

2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is F, A is $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is F, A is NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is F, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is NHC(O)CH$(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl

2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl

2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Cl, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3

2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is $NHC(O)CH(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3

2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is Me, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3

2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is $NHC(O)CH(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y

2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

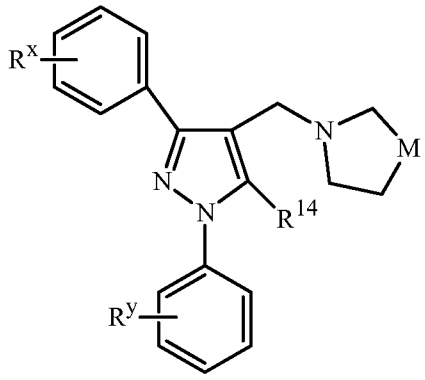
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} is NH_2, A is NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

TABLE 5b-4



5

M is CH(phenyl)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3

2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(2-pyridinyl)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(3-pyridinyl)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
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2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(2-(1,3,4-oxadiazolyl))

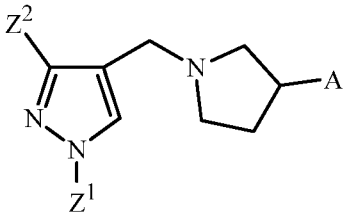
R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M is CH(1-(1,2,4-triazolyl))

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

TABLE 5b-5



A is NHC(O)Me

Z^1	Z^2	Z^1	Z^2
4,5-dichloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4,5-dichloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5,6-dichloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5,6-dichloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
4,5-dichloro-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4,5-dichloro-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-chloro-6-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(CF_3)-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(OCF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl

5-chloro-6-(OCF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(OCF_3)-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-(CF_3)-5-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(CF_3)-6-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-(CF_3)-5-chloro-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4,5-bis(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4,5-bis(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
5,6-bis(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5,6-bis(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4,5-bis(CF_3)-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4,5-bis(CF_3)-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-(OCF_3)-5-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(OCF_3)-6-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-(OCF_3)-5-chloro-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-fluoro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-fluoro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-bromo-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-bromo-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-fluoro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-fluoro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(OCF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(OCF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4,5-dichloro-2-pyridinyl	2-chloro-3-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	2-chloro-3-pyridinyl
5,6-dichloro-2-pyridinyl	2-chloro-3-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	2-chloro-3-pyridinyl
4,5-dichloro-2-pyrimidinyl	2-chloro-3-pyridinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	2-chloro-3-pyridinyl
4-chloro-5-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl	4,5-bis(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl	5,6-bis(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	2-chloro-3-pyridinyl	4,5-bis(CF_3)-2-pyrimidinyl	2-chloro-3-pyridinyl
4-chloro-5-(OCF_3)-2-pyridinyl	2-chloro-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl	2-chloro-3-pyridinyl
5-chloro-6-(OCF_3)-2-pyridinyl	2-chloro-3-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl	2-chloro-3-pyridinyl
4-chloro-5-(OCF_3)-2-pyrimidinyl	2-chloro-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl	2-chloro-3-pyridinyl
5-chloro-2-pyridinyl	2-chloro-3-pyridinyl	5-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl
5-bromo-2-pyridinyl	2-chloro-3-pyridinyl	5-(OCF_3)-2-pyridinyl	2-chloro-3-pyridinyl
5-fluoro-2-pyridinyl	2-chloro-3-pyridinyl	4-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl
4-chloro-5-fluoro-2-pyridinyl	2-chloro-3-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
4,5-dichloro-2-pyridinyl	3-fluoro-4-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
5,6-dichloro-2-pyridinyl	3-fluoro-4-pyridinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	3-fluoro-4-pyridinyl
4,5-dichloro-2-pyrimidinyl	3-fluoro-4-pyridinyl	4,5-bis(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
4-chloro-5-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl	5,6-bis(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl	4,5-bis(CF_3)-2-pyrimidinyl	3-fluoro-4-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	3-fluoro-4-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
4-chloro-5-(OCF_3)-2-pyridinyl	3-fluoro-4-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl	3-fluoro-4-pyridinyl

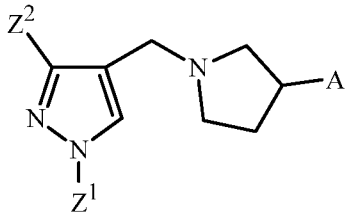
5-chloro-6-(OCF_3)-2-pyridinyl	3-fluoro-4-pyridinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl	3-fluoro-4-pyridinyl
4-chloro-5-(OCF_3)-2-pyrimidinyl	3-fluoro-4-pyridinyl	5-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5-chloro-2-pyridinyl	3-fluoro-4-pyridinyl	5-(OCF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5-bromo-2-pyridinyl	3-fluoro-4-pyridinyl	4-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5-fluoro-2-pyridinyl	3-fluoro-4-pyridinyl	4-chloro-5-fluoro-2-pyridinyl	3-fluoro-4-pyridinyl

A is $NHC(O)CH(CH_2)_2$

Z^1	Z^2	Z^1	Z^2
4,5-dichloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4,5-dichloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5,6-dichloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5,6-dichloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
4,5-dichloro-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4,5-dichloro-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-chloro-6-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(CF_3)-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(OCF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-chloro-6-(OCF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(OCF_3)-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-(CF_3)-5-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(CF_3)-6-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-(CF_3)-5-chloro-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4,5-bis(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4,5-bis(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
5,6-bis(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5,6-bis(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4,5-bis(CF_3)-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4,5-bis(CF_3)-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-(OCF_3)-5-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(OCF_3)-6-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-(OCF_3)-5-chloro-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-fluoro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-fluoro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-bromo-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-bromo-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-fluoro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-fluoro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(OCF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(OCF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4,5-dichloro-2-pyridinyl	2-chloro-3-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	2-chloro-3-pyridinyl
5,6-dichloro-2-pyridinyl	2-chloro-3-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	2-chloro-3-pyridinyl
4,5-dichloro-2-pyrimidinyl	2-chloro-3-pyridinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	2-chloro-3-pyridinyl
4-chloro-5-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl	4,5-bis(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl	5,6-bis(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl

4-chloro-5-(CF_3)-2-pyrimidinyl	2-chloro-3-pyridinyl	4,5-bis(CF_3)-2-pyrimidinyl	2-chloro-3-pyridinyl
4-chloro-5-(OCF_3)-2-pyridinyl	2-chloro-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl	2-chloro-3-pyridinyl
5-chloro-6-(OCF_3)-2-pyridinyl	2-chloro-3-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl	2-chloro-3-pyridinyl
4-chloro-5-(OCF_3)-2-pyrimidinyl	2-chloro-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl	2-chloro-3-pyridinyl
5-chloro-2-pyridinyl	2-chloro-3-pyridinyl	5-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl
5-bromo-2-pyridinyl	2-chloro-3-pyridinyl	5-(OCF_3)-2-pyridinyl	2-chloro-3-pyridinyl
5-fluoro-2-pyridinyl	2-chloro-3-pyridinyl	4-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl
4-chloro-5-fluoro-2-pyridinyl	2-chloro-3-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
4,5-dichloro-2-pyridinyl	3-fluoro-4-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
5,6-dichloro-2-pyridinyl	3-fluoro-4-pyridinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	3-fluoro-4-pyridinyl
4,5-dichloro-2-pyrimidinyl	3-fluoro-4-pyridinyl	4,5-bis(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
4-chloro-5-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl	5,6-bis(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl	4,5-bis(CF_3)-2-pyrimidinyl	3-fluoro-4-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	3-fluoro-4-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
4-chloro-5-(OCF_3)-2-pyridinyl	3-fluoro-4-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
5-chloro-6-(OCF_3)-2-pyridinyl	3-fluoro-4-pyridinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl	3-fluoro-4-pyridinyl
4-chloro-5-(OCF_3)-2-pyrimidinyl	3-fluoro-4-pyridinyl	5-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5-chloro-2-pyridinyl	3-fluoro-4-pyridinyl	5-(OCF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5-bromo-2-pyridinyl	3-fluoro-4-pyridinyl	4-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5-fluoro-2-pyridinyl	3-fluoro-4-pyridinyl	4-chloro-5-fluoro-2-pyridinyl	3-fluoro-4-pyridinyl

TABLE 5b-6



Z^2 is 2-fluorophenyl, A is NHC(O)Me

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl

2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

Z^2 is 2-fluorophenyl, A is NHC(O)CH(CH_2)$_2$

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

Z^2 is 4-fluorophenyl, A is NHC(O)Me

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

5

Z^2 is 4-fluorophenyl, A is NHC(O)CH(CH_2)$_2$

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl

5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

Z^2 is 4-fluoro-2-methylphenyl, A is NHC(O)Me

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

Z^2 is 4-fluoro-2-methylphenyl, A is $NHC(O)CH(CH_2)_2$

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

Z^2 is 2-(trifluoromethyl)phenyl, A is NHC(O)Me

Z^1	Z^1	Z^1

4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

Z^2 is 2-(trifluoromethyl)phenyl, A is $NHC(O)CH(CH_2)_2$

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

Z^2 is 2,4-difluorophenyl, A is NHC(O)Me

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl

4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

Z^2 is 2,4-difluorophenyl, A is NHC(O)CH(CH_2)$_2$

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

Z^2 is 2,6-difluorophenyl, A is NHC(O)Me

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

5

Z^2 is 2,6-difluorophenyl, A is NHC(O)CH(CH_2)$_2$

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl

5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

Z^2 is 2,4,6-trifluorophenyl, A is NHC(O)Me

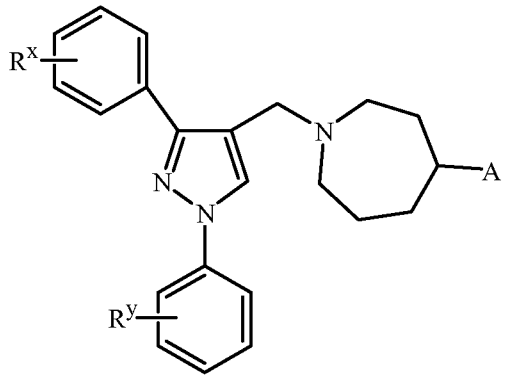
Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

Z^2 is 2,4,6-trifluorophenyl, A is NHC(O)CH(CH_2)$_2$

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl	4-choro-5-fluoro-2-pyridinyl	

5

TABLE 5c

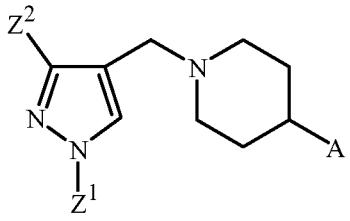


A is cyano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

TABLE 6a

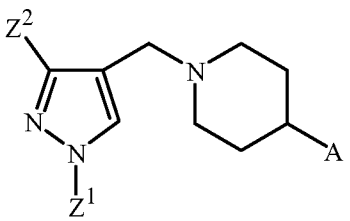


A is cyano

Z^1	Z^2	Z^1	Z^2
4,5-dichloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4,5-dichloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5,6-dichloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5,6-dichloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
4,5-dichloro-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4,5-dichloro-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-chloro-6-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(CF_3)-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(OCF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-chloro-6-(OCF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-chloro-5-(OCF_3)-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-(CF_3)-5-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(CF_3)-6-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-(CF_3)-5-chloro-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4,5-bis(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4,5-bis(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
5,6-bis(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5,6-bis(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4,5-bis(CF_3)-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4,5-bis(CF_3)-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
4-(OCF_3)-5-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(OCF_3)-6-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
4-(OCF_3)-5-chloro-2-pyrimidinyl	2-(OCF_3)-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl	2-(CF_3)-3-pyridinyl
2-naphthalenyl	2-(OCF_3)-3-pyridinyl	2-naphthalenyl	2-(CF_3)-3-pyridinyl
2-quinolinyl	2-(OCF_3)-3-pyridinyl	2-quinolinyl	2-(CF_3)-3-pyridinyl
5-chloro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-chloro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-bromo-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-bromo-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-fluoro-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-fluoro-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
5-(OCF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	5-(OCF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl

4-(CF_3)-2-pyridinyl	2-(OCF_3)-3-pyridinyl	4-(CF_3)-2-pyridinyl	2-(CF_3)-3-pyridinyl
4,5-dichloro-2-pyridinyl	2-chloro-3-pyridinyl	4,5-dichloro-2-pyridinyl	3-fluoro-4-pyridinyl
5,6-dichloro-2-pyridinyl	2-chloro-3-pyridinyl	5,6-dichloro-2-pyridinyl	3-fluoro-4-pyridinyl
4,5-dichloro-2-pyrimidinyl	2-chloro-3-pyridinyl	4,5-dichloro-2-pyrimidinyl	3-fluoro-4-pyridinyl
4-chloro-5-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl	4-chloro-5-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl	5-chloro-6-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	2-chloro-3-pyridinyl	4-chloro-5-(CF_3)-2-pyrimidinyl	3-fluoro-4-pyridinyl
4-chloro-5-(OCF_3)-2-pyridinyl	2-chloro-3-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5-chloro-6-(OCF_3)-2-pyridinyl	2-chloro-3-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
4-chloro-5-(OCF_3)-2-pyrimidinyl	2-chloro-3-pyridinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	3-fluoro-4-pyridinyl
4-(CF_3)-5-chloro-2-pyridinyl	2-chloro-3-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
5-(CF_3)-6-chloro-2-pyridinyl	2-chloro-3-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
4-(CF_3)-5-chloro-2-pyrimidinyl	2-chloro-3-pyridinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	3-fluoro-4-pyridinyl
4,5-bis(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl	4,5-bis(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5,6-bis(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl	5,6-bis(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
4,5-bis(CF_3)-2-pyrimidinyl	2-chloro-3-pyridinyl	4,5-bis(CF_3)-2-pyrimidinyl	3-fluoro-4-pyridinyl
4-(OCF_3)-5-chloro-2-pyridinyl	2-chloro-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
5-(OCF_3)-6-chloro-2-pyridinyl	2-chloro-3-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
4-(OCF_3)-5-chloro-2-pyrimidinyl	2-chloro-3-pyridinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl	3-fluoro-4-pyridinyl
2-naphthalenyl	2-chloro-3-pyridinyl	2-naphthalenyl	3-fluoro-4-pyridinyl
2-quinolinyl	2-chloro-3-pyridinyl	2-quinolinyl	3-fluoro-4-pyridinyl
5-chloro-2-pyridinyl	2-chloro-3-pyridinyl	5-chloro-2-pyridinyl	3-fluoro-4-pyridinyl
5-bromo-2-pyridinyl	2-chloro-3-pyridinyl	5-bromo-2-pyridinyl	3-fluoro-4-pyridinyl
5-fluoro-2-pyridinyl	2-chloro-3-pyridinyl	5-fluoro-2-pyridinyl	3-fluoro-4-pyridinyl
5-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl	5-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
5-(OCF_3)-2-pyridinyl	2-chloro-3-pyridinyl	5-(OCF_3)-2-pyridinyl	3-fluoro-4-pyridinyl
4-(CF_3)-2-pyridinyl	2-chloro-3-pyridinyl	4-(CF_3)-2-pyridinyl	3-fluoro-4-pyridinyl

TABLE 6b



Z^2 is 2-fluorophenyl, A is cyano

Z^1	Z^1	Z^1

4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl		

Z^2 is 4-fluorophenyl, A is cyano

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl		

Z^2 is 2-chlorophenyl, A is cyano

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl

4-(CF_3)-2-pyridinyl		

Z^2 is 2-bromophenyl, A is cyano

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl		

Z^2 is 2-methylphenyl, A is cyano

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl		

5

Z^2 is 2-(trifluoromethyl)phenyl, A is cyano

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl

5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl		

Z^2 is 2,4-difluorophenyl, A is cyano

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl		

Z^2 is 2,6-difluorophenyl, A is cyano

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl
4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl		

5

Z^2 is 2,4,6-trifluorophenyl, A is cyano

Z^1	Z^1	Z^1
4,5-dichloro-2-pyridinyl	4-chloro-5-(OCF_3)-2-pyridinyl	4,5-bis(CF_3)-2-pyridinyl
5,6-dichloro-2-pyridinyl	5-chloro-6-(OCF_3)-2-pyridinyl	5,6-bis(CF_3)-2-pyridinyl

4,5-dichloro-2-pyrimidinyl	4-chloro-5-(OCF_3)-2-pyrimidinyl	4,5-bis(CF_3)-2-pyrimidinyl
4-chloro-5-(CF_3)-2-pyridinyl	4-(CF_3)-5-chloro-2-pyridinyl	4-(OCF_3)-5-chloro-2-pyridinyl
5-chloro-6-(CF_3)-2-pyridinyl	5-(CF_3)-6-chloro-2-pyridinyl	5-(OCF_3)-6-chloro-2-pyridinyl
4-chloro-5-(CF_3)-2-pyrimidinyl	4-(CF_3)-5-chloro-2-pyrimidinyl	4-(OCF_3)-5-chloro-2-pyrimidinyl
5,6-dichloro-3-pyridinyl	6-chloro-3-pyridinyl	2-chloro-4-pyridinyl
4,5-dichloro-2-furanyl	4,5-dichloro-2-thienyl	2-naphthalenyl
2-quinolinyl	5-chloro-2-pyridinyl	5-bromo-2-pyridinyl
5-fluoro-2-pyridinyl	5-(CF_3)-2-pyridinyl	5-(OCF_3)-2-pyridinyl
4-(CF_3)-2-pyridinyl		

Z^2 is 2-chloro-3-pyridinyl, A is cyano

Z^1	Z^1	Z^1
2-fluorophenyl	2-chlorophenyl	2-bromophenyl
2-methylphenyl	2-(trifluoromethyl)phenyl	2,4-difluorophenyl
2,6-difluorophenyl		

Z^2 is 2-(trifluoromethyl)-3-pyridinyl, A is cyano

Z^1	Z^1	Z^1
2-fluorophenyl	2-chlorophenyl	2-bromophenyl
2-methylphenyl	2-(trifluoromethyl)phenyl	2,4-difluorophenyl
2,6-difluorophenyl		

Z^2 is 2-(trifluoromethoxy)-3-pyridinyl, A is cyano

Z^1	Z^1	Z^1
2-fluorophenyl	2-chlorophenyl	2-bromophenyl
2-methylphenyl	2-(trifluoromethyl)phenyl	2,4-difluorophenyl
2,6-difluorophenyl		

A compound of this invention will generally be used as an invertebrate pest control active ingredient in a composition, i.e. formulation, with at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents, which serves as a carrier. The formulation or composition ingredients are selected to be consistent with the physical properties of the active ingredient, mode of application and environmental factors such as soil type, moisture and temperature.

Useful formulations include both liquid and solid compositions. Liquid compositions include solutions (including emulsifiable concentrates), suspensions, emulsions (including microemulsions and/or suspoemulsions) and the like, which optionally can be thickened into gels. The general types of aqueous liquid compositions are soluble concentrate, suspension

concentrate, capsule suspension, concentrated emulsion, microemulsion and suspo-emulsion. The general types of nonaqueous liquid compositions are emulsifiable concentrate, microemulsifiable concentrate, dispersible concentrate and oil dispersion.

The general types of solid compositions are dusts, powders, granules, pellets, prills, pastilles, tablets, filled films (including seed coatings) and the like, which can be water-dispersible ("wettable") or water-soluble. Films and coatings formed from film-forming solutions or flowable suspensions are particularly useful for seed treatment. Active ingredient can be (micro)encapsulated and further formed into a suspension or solid formulation; alternatively the entire formulation of active ingredient can be encapsulated (or "overcoated"). Encapsulation can control or delay release of the active ingredient. An emulsifiable granule combines the advantages of both an emulsifiable concentrate formulation and a dry granular formulation. High-strength compositions are primarily used as intermediates for further formulation.

Sprayable formulations are typically extended in a suitable medium before spraying. Such liquid and solid formulations are formulated to be readily diluted in the spray medium, usually water. Spray volumes can range from about one to several thousand liters per hectare, but more typically are in the range from about ten to several hundred liters per hectare. Sprayable formulations can be tank mixed with water or another suitable medium for foliar treatment by aerial or ground application, or for application to the growing medium of the plant. Liquid and dry formulations can be metered directly into drip irrigation systems or metered into the furrow during planting. Liquid and solid formulations can be applied onto seeds of crops and other desirable vegetation as seed treatments before planting to protect developing roots and other subterranean plant parts and/or foliage through systemic uptake.

The formulations will typically contain effective amounts of active ingredient, diluent and surfactant within the following approximate ranges which add up to 100 percent by weight.

	Weight Percent		
	Active Ingredient	Diluent	Surfactant
Water-Dispersible and Water-soluble Granules, Tablets and Powders	0.001–90	0–99.999	0–15
Oil Dispersions, Suspensions, Emulsions, Solutions (including Emulsifiable Concentrates)	1–50	40–99	0–50
Dusts	1–25	70–99	0–5
Granules and Pellets	0.001–95	5–99.999	0–15
High Strength Compositions	90–99	0–10	0–2

Solid diluents include, for example, clays such as bentonite, montmorillonite, attapulgite and kaolin, gypsum, cellulose, titanium dioxide, zinc oxide, starch, dextrin, sugars (e.g., lactose, sucrose), silica, talc, mica, diatomaceous earth, urea, calcium carbonate, sodium carbonate and bicarbonate, and sodium sulfate. Typical solid diluents are described in Watkins et al., *Handbook of Insecticide Dust Diluents and Carriers*, 2nd Ed., Dorland Books, Caldwell, New Jersey.

Liquid diluents include, for example, water, *N*,*N*-dimethylalkanamides (e.g., *N*,*N*-dimethylformamide), limonene, dimethyl sulfoxide, *N*-alkylpyrrolidones (e.g., *N*-methylpyrrolidinone), ethylene glycol, triethylene glycol, propylene glycol, dipropylene glycol, polypropylene glycol, propylene carbonate, butylene carbonate, paraffins (e.g., white mineral oils, normal paraffins, isoparaffins), alkylbenzenes, alkylnaphthalenes, glycerine, glycerol triacetate, sorbitol, triacetin, aromatic hydrocarbons, dearomatized aliphatics, alkylbenzenes, alkylnaphthalenes, ketones such as cyclohexanone, 2-heptanone, isophorone and 4-hydroxy-4-methyl-2-pentanone, acetates such as isoamyl acetate, hexyl acetate, heptyl acetate, octyl acetate, nonyl acetate, tridecyl acetate and isobornyl acetate, other esters such as alkylated lactate esters, dibasic esters and γ-butyrolactone, and alcohols, which can be linear, branched, saturated or unsaturated, such as methanol, ethanol, *n*-propanol, isopropyl alcohol, *n*-butanol, isobutyl alcohol, *n*-hexanol, 2-ethylhexanol, *n*-octanol, decanol, isodecyl alcohol, isooctadecanol, cetyl alcohol, lauryl alcohol, tridecyl alcohol, oleyl alcohol, cyclohexanol, tetrahydrofurfuryl alcohol, diacetone alcohol and benzyl alcohol. Liquid diluents also include glycerol esters of saturated and unsaturated fatty acids (typically C_6–C_{22}), such as plant seed and fruit oils (e.g, oils of olive, castor, linseed, sesame, corn (maize), peanut, sunflower, grapeseed, safflower, cottonseed, soybean, rapeseed, coconut and palm kernel), animal-sourced fats (e.g., beef tallow, pork tallow, lard, cod liver oil, fish oil), and mixtures thereof. Liquid diluents also include alkylated fatty acids (e.g.,

methylated, ethylated, butylated) wherein the fatty acids can be obtained by hydrolysis of glycerol esters from plant and animal sources, and can be purified by distillation. Typical liquid diluents are described in Marsden, *Solvents Guide*, 2nd Ed., Interscience, New York, 1950.

The solid and liquid compositions of the present invention often include one or more surfactants. When added to a liquid, surfactants (also known as "surface-active agents") generally modify, most often reduce, the surface tension of the liquid. Depending on the nature of the hydrophilic and lipophilic groups in a surfactant molecule, surfactants can be useful as wetting agents, dispersants, emulsifiers or defoaming agents.

Surfactants can be classified as nonionic, anionic or cationic. Nonionic surfactants useful for the present compositions include, but are not limited to: alcohol alkoxylates such as alcohol alkoxylates based on natural and synthetic alcohols (which are branched or linear) and prepared from the alcohols and ethylene oxide, propylene oxide, butylene oxide or mixtures thereof; amine ethoxylates, alkanolamides and ethoxylated alkanolamides; alkoxylated triglycerides such as ethoxylated soybean, castor and rapeseed oils; alkylphenol alkoxylates such as octylphenol ethoxylates, nonylphenol ethoxylates, dinonyl phenol ethoxylates and dodecyl phenol ethoxylates (prepared from the phenols and ethylene oxide, propylene oxide, butylene oxide or mixtures thereof); block polymers prepared from ethylene oxide or propylene oxide and reverse block polymers where the terminal blocks are prepared from propylene oxide; ethoxylated fatty acids; ethoxylated fatty esters and oils; ethoxylated methyl esters; ethoxylated tristyrylphenol (including those prepared from ethylene oxide, propylene oxide, butylene oxide or mixtures thereof); fatty acid esters, glycerol esters, lanolin-based derivatives, polyethoxylate esters such as polyethoxylated sorbitan fatty acid esters, polyethoxylated sorbitol fatty acid esters and polyethoxylated glycerol fatty acid esters; other sorbitan derivatives such as sorbitan esters; polymeric surfactants such as random copolymers, block copolymers, alkyd peg (polyethylene glycol) resins, graft or comb polymers and star polymers; polyethylene glycols (pegs); polyethylene glycol fatty acid esters; silicone-based surfactants; and sugar-derivatives such as sucrose esters, alkyl polyglycosides and alkyl polysaccharides.

Useful anionic surfactants include, but are not limited to: alkylaryl sulfonic acids and their salts; carboxylated alcohol or alkylphenol ethoxylates; diphenyl sulfonate derivatives; lignin and lignin derivatives such as lignosulfonates; maleic or succinic acids or their anhydrides; olefin sulfonates; phosphate esters such as phosphate esters of alcohol alkoxylates, phosphate esters of alkylphenol alkoxylates and phosphate esters of styryl phenol ethoxylates; protein-based surfactants; sarcosine derivatives; styryl phenol ether sulfate; sulfates and sulfonates of oils and fatty acids; sulfates and sulfonates of ethoxylated alkylphenols; sulfates of alcohols; sulfates of ethoxylated alcohols; sulfonates of amines and amides such as *N,N*-alkyltaurates; sulfonates of benzene, cumene, toluene, xylene, and

dodecyl and tridecylbenzenes; sulfonates of condensed naphthalenes; sulfonates of naphthalene and alkyl naphthalene; sulfonates of fractionated petroleum; sulfosuccinamates; and sulfosuccinates and their derivatives such as dialkyl sulfosuccinate salts.

Useful cationic surfactants include, but are not limited to: amides and ethoxylated amides; amines such as *N*-alkyl propanediamines, tripropylenetriamines and dipropylenetetramines, and ethoxylated amines, ethoxylated diamines and propoxylated amines (prepared from the amines and ethylene oxide, propylene oxide, butylene oxide or mixtures thereof); amine salts such as amine acetates and diamine salts; quaternary ammonium salts such as quaternary salts, ethoxylated quaternary salts and diquaternary salts; and amine oxides such as alkyldimethylamine oxides and bis-(2-hydroxyethyl)-alkylamine oxides.

Also useful for the present compositions are mixtures of nonionic and anionic surfactants or mixtures of nonionic and cationic surfactants. Nonionic, anionic and cationic surfactants and their recommended uses are disclosed in a variety of published references including *McCutcheon's Emulsifiers and Detergents*, annual American and International Editions published by McCutcheon's Division, The Manufacturing Confectioner Publishing Co.; Sisely and Wood, *Encyclopedia of Surface Active Agents*, Chemical Publ. Co., Inc., New York, 1964; and A. S. Davidson and B. Milwidsky, *Synthetic Detergents*, Seventh Edition, John Wiley and Sons, New York, 1987.

Compositions of this invention can also contain formulation auxiliaries and additives, known to those skilled in the art as formulation aids (some of which can be considered to also function as solid diluents, liquid diluents or surfactants). Such formulation auxiliaries and additives can control: pH (buffers), foaming during processing (antifoams such polyorganosiloxanes), sedimentation of active ingredients (suspending agents), viscosity (thixotropic thickeners), in-container microbial growth (antimicrobials), product freezing (antifreezes), color (dyes/pigment dispersions), wash-off (film formers or stickers), evaporation (evaporation retardants), and other formulation attributes. Film formers include, for example, polyvinyl acetates, polyvinyl acetate copolymers, polyvinylpyrrolidone-vinyl acetate copolymer, polyvinyl alcohols, polyvinyl alcohol copolymers and waxes. Examples of formulation auxiliaries and additives include those listed in *McCutcheon's Volume 2: Functional Materials*, annual International and North American editions published by McCutcheon's Division, The Manufacturing Confectioner Publishing Co.; and PCT Publication WO 03/024222.

The compound of Formula **1** and any other active ingredients are typically incorporated into the present compositions by dissolving the active ingredient in a solvent or by grinding in a liquid or dry diluent. Solutions, including emulsifiable concentrates, can be prepared by simply mixing the ingredients. If the solvent of a liquid composition intended for use as an emulsifiable concentrate is water-immiscible, an emulsifier is typically added to

emulsify the active-containing solvent upon dilution with water. Active ingredient slurries, with particle diameters of up to 2,000 μm can be wet milled using media mills to obtain particles with average diameters below 3 μm. Aqueous slurries can be made into finished suspension concentrates (see, for example, U.S. 3,060,084) or further processed by spray drying to form water-dispersible granules. Dry formulations usually require dry milling processes, which produce average particle diameters in the 2 to 10 μm range. Dusts and powders can be prepared by blending and usually grinding (such as with a hammer mill or fluid-energy mill). Granules and pellets can be prepared by spraying the active material upon preformed granular carriers or by agglomeration techniques. See Browning, "Agglomeration", *Chemical Engineering*, December 4, 1967, pp 147–48, *Perry's Chemical Engineer's Handbook*, 4th Ed., McGraw-Hill, New York, 1963, pages 8–57 and following, and WO 91/13546. Pellets can be prepared as described in U.S. 4,172,714. Water-dispersible and water-soluble granules can be prepared as taught in U.S. 4,144,050, U.S. 3,920,442 and DE 3,246,493. Tablets can be prepared as taught in U.S. 5,180,587, U.S. 5,232,701 and U.S. 5,208,030. Films can be prepared as taught in GB 2,095,558 and U.S. 3,299,566.

For further information regarding the art of formulation, see T. S. Woods, "The Formulator's Toolbox – Product Forms for Modern Agriculture" in *Pesticide Chemistry and Bioscience, The Food–Environment Challenge*, T. Brooks and T. R. Roberts, Eds., Proceedings of the 9th International Congress on Pesticide Chemistry, The Royal Society of Chemistry, Cambridge, 1999, pp. 120–133. See also U.S. 3,235,361, Col. 6, line 16 through Col. 7, line 19 and Examples 10–41; U.S. 3,309,192, Col. 5, line 43 through Col. 7, line 62 and Examples 8, 12, 15, 39, 41, 52, 53, 58, 132, 138–140, 162–164, 166, 167 and 169–182; U.S. 2,891,855, Col. 3, line 66 through Col. 5, line 17 and Examples 1–4; Klingman, *Weed Control as a Science*, John Wiley and Sons, Inc., New York, 1961, pp 81–96; Hance et al., *Weed Control Handbook*, 8th Ed., Blackwell Scientific Publications, Oxford, 1989; and *Developments in formulation technology*, PJB Publications, Richmond, UK, 2000.

In the following Examples, all formulations are prepared in conventional ways. Compound numbers refer to compounds in Index Tables A–D. Without further elaboration, it is believed that one skilled in the art using the preceding description can utilize the present invention to its fullest extent. The following Examples are, therefore, to be construed as merely illustrative, and not limiting of the disclosure in any way whatsoever. Percentages are by weight except where otherwise indicated.

Example A

High Strength Concentrate

compound 41	98.5%
silica aerogel	0.5%
synthetic amorphous fine silica	1.0%

Example B

Wettable Powder

compound 77	65.0%
dodecylphenol polyethylene glycol ether	2.0%
sodium ligninsulfonate	4.0%
sodium silicoaluminate	6.0%
montmorillonite (calcined)	23.0%

Example C

Granule

compound 546	10.0%
attapulgite granules (low volatile matter, 0.71/0.30 mm; U.S.S. No. 25–50 sieves)	90.0%

Example D

Extruded Pellet

compound 613	25.0%
anhydrous sodium sulfate	10.0%
crude calcium ligninsulfonate	5.0%
sodium alkylnaphthalenesulfonate	1.0%
calcium/magnesium bentonite	59.0%

Example E

Emulsifiable Concentrate

compound 869	10.0%
polyoxyethylene sorbitol hexoleate	20.0%
C_6–C_{10} fatty acid methyl ester	70.0%

Example F

Microemulsion

compound 805	5.0%
polyvinylpyrrolidone-vinyl acetate copolymer	30.0%
alkylpolyglycoside	30.0%
glyceryl monooleate	15.0%
water	20.0%

Example G

Seed Treatment

compound 800	20.00%
polyvinylpyrrolidone-vinyl acetate copolymer	5.00%
montan acid wax	5.00%
calcium ligninsulfonate	1.00%
polyoxyethylene/polyoxypropylene block copolymers	1.00%
stearyl alcohol (POE 20)	2.00%
polyorganosilane	0.20%
colorant red dye	0.05%
water	65.75%

Example H

Fertilizer Stick

compound 720	2.50%
pyrrolidone-styrene copolymer	4.80%
tristyrylphenyl 16-ethoxylate	2.30%
talc	0.80%
corn starch	5.00%
slow-release fertilizer	36.00%
kaolin	38.00%
water	10.60%

Example I

Suspension Concentrate

compound 802	35%
butyl polyoxyethylene/polypropylene block copolymer	4.0%
stearic acid/polyethylene glycol copolymer	1.0%
styrene acrylic polymer	1.0%
xanthan gum	0.1%
propylene glycol	5.0%
silicone based defoamer	0.1%
1,2-benzisothiazolin-3-one	0.1%
water	53.7%

Example J

Emulsion in Water

compound 801	10.0%
butyl polyoxyethylene/polypropylene block copolymer	4.0%
stearic acid/polyethylene glycol copolymer	1.0%

styrene acrylic polymer	1.0%
xanthan gum	0.1%
propylene glycol	5.0%
silicone based defoamer	0.1%
1,2-benzisothiazolin-3-one	0.1%
aromatic petroleum based hydrocarbon	20.0
water	58.7%

Example K

Oil Dispersion

compound 807	25%
polyoxyethylene sorbitol hexaoleate	15%
organically modified bentonite clay	2.5%
fatty acid methyl ester	57.5%

Example L

Suspoemulsion

compound 806	10.0%
imidacloprid	5.0%
butyl polyoxyethylene/polypropylene block copolymer	4.0%
stearic acid/polyethylene glycol copolymer	1.0%
styrene acrylic polymer	1.0%
xanthan gum	0.1%
propylene glycol	5.0%
silicone based defoamer	0.1%
1,2-benzisothiazolin-3-one	0.1%
aromatic petroleum based hydrocarbon	20.0%
water	53.7%

Compounds of this invention exhibit activity against a wide spectrum of invertebrate pests. These pests include invertebrates inhabiting a variety of environments such as, for example, plant foliage, roots, soil, harvested crops or other foodstuffs, building structures or animal integuments. These pests include, for example, invertebrates feeding on foliage (including leaves, stems, flowers and fruits), seeds, wood, textile fibers or animal blood or tissues, and thereby causing injury or damage to, for example, growing or stored agronomic crops, forests, greenhouse crops, ornamentals, nursery crops, stored foodstuffs or fiber products, or houses or other structures or their contents, or being harmful to animal health or public health. Those skilled in the art will appreciate that not all compounds are equally effective against all growth stages of all pests.

These present compounds and compositions are thus useful agronomically for protecting field crops from phytophagous invertebrate pests, and also nonagronomically for protecting other horticultural crops and plants from phytophagous invertebrate pests. This utility includes protecting crops and other plants (i.e. both agronomic and nonagronomic) that contain genetic material introduced by genetic engineering (i.e. transgenic) or modified by mutagenesis to provide advantageous traits. Examples of such traits include tolerance to herbicides, resistance to phytophagous pests (e.g., insects, mites, aphids, spiders, nematodes, snails, plant-pathogenic fungi, bacteria and viruses), improved plant growth, increased tolerance of adverse growing conditions such as high or low temperatures, low or high soil moisture, and high salinity, increased flowering or fruiting, greater harvest yields, more rapid maturation, higher quality and/or nutritional value of the harvested product, or improved storage or process properties of the harvested products. Transgenic plants can be modified to express multiple traits. Examples of plants containing traits provided by genetic engineering or mutagenesis include varieties of corn, cotton, soybean and potato expressing an insecticidal *Bacillus thuringiensis* toxin such as YIELD GARD®, KNOCKOUT®, STARLINK®, BOLLGARD®, NuCOTN® and NEWLEAF®, and herbicide-tolerant varieties of corn, cotton, soybean and rapeseed such as ROUNDUP READY®, LIBERTY LINK®, IMI®, STS® and CLEARFIELD®, as well as crops expressing *N*-acetyltransferase (GAT) to provide resistance to glyphosate herbicide, or crops containing the HRA gene providing resistance to herbicides inhibiting acetolactate synthase (ALS). The present compounds and compositions may interact synergistically with traits introduced by genetic engineering or modified by mutagenesis, thus enhancing phenotypic expression or effectiveness of the traits or increasing the invertebrate pest control effectiveness of the present compounds and compositions. In particular, the present compounds and compositions may interact synergistically with the phenotypic expression of proteins or other natural products toxic to invertebrate pests to provide greater-than-additive control of these pests.

Compositions of this invention can also optionally comprise plant nutrients, e.g., a fertilizer composition comprising at least one plant nutrient selected from nitrogen, phosphorus, potassium, sulfur, calcium, magnesium, iron, copper, boron, manganese, zinc, and molybdenum. Of note are compositions comprising at least one fertilizer composition comprising at least one plant nutrient selected from nitrogen, phosphorus, potassium, sulfur, calcium and magnesium. Compositions of the present invention which further comprise at least one plant nutrient can be in the form of liquids or solids. Of note are solid formulations in the form of granules, small sticks or tablets. Solid formulations comprising a fertilizer composition can be prepared by mixing the compound or composition of the present invention with the fertilizer composition together with formulating ingredients and then preparing the formulation by methods such as granulation or extrusion. Alternatively solid formulations can be prepared by spraying a solution or suspension of a compound or

composition of the present invention in a volatile solvent onto a previous prepared fertilizer composition in the form of dimensionally stable mixtures, e.g., granules, small sticks or tablets, and then evaporating the solvent.

Examples of agronomic or nonagronomic invertebrate pests include eggs, larvae and adults of the order Lepidoptera, such as armyworms, cutworms, loopers, and heliothines in the family Noctuidae (e.g., pink stem borer (*Sesamia inferens* Walker), corn stalk borer (*Sesamia nonagrioides* Lefebvre), southern armyworm (*Spodoptera eridania* Cramer), fall armyworm (*Spodoptera fugiperda* J. E. Smith), beet armyworm (*Spodoptera exigua* Hübner), cotton leafworm (*Spodoptera littoralis* Boisduval), yellowstriped armyworm (*Spodoptera ornithogalli* Guenée), black cutworm (*Agrotis ipsilon* Hufnagel), velvetbean caterpillar (*Anticarsia gemmatalis* Hübner), green fruitworm (*Lithophane antennata* Walker), cabbage armyworm (*Barathra brassicae* Linnaeus), soybean looper (*Pseudoplusia includens* Walker), cabbage looper (*Trichoplusia ni* Hübner), tobacco budworm (*Heliothis virescens* Fabricius)); borers, casebearers, webworms, coneworms, cabbageworms and skeletonizers from the family Pyralidae (e.g., European corn borer (*Ostrinia nubilalis* Hübner), navel orangeworm (*Amyelois transitella* Walker), corn root webworm (*Crambus caliginosellus* Clemens), sod webworms (Pyralidae: *Crambinae*) such as sod worm (*Herpetogramma licarsisalis* Walker), sugarcane stem borer (*Chilo infuscatellus* Snellen), tomato small borer (*Neoleucinodes elegantalis* Guenée), green leafroller (*Cnaphalocerus medinalis*), grape leaffolder (*Desmia funeralis* Hübner), melon worm (*Diaphania nitidalis* Stoll), cabbage center grub (*Helluala hydralis* Guenée), yellow stem borer (*Scirpophaga incertulas* Walker), early shoot borer (*Scirpophaga infuscatellus* Snellen), white stem borer (*Scirpophaga innotata* Walker), top shoot borer (*Scirpophaga nivella* Fabricius), dark-headed rice borer (*Chilo polychrysus* Meyrick), cabbage cluster caterpillar (*Crocidolomia binotalis* English)); leafrollers, budworms, seed worms, and fruit worms in the family Tortricidae (e.g., codling moth (*Cydia pomonella* Linnaeus), grape berry moth (*Endopiza viteana* Clemens), oriental fruit moth (*Grapholita molesta* Busck), citrus false codling moth (*Cryptophlebia leucotreta* Meyrick), citrus borer (*Ecdytolopha aurantiana* Lima), redbanded leafroller (*Argyrotaenia velutinana* Walker), obliquebanded leafroller (*Choristoneura rosaceana* Harris), light brown apple moth (*Epiphyas postvittana* Walker), European grape berry moth (*Eupoecilia ambiguella* Hübner), apple bud moth (*Pandemis pyrusana* Kearfott), omnivorous leafroller (*Platynota stultana* Walsingham), barred fruit-tree tortrix (*Pandemis cerasana* Hübner), apple brown tortrix (*Pandemis heparana* Denis & Schiffermüller)); and many other economically important lepidoptera (e.g., diamondback moth (*Plutella xylostella* Linnaeus), pink bollworm (*Pectinophora gossypiella* Saunders), gypsy moth (*Lymantria dispar* Linnaeus), peach fruit borer (*Carposina niponensis* Walsingham), peach twig borer (*Anarsia lineatella* Zeller), potato tuberworm (*Phthorimaea operculella* Zeller), spotted teniform leafminer (*Lithocolletis blancardella* Fabricius), Asiatic apple leafminer

(*Lithocolletis ringoniella* Matsumura), rice leaffolder (*Lerodea eufala* Edwards), apple leafminer (*Leucoptera scitella* Zeller)); eggs, nymphs and adults of the order Blattodea including cockroaches from the families Blattellidae and Blattidae (e.g., oriental cockroach (*Blatta orientalis* Linnaeus), Asian cockroach (*Blatella asahinai* Mizukubo), German cockroach (*Blattella germanica* Linnaeus), brownbanded cockroach (*Supella longipalpa* Fabricius), American cockroach (*Periplaneta americana* Linnaeus), brown cockroach (*Periplaneta brunnea* Burmeister), Madeira cockroach (*Leucophaea maderae* Fabricius)), smoky brown cockroach (*Periplaneta fuliginosa* Service), Australian Cockroach (*Periplaneta australasiae* Fabr.), lobster cockroach (*Nauphoeta cinerea* Olivier) and smooth cockroach (*Symploce pallens* Stephens)); eggs, foliar feeding, fruit feeding, root feeding, seed feeding and vesicular tissue feeding larvae and adults of the order Coleoptera including weevils from the families Anthribidae, Bruchidae, and Curculionidae (e.g., boll weevil (*Anthonomus grandis* Boheman), rice water weevil (*Lissorhoptrus oryzophilus* Kuschel), granary weevil (*Sitophilus granarius* Linnaeus), rice weevil (*Sitophilus oryzae* Linnaeus)), annual bluegrass weevil (*Listronotus maculicollis* Dietz), bluegrass billbug (*Sphenophorus parvulus* Gyllenhal), hunting billbug (*Sphenophorus venatus vestitus*), Denver billbug (*Sphenophorus cicatristriatus* Fahraeus)); flea beetles, cucumber beetles, rootworms, leaf beetles, potato beetles, and leafminers in the family Chrysomelidae (e.g., Colorado potato beetle (*Leptinotarsa decemlineata* Say), western corn rootworm (*Diabrotica virgifera virgifera* LeConte)); chafers and other beetles from the family Scarabaeidae (e.g., Japanese beetle (*Popillia japonica* Newman), oriental beetle (*Anomala orientalis* Waterhouse, *Exomala orientalis* (Waterhouse) Baraud), northern masked chafer (*Cyclocephala borealis* Arrow), southern masked chafer (*Cyclocephala immaculata* Olivier or *C. lurida* Bland), dung beetle and white grub (Aphodius spp.), black turfgrass ataenius (*Ataenius spretulus* Haldeman), green June beetle (*Cotinis nitida* Linnaeus), Asiatic garden beetle (*Maladera castanea* Arrow), May/June beetles (*Phyllophaga* spp.) and European chafer (*Rhizotrogus majalis* Razoumowsky)); carpet beetles from the family Dermestidae; wireworms from the family Elateridae; bark beetles from the family Scolytidae and flour beetles from the family Tenebrionidae.

In addition, agronomic and nonagronomic pests include: eggs, adults and larvae of the order Dermaptera including earwigs from the family Forficulidae (e.g., European earwig (*Forficula auricularia* Linnaeus), black earwig (*Chelisoches morio* Fabricius)); eggs, immatures, adults and nymphs of the orders Hemiptera and Homoptera such as, plant bugs from the family Miridae, cicadas from the family Cicadidae, leafhoppers (e.g. *Empoasca* spp.) from the family Cicadellidae, bed bugs (e.g., *Cimex lectularius* Linnaeus) from the family Cimicidae, planthoppers from the families Fulgoroidae and Delphacidae, treehoppers from the family Membracidae, psyllids from the family Psyllidae, whiteflies from the family Aleyrodidae, aphids from the family Aphididae, phylloxera from the family Phylloxeridae,

mealybugs from the family Pseudococcidae, scales from the families Coccidae, Diaspididae and Margarodidae, lace bugs from the family Tingidae, stink bugs from the family Pentatomidae, chinch bugs (e.g., hairy chinch bug (*Blissus leucopterus hirtus* Montandon) and southern chinch bug (*Blissus insularis* Barber)) and other seed bugs from the family Lygaeidae, spittlebugs from the family Cercopidae squash bugs from the family Coreidae, and red bugs and cotton stainers from the family Pyrrhocoridae.

Agronomic and nonagronomic pests also include: eggs, larvae, nymphs and adults of the order Acari (mites) such as spider mites and red mites in the family Tetranychidae (e.g., European red mite (*Panonychus ulmi* Koch), two spotted spider mite (*Tetranychus urticae* Koch), McDaniel mite (*Tetranychus mcdanieli* McGregor)); flat mites in the family Tenuipalpidae (e.g., citrus flat mite (*Brevipalpus lewisi* McGregor)); rust and bud mites in the family Eriophyidae and other foliar feeding mites and mites important in human and animal health, i.e. dust mites in the family Epidermoptidae, follicle mites in the family Demodicidae, grain mites in the family Glycyphagidae; ticks in the family Ixodidae, commonly known as hard ticks (e.g., deer tick (*Ixodes scapularis* Say), Australian paralysis tick (*Ixodes holocyclus* Neumann), American dog tick (*Dermacentor variabilis* Say), lone star tick (*Amblyomma americanum* Linnaeus)) and ticks in the family Argasidae, commonly known as soft ticks (e.g., relapsing fever tick (*Ornithodoros turicata*), common fowl tick (*Argas radiatus*)); scab and itch mites in the families Psoroptidae, Pyemotidae, and Sarcoptidae; eggs, adults and immatures of the order Orthoptera including grasshoppers, locusts and crickets (e.g., migratory grasshoppers (e.g., *Melanoplus sanguinipes* Fabricius, *M. differentialis* Thomas), American grasshoppers (e.g., *Schistocerca americana* Drury), desert locust (*Schistocerca gregaria* Forskal), migratory locust (*Locusta migratoria* Linnaeus), bush locust (*Zonocerus* spp.), house cricket (*Acheta domesticus* Linnaeus), mole crickets (e.g., tawny mole cricket (*Scapteriscus vicinus* Scudder) and southern mole cricket (*Scapteriscus borellii* Giglio-Tos)); eggs, adults and immatures of the order Diptera including leafminers (e.g., *Liriomyza* spp. such as serpentine vegetable leafminer (*Liriomyza sativae* Blanchard)), midges, fruit flies (Tephritidae), frit flies (e.g., *Oscinella frit* Linnaeus), soil maggots, house flies (e.g., *Musca domestica* Linnaeus), lesser house flies (e.g., *Fannia canicularis* Linnaeus, *F. femoralis* Stein), stable flies (e.g., *Stomoxys calcitrans* Linnaeus), face flies, horn flies, blow flies (e.g., *Chrysomya* spp., *Phormia* spp.), and other muscoid fly pests, horse flies (e.g., *Tabanus* spp.), bot flies (e.g., *Gastrophilus* spp., *Oestrus* spp.), cattle grubs (e.g., *Hypoderma* spp.), deer flies (e.g., *Chrysops* spp.), keds (e.g., *Melophagus ovinus* Linnaeus) and other Brachycera, mosquitoes (e.g., *Aedes* spp., *Anopheles* spp., *Culex* spp.), black flies (e.g., *Prosimulium* spp., *Simulium* spp.), biting midges, sand flies, sciarids, and other Nematocera; eggs, adults and immatures of the order Thysanoptera including onion thrips (*Thrips tabaci* Lindeman), flower thrips (*Frankliniella* spp.), and other foliar feeding thrips; insect pests of the order Hymenoptera including ants of the Family Formicidae

including the Florida carpenter ant (*Camponotus floridanus* Buckley), red carpenter ant (*Camponotus ferrugineus* Fabricius), black carpenter ant (*Camponotus pennsylvanicus* De Geer), white-footed ant (*Technomyrmex albipes* fr. Smith), big headed ants (*Pheidole* sp.), ghost ant (*Tapinoma melanocephalum* Fabricius); Pharaoh ant (*Monomorium pharaonis* Linnaeus), little fire ant (*Wasmannia auropunctata* Roger), fire ant (*Solenopsis geminata* Fabricius), red imported fire ant (*Solenopsis invicta* Buren), Argentine ant (*Iridomyrmex humilis* Mayr), crazy ant (*Paratrechina longicornis* Latreille), pavement ant (*Tetramorium caespitum* Linnaeus), cornfield ant (*Lasius alienus* Förster) and odorous house ant (*Tapinoma sessile* Say). Other Hymenoptera including bees (including carpenter bees), hornets, yellow jackets, wasps, and sawflies (*Neodiprion* spp.; *Cephus* spp.); insect pests of the order Isoptera including termites in the Termitidae (e.g., *Macrotermes* sp., *Odontotermes obesus* Rambur), Kalotermitidae (e.g., *Cryptotermes* sp.), and Rhinotermitidae (e.g., *Reticulitermes* sp., *Coptotermes* sp., *Heterotermes tenuis* Hagen) families, the eastern subterranean termite (*Reticulitermes flavipes* Kollar), western subterranean termite (*Reticulitermes hesperus* Banks), Formosan subterranean termite (*Coptotermes formosanus* Shiraki), West Indian drywood termite (*Incisitermes immigrans* Snyder), powder post termite (*Cryptotermes brevis* Walker), drywood termite (*Incisitermes snyderi* Light), southeastern subterranean termite (*Reticulitermes virginicus* Banks), western drywood termite (*Incisitermes minor* Hagen), arboreal termites such as *Nasutitermes* sp. and other termites of economic importance; insect pests of the order Thysanura such as silverfish (*Lepisma saccharina* Linnaeus) and firebrat (*Thermobia domestica* Packard); insect pests of the order Mallophaga and including the head louse (*Pediculus humanus capitis* De Geer), body louse (*Pediculus humanus* Linnaeus), chicken body louse (*Menacanthus stramineus* Nitszch), dog biting louse (*Trichodectes canis* De Geer), fluff louse (*Goniocotes gallinae* De Geer), sheep body louse (*Bovicola ovis* Schrank), short-nosed cattle louse (*Haematopinus eurysternus* Nitzsch), long-nosed cattle louse (*Linognathus vituli* Linnaeus) and other sucking and chewing parasitic lice that attack man and animals; insect pests of the order Siphonoptera including the oriental rat flea (*Xenopsylla cheopis* Rothschild), cat flea (*Ctenocephalides felis* Bouche), dog flea (*Ctenocephalides canis* Curtis), hen flea (*Ceratophyllus gallinae* Schrank), sticktight flea (*Echidnophaga gallinacea* Westwood), human flea (*Pulex irritans* Linnaeus) and other fleas afflicting mammals and birds. Additional arthropod pests covered include: spiders in the order Araneae such as the brown recluse spider (*Loxosceles reclusa* Gertsch & Mulaik) and the black widow spider (*Latrodectus mactans* Fabricius), and centipedes in the order Scutigeromorpha such as the house centipede (*Scutigera coleoptrata* Linnaeus).

Examples of invertebrate pests of stored grain include larger grain borer (*Prostephanus truncatus*), lesser grain borer (*Rhyzopertha dominica*), rice weevil (*Stiophilus oryzae*), maize weevil (*Stiophilus zeamais*), cowpea weevil (*Callosobruchus maculatus*), red flour beetle

(*Tribolium castaneum*), granary weevil (*Stiophilus granarius*), Indian meal moth (*Plodia interpunctella*), Mediterranean flour beetle (*Ephestia kuhniella*) and flat or rusty grain beetle (*Cryptolestis ferrugineus*).

Compounds of the invention show particularly high activity against pests in the order Lepidoptera (e.g., *Alabama argillacea* Hübner (cotton leaf worm), *Archips argyrospila* Walker (fruit tree leaf roller), *A. rosana* Linnaeus (European leaf roller) and other *Archips* species, *Chilo suppressalis* Walker (rice stem borer), *Cnaphalocrosis medinalis* Guenée (rice leaf roller), *Crambus caliginosellus* Clemens (corn root webworm), *Crambus teterrellus* Zincken (bluegrass webworm), *Cydia pomonella* Linnaeus (codling moth), *Earias insulana* Boisduval (spiny bollworm), *Earias vittella* Fabricius (spotted bollworm), *Helicoverpa armigera* Hübner (American bollworm), *Helicoverpa zea* Boddie (corn earworm), *Heliothis virescens* Fabricius (tobacco budworm), *Herpetogramma licarsisalis* Walker (sod webworm), *Lobesia botrana* Denis & Schiffermüller (grape berry moth), *Pectinophora gossypiella* Saunders (pink bollworm), *Phyllocnistis citrella* Stainton (citrus leafminer), *Pieris brassicae* Linnaeus (large white butterfly), *Pieris rapae* Linnaeus (small white butterfly), *Plutella xylostella* Linnaeus (diamondback moth), *Spodoptera exigua* Hübner (beet armyworm), *Spodoptera litura* Fabricius (tobacco cutworm, cluster caterpillar), *Spodoptera frugiperda* J. E. Smith (fall armyworm), *Trichoplusia ni* Hübner (cabbage looper) and *Tuta absoluta* Meyrick (tomato leafminer)).

Compounds of the invention also have activity on members from the order Homoptera including: *Acyrthosiphon pisum* Harris (pea aphid), *Aphis craccivora* Koch (cowpea aphid), *Aphis fabae* Scopoli (black bean aphid), *Aphis gossypii* Glover (cotton aphid, melon aphid), *Aphis pomi* De Geer (apple aphid), *Aphis spiraecola* Patch (spirea aphid), *Aulacorthum solani* Kaltenbach (foxglove aphid), *Chaetosiphon fragaefolii* Cockerell (strawberry aphid), *Diuraphis noxia* Kurdjumov/Mordvilko (Russian wheat aphid), *Dysaphis plantaginea* Paaserini (rosy apple aphid), *Eriosoma lanigerum* Hausmann (woolly apple aphid), *Hyalopterus pruni* Geoffroy (mealy plum aphid), *Lipaphis erysimi* Kaltenbach (turnip aphid), *Metopolophium dirrhodum* Walker (cereal aphid), *Macrosiphum euphorbiae* Thomas (potato aphid), *Myzus persicae* Sulzer (peach-potato aphid, green peach aphid), *Nasonovia ribisnigri* Mosley (lettuce aphid), *Pemphigus* spp. (root aphids and gall aphids), *Rhopalosiphum maidis* Fitch (corn leaf aphid), *Rhopalosiphum padi* Linnaeus (bird cherry-oat aphid), *Schizaphis graminum* Rondani (greenbug), *Sitobion avenae* Fabricius (English grain aphid), *Therioaphis maculata* Buckton (spotted alfalfa aphid), *Toxoptera aurantii* Boyer de Fonscolombe (black citrus aphid), and *Toxoptera citricida* Kirkaldy (brown citrus aphid); *Adelges* spp. (adelgids); *Phylloxera devastatrix* Pergande (pecan phylloxera); *Bemisia tabaci* Gennadius (tobacco whitefly, sweetpotato whitefly), *Bemisia argentifolii* Bellows & Perring (silverleaf whitefly), *Dialeurodes citri* Ashmead (citrus whitefly) and *Trialeurodes vaporariorum* Westwood (greenhouse whitefly); *Empoasca fabae* Harris

(potato leafhopper), *Laodelphax striatellus* Fallen (smaller brown planthopper), *Macrolestes quadrilineatus* Forbes (aster leafhopper), *Nephotettix cinticeps* Uhler (green leafhopper), *Nephotettix nigropictus* Stål (rice leafhopper), *Nilaparvata lugens* Stål (brown planthopper), *Peregrinus maidis* Ashmead (corn planthopper), *Sogatella furcifera* Horvath (white-backed planthopper), *Sogatodes orizicola* Muir (rice delphacid), *Typhlocyba pomaria* McAtee white apple leafhopper, *Erythroneoura* spp. (grape leafhoppers); *Magicidada septendecim* Linnaeus (periodical cicada); *Icerya purchasi* Maskell (cottony cushion scale), *Quadraspidiotus perniciosus* Comstock (San Jose scale); *Planococcus citri* Risso (citrus mealybug); *Pseudococcus* spp. (other mealybug complex); *Cacopsylla pyricola* Foerster (pear psylla), *Trioza diospyri* Ashmead (persimmon psylla).

Compounds of this invention may also have activity on members from the order Hemiptera including: *Acrosternum hilare* Say (green stink bug), *Anasa tristis* De Geer (squash bug), *Blissus leucopterus leucopterus* Say (chinch bug), *Cimex lectularius* Linnaeus (bed bug) *Corythuca gossypii* Fabricius (cotton lace bug), *Cyrtopeltis modesta* Distant (tomato bug), *Dysdercus suturellus* Herrich-Schäffer (cotton stainer), *Euchistus servus* Say (brown stink bug), *Euchistus variolarius* Palisot de Beauvois (one-spotted stink bug), *Graptosthetus* spp. (complex of seed bugs), *Leptoglossus corculus* Say (leaf-footed pine seed bug), *Lygus lineolaris* Palisot de Beauvois (tarnished plant bug), *Nezara viridula* Linnaeus (southern green stink bug), *Oebalus pugnax* Fabricius (rice stink bug), *Oncopeltus fasciatus* Dallas (large milkweed bug), *Pseudatomoscelis seriatus* Reuter (cotton fleahopper). Other insect orders controlled by compounds of the invention include Thysanoptera (e.g., *Frankliniella occidentalis* Pergande (western flower thrips), *Scirthothrips citri* Moulton (citrus thrips), *Sericothrips variabilis* Beach (soybean thrips), and *Thrips tabaci* Lindeman (onion thrips); and the order Coleoptera (e.g., *Leptinotarsa decemlineata* Say (Colorado potato beetle), *Epilachna varivestis* Mulsant (Mexican bean beetle) and wireworms of the genera *Agriotes*, *Athous* or *Limonius*).

Note that some contemporary classification systems place Homoptera as a suborder within the order Hemiptera.

Of note is use of compounds of this invention for controlling diamondback moth (*Plutella xylostella*). Of note is use of compounds of this invention for controlling fall armyworm (*Spodoptera frugiperda*).

Compounds of this invention can also be mixed with one or more other biologically active compounds or agents including insecticides, fungicides, nematocides, bactericides, acaricides, herbicides, herbicide safeners, growth regulators such as insect molting inhibitors and rooting stimulants, chemosterilants, semiochemicals, repellents, attractants, pheromones, feeding stimulants, other biologically active compounds or entomopathogenic bacteria, virus or fungi to form a multi-component pesticide giving an even broader spectrum of agronomic and nonagronomic utility. Thus the present invention also pertains to a composition

comprising a biologically effective amount of a compound of Formula **1**, an *N*-oxide, or salt thereof, at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents, and at least one additional biologically active compound or agent. For mixtures of the present invention, the other biologically active compounds or agents can be formulated together with the present compounds, including the compounds of Formula **1**, to form a premix, or the other biologically active compounds or agents can be formulated separately from the present compounds, including the compounds of Formula **1**, and the two formulations combined together before application (e.g., in a spray tank) or, alternatively, applied in succession.

Examples of such biologically active compounds or agents with which compounds of this invention can be formulated are insecticides such as abamectin, acephate, acequinocyl, acetamiprid, acrinathrin, amidoflumet, amitraz, avermectin, azadirachtin, azinphos-methyl, benfuracarb, bensultap, bifenthrin, bifenazate, bistrifluron, borate, buprofezin, cadusafos, carbaryl, carbofuran, cartap, carzol, chlorantraniliprole, chlorfenapyr, chlorfluazuron, chlorpyrifos, chlorpyrifos-methyl, chromafenozide, clofentezin, clothianidin, cyantraniliprole, cycloprothrin, cyflumetofen, cyfluthrin, beta-cyfluthrin, cyhalothrin, gamma-cyhalothrin, lambda-cyhalothrin, cypermethrin, alpha-cypermethrin, zeta-cypermethrin, cyromazine, deltamethrin, diafenthiuron, diazinon, dieldrin, diflubenzuron, dimefluthrin, dimehypo, dimethoate, dinotefuran, diofenolan, emamectin, endosulfan, esfenvalerate, ethiprole, etofenprox, etoxazole, fenbutatin oxide, fenitrothion, fenothiocarb, fenoxycarb, fenpropathrin, fenvalerate, fipronil, flonicamid, flubendiamide, flucythrinate, flufenerim, flufenoxuron, fluvalinate, tau-fluvalinate, fonophos, formetanate, fosthiazate, halofenozide, hexaflumuron, hexythiazox, hydramethylnon, imidacloprid, indoxacarb, insecticidal soaps, isofenphos, lufenuron, malathion, meperfluthrin, metaflumizone, metaldehyde, methamidophos, methidathion, methiodicarb, methomyl, methoprene, methoxychlor, metofluthrin, monocrotophos, methoxyfenozide, nitenpyram, nithiazine, novaluron, noviflumuron, oxamyl, parathion, parathion-methyl, permethrin, phorate, phosalone, phosmet, phosphamidon, pirimicarb, profenofos, profluthrin, propargite, protrifenbute, pymetrozine, pyrafluprole, pyrethrin, pyridaben, pyridalyl, pyrifluquinazon, pyriprole, pyriproxyfen, rotenone, ryanodine, silafluofen, spinetoram, spinosad, spirodiclofen, spiromesifen, spirotetramat, sulprofos, sulfoxaflor, tebufenozide, tebufenpyrad, teflubenzuron, tefluthrin, terbufos, tetrachlorvinphos, tetramethrin, tetramethylfluthrin, thiacloprid, thiamethoxam, thiodicarb, thiosultap-sodium, tolfenpyrad, tralomethrin, triazamate, trichlorfon, triflumuron, *Bacillus thuringiensis* delta-endotoxins, entomopathogenic bacteria, entomopathogenic viruses and entomopathogenic fungi.

Of note are insecticides such as abamectin, acetamiprid, acrinathrin, amitraz, avermectin, azadirachtin, bensultap, bifenthrin, buprofezin, cadusafos, carbaryl, cartap, chlorantraniliprole, chlorfenapyr, chlorpyrifos, clothianidin, cyantraniliprole, cyfluthrin,

beta-cyfluthrin, cyhalothrin, gamma-cyhalothrin, lambda-cyhalothrin, cypermethrin, alpha-cypermethrin, zeta-cypermethrin, cyromazine, deltamethrin, dieldrin, dinotefuran, diofenolan, emamectin, endosulfan, esfenvalerate, ethiprole, etofenprox, etoxazole, fenothiocarb, fenoxycarb, fenvalerate, fipronil, flonicamid, flubendiamide, flufenoxuron, fluvalinate, formetanate, fosthiazate, hexaflumuron, hydramethylnon, imidacloprid, indoxacarb, lufenuron, metaflumizone, methiodicarb, methomyl, methoprene, methoxyfenozide, nitenpyram, nithiazine, novaluron, oxamyl, pymetrozine, pyrethrin, pyridaben, pyridalyl, pyriproxyfen, ryanodine, spinetoram, spinosad, spirodiclofen, spiromesifen, spirotetramat, sulfoxaflor, tebufenozide, tetramethrin, thiacloprid, thiamethoxam, thiodicarb, thiosultap-sodium, tralomethrin, triazamate, triflumuron, *Bacillus thuringiensis* delta-endotoxins, all strains of *Bacillus thuringiensis* and all strains of *Nucleo polyhydrosis* viruses.

One embodiment of biological agents for mixing with compounds of this invention include entomopathogenic bacteria such as *Bacillus thuringiensis,* and the encapsulated delta-endotoxins of *Bacillus thuringiensis* such as MVP® and MVPII® bioinsecticides prepared by the CellCap® process (CellCap®, MVP® and MVPII® are trademarks of Mycogen Corporation, Indianapolis, Indiana, USA); entomopathogenic fungi such as green muscardine fungus; and entomopathogenic (both naturally occurring and genetically modified) viruses including baculovirus, nucleopolyhedro virus (NPV) such as *Helicoverpa zea* nucleopolyhedrovirus (HzNPV), *Anagrapha falcifera* nucleopolyhedrovirus (AfNPV); and granulosis virus (GV) such as *Cydia pomonella* granulosis virus (CpGV).

Of particular note is such a combination where the other invertebrate pest control active ingredient belongs to a different chemical class or has a different site of action than the compound of Formula **1**. In certain instances, a combination with at least one other invertebrate pest control active ingredient having a similar spectrum of control but a different site of action will be particularly advantageous for resistance management. Thus, a composition of the present invention can further comprise a biologically effective amount of at least one additional invertebrate pest control active ingredient having a similar spectrum of control but belonging to a different chemical class or having a different site of action. These additional biologically active compounds or agents include, but are not limited to, sodium channel modulators such as bifenthrin, cypermethrin, cyhalothrin, lambda-cyhalothrin, cyfluthrin, beta-cyfluthrin, deltamethrin, dimefluthrin, esfenvalerate, fenvalerate, indoxacarb, metofluthrin, profluthrin, pyrethrin and tralomethrin; cholinesterase inhibitors such as chlorpyrifos, methomyl, oxamyl, thiodicarb and triazamate; neonicotinoids such as acetamiprid, clothianidin, dinotefuran, imidacloprid, nitenpyram, nithiazine, thiacloprid and thiamethoxam; insecticidal macrocyclic lactones such as spinetoram, spinosad, abamectin, avermectin and emamectin; GABA (γ–aminobutyric acid)-gated chloride channel antagonists such as avermectin or blockers such as ethiprole and fipronil;

chitin synthesis inhibitors such as buprofezin, cyromazine, flufenoxuron, hexaflumuron, lufenuron, novaluron, noviflumuron and triflumuron; juvenile hormone mimics such as diofenolan, fenoxycarb, methoprene and pyriproxyfen; octopamine receptor ligands such as amitraz; molting inhibitors and ecdysone agonists such as azadirachtin, methoxyfenozide and tebufenozide; ryanodine receptor ligands such as ryanodine, anthranilic diamides such as chlorantraniliprole, cyantraniliprole and flubendiamide; nereistoxin analogs such as cartap; mitochondrial electron transport inhibitors such as chlorfenapyr, hydramethylnon and pyridaben; lipid biosynthesis inhibitors such as spirodiclofen and spiromesifen; cyclodiene insecticides such as dieldrin or endosulfan; pyrethroids; carbamates; insecticidal ureas; and biological agents including nucleopolyhedro viruses (NPV), members of *Bacillus thuringiensis*, encapsulated delta-endotoxins of *Bacillus thuringiensis*, and other naturally occurring or genetically modified insecticidal viruses.

Further examples of biologically active compounds or agents with which compounds of this invention can be formulated are: fungicides such as 1-[4-[4-[5-(2,6-difluorophenyl)-4,5-dihydro-3-isoxazolyl]-2-thiazolyl]-1-piperidinyl]-2-[5-methyl-3-(trifluoromethyl)-1*H*-pyrazol-1-yl]ethanone, acibenzolar, aldimorph, amisulbrom, azaconazole, azoxystrobin, benalaxyl, benomyl, benthiavalicarb, benthiavalicarb-isopropyl, binomial, biphenyl, bitertanol, blasticidin-S, Bordeaux mixture (Tribasic copper sulfate), boscalid/nicobifen, bromuconazole, bupirimate, buthiobate, carboxin, carpropamid, captafol, captan, carbendazim, chloroneb, chlorothalonil, chlozolinate, clotrimazole, copper oxychloride, copper salts such as copper sulfate and copper hydroxide, cyazofamid, cyflunamid, cymoxanil, cyproconazole, cyprodinil, dichlofluanid, diclocymet, diclomezine, dicloran, diethofencarb, difenoconazole, dimethomorph, dimoxystrobin, diniconazole, diniconazole-M, dinocap, discostrobin, dithianon, dodemorph, dodine, econazole, etaconazole, edifenphos, epoxiconazole, ethaboxam, ethirimol, ethridiazole, famoxadone, fenamidone, fenarimol, fenbuconazole, fencaramid, fenfuram, fenhexamide, fenoxanil, fenpiclonil, fenpropidin, fenpropimorph, fentin acetate, fentin hydroxide, ferbam, ferfurazoate, ferimzone, fluazinam, fludioxonil, flumetover, fluopicolide, fluoxastrobin, fluquinconazole, fluquinconazole, flusilazole, flusulfamide, flutolanil, flutriafol, fluxapyroxad, folpet, fosetyl-aluminum, fthalide, fuberidazole, furalaxyl, furametpyr, hexaconazole, hymexazole, guazatine, imazalil, imibenconazole, iminoctadine, iodicarb, ipconazole, iprobenfos, iprodione, iprovalicarb, isoconazole, isoprothiolane, isotianil, kasugamycin, kresoxim-methyl, mancozeb, mandipropamid, maneb, mapanipyrin, mefenoxam, mepronil, metalaxyl, metconazole, methasulfocarb, metiram, metominostrobin/fenominostrobin, mepanipyrim, metrafenone, miconazole, myclobutanil, neo-asozin (ferric methanearsonate), nuarimol, octhilinone, ofurace, orysastrobin, oxadixyl, oxolinic acid, oxpoconazole, oxycarboxin, paclobutrazol, penconazole, pencycuron, penflufen, penthiopyrad, perfurazoate, phosphonic acid, phthalide, picobenzamid,

picoxystrobin, polyoxin, probenazole, prochloraz, procymidone, propamocarb, propamocarb-hydrochloride, propiconazole, propineb, proquinazid, prothioconazole, pyraclostrobin, pyrametostrobin, pyraoxystrobin, pryazophos, pyrifenox, pyrimethanil, pyrifenox, pyriofenone, pyrolnitrine, pyroquilon, quinconazole, quinoxyfen, quintozene, silthiofam, simeconazole, spiroxamine, streptomycin, sulfur, tebuconazole, tebufloquin, techrazene, tecloftalam, tecnazene, tetraconazole, thiabendazole, thifluzamide, thiophanate, thiophanate-methyl, thiram, tiadinil, tolclofos-methyl, tolyfluanid, triadimefon, triadimenol, triarimol, triazoxide, tridemorph, trimorphamide, tricyclazole, trifloxystrobin, triflumizole, triforine, triticonazole, uniconazole, validamycin, valifenalate, vinclozolin, zineb, ziram, and zoxamide; nematocides such as aldicarb, imicyafos, oxamyl and fenamiphos; bactericides such as streptomycin; acaricides such as amitraz, chinomethionat, chlorobenzilate, cyhexatin, dicofol, dienochlor, etoxazole, fenazaquin, fenbutatin oxide, fenpropathrin, fenpyroximate, hexythiazox, propargite, pyridaben and tebufenpyrad.

Of note are fungicides and compositions comprising fungicides such as 1-[4-[4-[5-(2,6-difluorophenyl)-4,5-dihydro-3-isoxazolyl]-2-thiazolyl]-1-piperidinyl]-2-[5-methyl-3-(trifluoromethyl)-1*H*-pyrazol-1-yl]ethanone, azoxystrobin, copper hydroxide, cymoxanil, cyproconazole, difenoconazole, famoxadone, fenoxanil, ferimzone, flusilazole, flutolanil, fthalide, furametpyr, hexaconazole, isoprothiolane, isotianil, kasugamycin, mancozeb, metominostrobin, orysastrobin, pencycuron, penthiopyrad, picoxystrobin, probenazole, propiconazole, proquinazid, pyroquilon, simeconazole, tiadinil, tricyclazole, trifloxystrobin and validamycin.

In certain instances, combinations of a compound of this invention with other biologically active (particularly invertebrate pest control) compounds or agents (i.e. active ingredients) can result in a greater-than-additive (i.e. synergistic) effect. Reducing the quantity of active ingredients released in the environment while ensuring effective pest control is always desirable. When synergism of invertebrate pest control active ingredients occurs at application rates giving agronomically satisfactory levels of invertebrate pest control, such combinations can be advantageous for reducing crop production cost and decreasing environmental load.

Compounds of this invention and compositions thereof can be applied to plants genetically transformed to express proteins toxic to invertebrate pests (such as *Bacillus thuringiensis* delta-endotoxins). Such an application may provide a broader spectrum of plant protection and be advantageous for resistance management. The effect of the exogenously applied invertebrate pest control compounds of this invention may be synergistic with the expressed toxin proteins.

General references for these agricultural protectants (i.e. insecticides, fungicides, nematocides, acaricides, herbicides and biological agents) include *The Pesticide Manual, 13th Edition*, C. D. S. Tomlin, Ed., British Crop Protection Council, Farnham, Surrey, U.K.,

2003 and *The BioPesticide Manual*, 2nd *Edition*, L. G. Copping, Ed., British Crop Protection Council, Farnham, Surrey, U.K., 2001.

For embodiments where one or more of these various mixing partners are used, the weight ratio of these various mixing partners (in total) to the compound of Formula **1**, an *N*-oxide, or salt thereof, is typically between about 1:3000 and about 3000:1. Of note are weight ratios between about 1:300 and about 300:1 (for example ratios between about 1:30 and about 30:1). One skilled in the art can easily determine through simple experimentation the biologically effective amounts of active ingredients necessary for the desired spectrum of biological activity. It will be evident that including these additional components can expand the spectrum of invertebrate pests controlled beyond the spectrum controlled by the compound of Formula **1** alone.

Table A lists specific combinations of a compound of Formula **1** with other invertebrate pest control agents illustrative of the mixtures, compositions and methods of the present invention. The first column of Table A lists the specific invertebrate pest control agents (e.g., "Abamectin" in the first line). The second column of Table A lists the mode of action (if known) or chemical class of the invertebrate pest control agents. The third column of Table A lists embodiment(s) of ranges of weight ratios for rates at which a compound of Formula **1** can be applied relative to an invertebrate pest control agent (e.g., "50:1 to 1:50" of a compound of Formula **1** relative to abamectin by weight). Thus, for example, the first line of Table A specifically discloses the combination of a compound of Formula **1** with abamectin can be applied in a weight ratio between 50:1 to 1:50. The remaining lines of Table A are to be construed similarly. Of further note Table A lists specific combinations of a compound of Formula **1** with other invertebrate pest control agents illustrative of the mixtures, compositions and methods of the present invention and includes additional embodiments of weight ratio ranges for application rates.

Table A

Invertebrate Pest Control Agent	Mode of Action or Chemical Class	Typical Weight Ratio
Abamectin	macrocyclic lactones	50:1 to 1:50
Acetamiprid	neonicotinoids	150:1 to 1:200
Amitraz	octopamine receptor ligands	200:1 to 1:100
Avermectin	macrocyclic lactones	50:1 to 1:50
Azadirachtin	ecdysone agonists	100:1 to 1:120
Beta-cyfluthrin	sodium channel modulators	150:1 to 1:200
Bifenthrin	sodium channel modulators	100:1 to 1:10
Buprofezin	chitin synthesis inhibitors	500:1 to 1:50
Cartap	nereistoxin analogs	100:1 to 1:200
Chlorantraniliprole	ryanodine receptor ligands	100:1 to 1:120

Invertebrate Pest Control Agent	Mode of Action or Chemical Class	Typical Weight Ratio
Chlorfenapyr	mitochondrial electron transport inhibitors	300:1 to 1:200
Chlorpyrifos	cholinesterase inhibitors	500:1 to 1:200
Clothianidin	neonicotinoids	100:1 to 1:400
Cyantraniliprole	ryanodine receptor ligands	100:1 to 1:120
Cyfluthrin	sodium channel modulators	150:1 to 1:200
Cyhalothrin	sodium channel modulators	150:1 to 1:200
Cypermethrin	sodium channel modulators	150:1 to 1:200
Cyromazine	chitin synthesis inhibitors	400:1 to 1:50
Deltamethrin	sodium channel modulators	50:1 to 1:400
Dieldrin	cyclodiene insecticides	200:1 to 1:100
Dinotefuran	neonicotinoids	150:1 to 1:200
Diofenolan	molting inhibitor	150:1 to 1:200
Emamectin	macrocyclic lactones	50:1 to 1:10
Endosulfan	cyclodiene insecticides	200:1 to 1:100
Esfenvalerate	sodium channel modulators	100:1 to 1:400
Ethiprole	GABA-regulated chloride channel blockers	200:1 to 1:100
Fenothiocarb		150:1 to 1:200
Fenoxycarb	juvenile hormone mimics	500:1 to 1:100
Fenvalerate	sodium channel modulators	150:1 to 1:200
Fipronil	GABA-regulated chloride channel blockers	150:1 to 1:100
Flonicamid		200:1 to 1:100
Flubendiamide	ryanodine receptor ligands	100:1 to 1:120
Flufenoxuron	chitin synthesis inhibitors	200:1 to 1:100
Hexaflumuron	chitin synthesis inhibitors	300:1 to 1:50
Hydramethylnon	mitochondrial electron transport inhibitors	150:1 to 1:250
Imidacloprid	neonicotinoids	1000:1 to 1:1000
Indoxacarb	sodium channel modulators	200:1 to 1:50
Lambda-cyhalothrin	sodium channel modulators	50:1 to 1:250
Lufenuron	chitin synthesis inhibitors	500:1 to 1:250
Metaflumizone		200:1 to 1:200
Methomyl	cholinesterase inhibitors	500:1 to 1:100
Methoprene	juvenile hormone mimics	500:1 to 1:100
Methoxyfenozide	ecdysone agonists	50:1 to 1:50

Invertebrate Pest Control Agent	Mode of Action or Chemical Class	Typical Weight Ratio
Nitenpyram	neonicotinoids	150:1 to 1:200
Nithiazine	neonicotinoids	150:1 to 1:200
Novaluron	chitin synthesis inhibitors	500:1 to 1:150
Oxamyl	cholinesterase inhibitors	200:1 to 1:200
Pymetrozine		200:1 to 1:100
Pyrethrin	sodium channel modulators	100:1 to 1:10
Pyridaben	mitochondrial electron transport inhibitors	200:1 to 1:100
Pyridalyl		200:1 to 1:100
Pyriproxyfen	juvenile hormone mimics	500:1 to 1:100
Ryanodine	ryanodine receptor ligands	100:1 to 1:120
Spinetoram	macrocyclic lactones	150:1 to 1:100
Spinosad	macrocyclic lactones	500:1 to 1:10
Spirodiclofen	lipid biosynthesis inhibitors	200:1 to 1:200
Spiromesifen	lipid biosynthesis inhibitors	200:1 to 1:200
Tebufenozide	ecdysone agonists	500:1 to 1:250
Thiacloprid	neonicotinoids	100:1 to 1:200
Thiamethoxam	neonicotinoids	1250:1 to 1:1000
Thiodicarb	cholinesterase inhibitors	500:1 to 1:400
Thiosultap-sodium		150:1 to 1:100
Tralomethrin	sodium channel modulators	150:1 to 1:200
Triazamate	cholinesterase inhibitors	250:1 to 1:100
Triflumuron	chitin synthesis inhibitors	200:1 to 1:100
Bacillus thuringiensis	biological agents	50:1 to 1:10
Bacillus thuringiensis delta-endotoxin	biological agents	50:1 to 1:10
NPV (e.g., Gemstar)	biological agents	50:1 to 1:10

Of note is the composition of the present invention wherein the at least one additional biologically active compound or agent is selected from the Invertebrate Pest Control Agents listed in Table A above.

The weight ratios of a compound, including a compound of Formula **1**, an *N*-oxide, or salt thereof, to the additional invertebrate pest control agent typically are between 1000:1 and 1:1000, with one embodiment being between 500:1 and 1:500, another embodiment being between 250:1 and 1:200 and another embodiment being between 100:1 and 1:50.

Listed below in Tables B1 to B15 are embodiments of specific compositions comprising a compound of Formula **1** (compound numbers (Cmpd. No.) refer to compounds in Index Table A) and an additional invertebrate pest control agent.

Table B1

Mixture No.	Cmpd. No.	and	Invertebrate Pest Control Agent	Mixture No.	Cmpd. No.	and	Invertebrate Pest Control Agent
B1-1	41	and	Abamectin	B1-36	41	and	Imidacloprid
B1-2	41	and	Acetamiprid	B1-37	41	and	Indoxacarb
B1-3	41	and	Amitraz	B1-38	41	and	Lambda-cyhalothrin
B1-4	41	and	Avermectin	B1-39	41	and	Lufenuron
B1-5	41	and	Azadirachtin	B1-40	41	and	Metaflumizone
B1-5a	41	and	Bensultap	B1-41	41	and	Methomyl
B1-6	41	and	Beta-cyfluthrin	B1-42	41	and	Methoprene
B1-7	41	and	Bifenthrin	B1-43	41	and	Methoxyfenozide
B1-8	41	and	Buprofezin	B1-44	41	and	Nitenpyram
B1-9	41	and	Cartap	B1-45	41	and	Nithiazine
B1-10	41	and	Chlorantraniliprole	B1-46	41	and	Novaluron
B1-11	41	and	Chlorfenapyr	B1-47	41	and	Oxamyl
B1-12	41	and	Chlorpyrifos	B1-48	41	and	Phosmet
B1-13	41	and	Clothianidin	B1-49	41	and	Pymetrozine
B1-14	41	and	Cyantraniliprole	B1-50	41	and	Pyrethrin
B1-15	41	and	Cyfluthrin	B1-51	41	and	Pyridaben
B1-16	41	and	Cyhalothrin	B1-52	41	and	Pyridalyl
B1-17	41	and	Cypermethrin	B1-53	41	and	Pyriproxyfen
B1-18	41	and	Cyromazine	B1-54	41	and	Ryanodine
B1-19	41	and	Deltamethrin	B1-55	41	and	Spinetoram
B1-20	41	and	Dieldrin	B1-56	41	and	Spinosad
B1-21	41	and	Dinotefuran	B1-57	41	and	Spirodiclofen
B1-22	41	and	Diofenolan	B1-58	41	and	Spiromesifen
B1-23	41	and	Emamectin	B1-59	41	and	Spirotetramat
B1-24	41	and	Endosulfan	B1-59a	41	and	Sulfoxaflor
B1-25	41	and	Esfenvalerate	B1-60	41	and	Tebufenozide
B1-26	41	and	Ethiprole	B1-61	41	and	Thiacloprid
B1-27	41	and	Fenothiocarb	B1-62	41	and	Thiamethoxam
B1-28	41	and	Fenoxycarb	B1-63	41	and	Thiodicarb
B1-29	41	and	Fenvalerate	B1-64	41	and	Thiosultap-sodium
B1-30	41	and	Fipronil	B1-65	41	and	Tolfenpyrad
B1-31	41	and	Flonicamid	B1-66	41	and	Tralomethrin

Mixture No.	Cmpd. No.	and	Invertebrate Pest Control Agent
B1-32	41	and	Flubendiamide
B1-33	41	and	Flufenoxuron
B1-34	41	and	Hexaflumuron
B1-35	41	and	Hydramethylnon

Mixture No.	Cmpd. No.	and	Invertebrate Pest Control Agent
B1-67	41	and	Triazamate
B1-68	41	and	Triflumuron
B1-69	41	and	*Bacillus thuringiensis*
B1-70	41	and	*Bacillus thuringiensis* delta-endotoxin
B1-71	41	and	NPV (e.g., Gemstar)

Table B2

Table B2 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 77. For example, the first mixture in Table B2 is designated B2-1 and is a mixture of compound 77 and the additional invertebrate pest control agent abamectin.

Table B3

Table B3 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 546. For example, the first mixture in Table B3 is designated B3-1 and is a mixture of compound 546 and the additional invertebrate pest control agent abamectin.

Table B4

Table B4 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 613. For example, the first mixture in Table B4 is designated B4-1 and is a mixture of compound 613 and the additional invertebrate pest control agent abamectin.

Table B5

Table B5 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 652. For example, the first mixture in Table B5 is designated B5-1 and is a mixture of compound 652 and the additional invertebrate pest control agent abamectin.

Table B6

Table B6 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 720. For example, the first mixture in Table B6 is designated B6-1 and is a mixture of compound 720 and the additional invertebrate pest control agent abamectin.

Table B7

Table B7 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 800. For example, the first

mixture in Table B7 is designated B7-1 and is a mixture of compound 800 and the additional invertebrate pest control agent abamectin.

Table B8

Table B8 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 801. For example, the first mixture in Table B8 is designated B8-1 and is a mixture of compound 801 and the additional invertebrate pest control agent abamectin.

Table B9

Table B9 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 802. For example, the first mixture in Table B9 is designated B9-1 and is a mixture of compound 802 and the additional invertebrate pest control agent abamectin.

Table B10

Table B10 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 804. For example, the first mixture in Table B10 is designated B10-1 and is a mixture of compound 804 and the additional invertebrate pest control agent abamectin.

Table B11

Table B11 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 805. For example, the first mixture in Table B11 is designated B11-1 and is a mixture of compound 805 and the additional invertebrate pest control agent abamectin.

Table B12

Table B12 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 806. For example, the first mixture in Table B12 is designated B12-1 and is a mixture of compound 806 and the additional invertebrate pest control agent abamectin.

Table B13

Table B13 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 807. For example, the first mixture in Table B13 is designated B13-1 and is a mixture of compound 807 and the additional invertebrate pest control agent abamectin.

Table B14

Table B14 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 820. For example, the first

mixture in Table B14 is designated B14-1 and is a mixture of compound 820 and the additional invertebrate pest control agent abamectin.

Table B15

Table B15 is identical to Table B1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 869. For example, the first mixture in Table B15 is designated B15-1 and is a mixture of compound 869 and the additional invertebrate pest control agent abamectin.

The specific mixtures listed in Tables B1 to B15 typically combine a compound of Formula **1** with the other invertebrate pest agent in the ratios specified in Table A.

Listed below in Tables C1 to C15 are embodiments of specific compositions comprising a compound of Formula **1** (compound numbers (Cmpd. No.) refer to compounds in Index Tables A–E) and an additional fungicide.

Table C1

Mixture No.	Cmpd. No.	and	Fungicide	Mixture No.	Cmpd. No.	and	Fungicide
C1-1	41	and	Probenazole	C1-17	41	and	Difenoconazole
C1-2	41	and	Tiadinil	C1-18	41	and	Cyproconazole
C1-3	41	and	Isotianil	C1-19	41	and	Propiconazole
C1-4	41	and	Pyroquilon	C1-20	41	and	Fenoxanil
C1-5	41	and	Metominostrobin	C1-21	41	and	Ferimzone
C1-6	41	and	Flutolanil	C1-22	41	and	Fthalide
C1-7	41	and	Validamycin	C1-23	41	and	Kasugamycin
C1-8	41	and	Furametpyr	C1-24	41	and	Picoxystrobin
C1-9	41	and	Pencycuron	C1-25	41	and	Penthiopyrad
C1-10	41	and	Simeconazole	C1-26	41	and	Famoxadone
C1-11	41	and	Orysastrobin	C1-27	41	and	Cymoxanil
C1-12	41	and	Trifloxystrobin	C1-28	41	and	Proquinazid
C1-13	41	and	Isoprothiolane	C1-29	41	and	Flusilazole
C1-14	41	and	Azoxystrobin	C1-30	41	and	Mancozeb
C1-15	41	and	Tricyclazole	C1-31	41	and	Copper hydroxide
C1-16	41	and	Hexaconazole	C1-32	41	and	(a)

(a) 1-[4-[4-[5-(2,6-difluorophenyl)-4,5-dihydro-3-isoxazolyl]-2-thiazolyl]-1-piperidinyl]-2-[5-methyl-3-(trifluoromethyl)-1*H*-pyrazol-1-yl]ethanone

Table C2

Table C2 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 77. For example, the first mixture in Table C2 is designated C2-1 and is a mixture of compound 77 and the additional fungicide probenazole.

Table C3

Table C3 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 546. For example, the first mixture in Table C3 is designated C3-1 and is a mixture of compound 546 and the additional fungicide probenazole.

Table C4

Table C4 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 613. For example, the first mixture in Table C4 is designated C4-1 and is a mixture of compound 613 and the additional fungicide probenazole.

Table C5

Table C5 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 652. For example, the first mixture in Table C5 is designated C5-1 and is a mixture of compound 652 and the additional fungicide probenazole.

Table C6

Table C6 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 720 For example, the first mixture in Table C6 is designated C6-1 and is a mixture of compound 720 and the additional fungicide probenazole.

Table C7

Table C7 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 800. For example, the first mixture in Table C7 is designated C7-1 and is a mixture of compound 800 and the additional fungicide probenazole.

Table C8

Table C8 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 801. For example, the first mixture in Table C8 is designated C8-1 and is a mixture of compound 801 and the additional fungicide probenazole.

Table C9

Table C9 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 802. For example, the first mixture in Table C9 is designated C9-1 and is a mixture of compound 802 and the additional fungicide probenazole.

Table C10

Table C10 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 804. For example, the first mixture in Table C10 is designated C10-1 and is a mixture of compound 804 and the additional fungicide probenazole.

Table C11

Table C11 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 805. For example, the first mixture in Table C11 is designated C11-1 and is a mixture of compound 805 and the additional fungicide probenazole.

Table C12

Table C12 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 806. For example, the first mixture in Table C12 is designated C12-1 and is a mixture of compound 806 and the additional fungicide probenazole.

Table C13

Table C13 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 807. For example, the first mixture in Table C13 is designated C13-1 and is a mixture of compound 807 and the additional fungicide probenazole.

Table C14

Table C14 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 820. For example, the first mixture in Table C14 is designated C14-1 and is a mixture of compound 820 and the additional fungicide probenazole.

Table C15

Table C15 is identical to Table C1, except that each reference to compound 41 in the column headed "Cmpd. No." is replaced by a reference to compound 869. For example, the first mixture in Table C15 is designated C15-1 and is a mixture of compound 869 and the additional fungicide probenazole.

Invertebrate pests are controlled in agronomic and nonagronomic applications by applying one or more compounds of this invention, typically in the form of a composition, in a biologically effective amount, to the environment of the pests, including the agronomic and/or nonagronomic locus of infestation, to the area to be protected, or directly on the pests to be controlled.

Thus the present invention comprises a method for controlling an invertebrate pest in agronomic and/or nonagronomic applications, comprising contacting the invertebrate pest or its environment with a biologically effective amount of one or more of the compounds of the invention, or with a composition comprising at least one such compound or a composition comprising at least one such compound and a biologically effective amount of at least one additional biologically active compound or agent. Examples of suitable compositions comprising a compound of the invention and a biologically effective amount of at least one additional biologically active compound or agent include granular compositions wherein the additional active compound is present on the same granule as the compound of the invention or on granules separate from those of the compound of the invention.

Embodiments of the method of this invention include contacting the environment. Of note is the method wherein the environment is a plant. Also of note is the method wherein the environment is an animal. Also of note is the method wherein the environment is a seed.

To achieve contact with a compound or composition of the invention to protect a field crop from invertebrate pests, the compound or composition is typically applied to the seed of the crop before planting, to the foliage (e.g., leaves, stems, flowers, fruits) of crop plants, or to the soil or other growth medium before or after the crop is planted.

One embodiment of a method of contact is by spraying. Alternatively, a granular composition comprising a compound of the invention can be applied to the plant foliage or the soil. Compounds of this invention can also be effectively delivered through plant uptake by contacting the plant with a composition comprising a compound of this invention applied as a soil drench of a liquid formulation, a granular formulation to the soil, a nursery box treatment or a dip of transplants. Of note is a composition of the present invention in the form of a soil drench liquid formulation. Also of note is a method for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biologically effective amount of a compound of the present invention or with a composition comprising a biologically effective amount of a compound of the present invention. Of further note is this method wherein the environment is soil and the composition is applied to the soil as a soil drench formulation. Of further note is that compounds of this invention are also effective by localized application to the locus of infestation. Other methods of contact include application of a compound or a composition of the invention by direct and residual sprays, aerial sprays, gels, seed coatings, microencapsulations, systemic uptake, baits, ear tags, boluses, foggers, fumigants, aerosols, dusts and many others. One embodiment of a method of contact is a dimensionally stable fertilizer granule, stick or tablet comprising a compound or composition of the invention. The compounds of this invention can also be impregnated into materials for fabricating invertebrate control devices (e.g., insect netting).

Compounds of this invention are also useful in seed treatments for protecting seeds from invertebrate pests. In the context of the present disclosure and claims, treating a seed

means contacting the seed with a biologically effective amount of a compound of this invention, which is typically formulated as a composition of the invention. This seed treatment protects the seed from invertebrate soil pests and generally can also protect roots and other plant parts in contact with the soil of the seedling developing from the germinating seed. The seed treatment may also provide protection of foliage by translocation of the compound of this invention or a second active ingredient within the developing plant. Seed treatments can be applied to all types of seeds, including those from which plants genetically transformed to express specialized traits will germinate. Representative examples include those expressing proteins toxic to invertebrate pests, such as *Bacillus thuringiensis* toxin or those expressing herbicide resistance such as glyphosate acetyltransferase, which provides resistance to glyphosate.

One method of seed treatment is by spraying or dusting the seed with a compound of the invention (i.e. as a formulated composition) before sowing the seeds. Compositions formulated for seed treatment generally comprise a film former or adhesive agent. Therefore typically a seed coating composition of the present invention comprises a biologically effective amount of a compound of Formula **1**, an *N*-oxide, or salt thereof, and a film former or adhesive agent. Seed can be coated by spraying a flowable suspension concentrate directly into a tumbling bed of seeds and then drying the seeds. Alternatively, other formulation types such as wetted powders, solutions, suspoemulsions, emulsifiable concentrates and emulsions in water can be sprayed on the seed. This process is particularly useful for applying film coatings on seeds. Various coating machines and processes are available to one skilled in the art. Suitable processes include those listed in P. Kosters et al., *Seed Treatment: Progress and Prospects*, 1994 BCPC Mongraph No. 57, and references listed therein.

The treated seed typically comprises a compound of the present invention in an amount from about 0.1 g to 1 kg per 100 kg of seed (i.e. from about 0.0001 to 1% by weight of the seed before treatment). A flowable suspension formulated for seed treatment typically comprises from about 0.5 to about 70% of the active ingredient, from about 0.5 to about 30% of a film-forming adhesive, from about 0.5 to about 20% of a dispersing agent, from 0 to about 5% of a thickener, from 0 to about 5% of a pigment and/or dye, from 0 to about 2% of an antifoaming agent, from 0 to about 1% of a preservative, and from 0 to about 75% of a volatile liquid diluent.

The compounds of this invention can be incorporated into a bait composition that is consumed by an invertebrate pest or used within a device such as a trap, bait station, and the like. Such a bait composition can be in the form of granules which comprise (a) active ingredients, namely a biologically effective amount of a compound of Formula **1** an *N*-oxide, or salt thereof; (b) one or more food materials; optionally (c) an attractant, and optionally (d) one or more humectants. Of note are granules or bait compositions which comprise between

about 0.001-5% active ingredients, about 40-99% food material and/or attractant; and optionally about 0.05-10% humectants, which are effective in controlling soil invertebrate pests at very low application rates, particularly at doses of active ingredient that are lethal by ingestion rather than by direct contact. Some food materials can function both as a food source and an attractant. Food materials include carbohydrates, proteins and lipids. Examples of food materials are vegetable flour, sugar, starches, animal fat, vegetable oil, yeast extracts and milk solids. Examples of attractants are odorants and flavorants, such as fruit or plant extracts, perfume, or other animal or plant component, pheromones or other agents known to attract a target invertebrate pest. Examples of humectants, i.e. moisture retaining agents, are glycols and other polyols, glycerine and sorbitol. Of note is a bait composition (and a method utilizing such a bait composition) used to control at least one invertebrate pest selected from the group consisting of ants, termites and cockroaches. A device for controlling an invertebrate pest can comprise the present bait composition and a housing adapted to receive the bait composition, wherein the housing has at least one opening sized to permit the invertebrate pest to pass through the opening so the invertebrate pest can gain access to the bait composition from a location outside the housing, and wherein the housing is further adapted to be placed in or near a locus of potential or known activity for the invertebrate pest.

The compounds of this invention can be applied without other adjuvants, but most often application will be of a formulation comprising one or more active ingredients with suitable carriers, diluents, and surfactants and possibly in combination with a food depending on the contemplated end use. One method of application involves spraying a water dispersion or refined oil solution of a compound of the present invention. Combinations with spray oils, spray oil concentrations, spreader stickers, adjuvants, other solvents, and synergists such as piperonyl butoxide often enhance compound efficacy. For nonagronomic uses such sprays can be applied from spray containers such as a can, a bottle or other container, either by means of a pump or by releasing it from a pressurized container, e.g., a pressurized aerosol spray can. Such spray compositions can take various forms, for example, sprays, mists, foams, fumes or fog. Such spray compositions thus can further comprise propellants, foaming agents, etc. as needed for application. Of note is a spray composition comprising a biologically effective amount of a compound or a composition of the present invention and a carrier. One embodiment of such a spray composition comprises a biologically effective amount of a compound or a composition of the present invention and a propellant. Representative propellants include, but are not limited to, methane, ethane, propane, butane, isobutane, butene, pentane, isopentane, neopentane, pentene, hydrofluorocarbons, chlorofluorocarbons, dimethyl ether, and mixtures of the foregoing. Of note is a spray composition (and a method utilizing such a spray composition dispensed from a spray container) used to control at least one invertebrate pest selected from the group

consisting of mosquitoes, black flies, stable flies, deer flies, horse flies, wasps, yellow jackets, hornets, ticks, spiders, ants, gnats, and the like, including individually or in combinations.

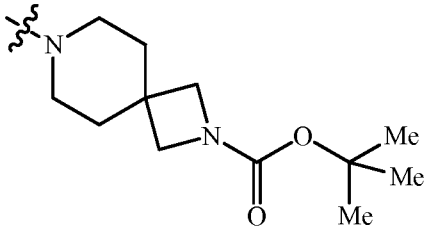
Nonagronomic uses refer to invertebrate pest control in the areas other than fields of crop plants. Nonagronomic uses of the present compounds and compositions include control of invertebrate pests in stored grains, beans and other foodstuffs, and in textiles such as clothing and carpets. Nonagronomic uses of the present compounds and compositions also include invertebrate pest control in ornamental plants, forests, in yards, along roadsides and railroad rights of way, and on turf such as lawns, golf courses and pastures. Nonagronomic uses of the present compounds and compositions also include invertebrate pest control in houses and other buildings which may be occupied by humans and/or companion, farm, ranch, zoo or other animals. Nonagronomic uses of the present compounds and compositions also include the control of pests such as termites that can damage wood or other structural materials used in buildings.

For agronomic applications, the rate of application required for effective control (i.e. "biologically effective amount") will depend on such factors as the species of invertebrate to be controlled, the pest's life cycle, life stage, its size, location, time of year, host crop or animal, feeding behavior, mating behavior, ambient moisture, temperature, and the like. Under normal circumstances, application rates of about 0.01 to 2 kg of active ingredients per hectare are sufficient to control pests in agronomic ecosystems, but as little as 0.0001 kg/hectare may be sufficient or as much as 8 kg/hectare may be required. For nonagronomic applications, effective use rates will range from about 1.0 to 50 mg/square meter but as little as 0.1 mg/square meter may be sufficient or as much as 150 mg/square meter may be required. One skilled in the art can easily determine the biologically effective amount necessary for the desired level of invertebrate pest control.

Representative compounds of this invention prepared by the methods described herein are shown in Index Tables A–E. See Index Table F for ^{1}H NMR data. The column titled "m.p. (°C) or AP+ (M+1)" contains either mass spectral data as a single numerical entry (e.g., 348), or melting point data as a numerical range (e.g., 122-124 °C). For mass spectral data (AP^+ (M+1)), the numerical value reported is the molecular weight of the parent molecular ion (M) formed by addition of H^+ (molecular weight of 1) to the molecule to give a M+1 peak observed by mass spectrometry using atmospheric pressure chemical ionization (AP^+). The alternate molecular ion peaks (e.g., M+2 or M+4) that occur with compounds containing multiple halogens are not reported.

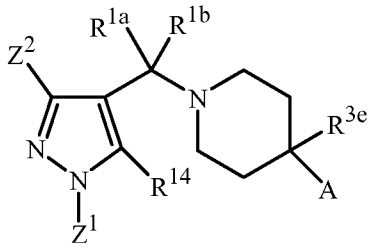
In Index Table B, entries in the column titled "X" represent definitions of the variable M of Formula **1**. When M is –C(R^{3e})(A)– and R^{3e} and A are taken together to form a ring, the ring is represented in the form "C(-ring members-)" with the first and last ring members being bonded to the carbon atom of –C(R^{3e})(A)– . For example, when X is defined as "C[-

$CH_2N(C(O)OC(Me)_3)CH_2$-]", the structure of the piperidine ring containing X would be as shown below.



The following abbreviations are used in the Index Tables which follow: Cmpd means Compound, Me is methyl, Et is ethyl, c-Pr is cyclopropyl, Ph is phenyl, CHO is formyl and CN is cyano.

INDEX TABLE A



R^{1a}, R^{1b} and R^{14} are H

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
1	2-chlorophenyl	4-fluorophenyl	phenyl	H	
2	3-methylphenyl	3-fluorophenyl	CO_2Me	H	408.5
3	2,4-difluorophenyl	2-methylphenyl	CO_2Me	H	426.5
4	4-methylphenyl	4-fluorophenyl	CO_2Me	H	408.5
5	3-methylphenyl	3-fluorophenyl	CH_2OCH_3	H	394.5
6	2-methylphenyl	3-fluoro-4-methoxyphenyl	CO_2Et	H	
7	4-methylphenyl	4-fluorophenyl	CH_2OCH_3	H	
8	4-methylphenyl	4-fluorophenyl	$C(O)NEt_2$	H	
9	2,4-difluorophenyl	4-fluorophenyl	CO_2Me	H	91-92 °C
10	4-(trifluoromethoxy)phenyl	4-fluorophenyl	CO_2Me	H	478.4
11	3-(trifluoromethyl)phenyl	4-fluorophenyl	CO_2Me	H	462.5
12	3-(trifluoromethyl)phenyl	4-fluorophenyl	cyano	H	429.4
13	4-chlorophenyl	4-fluorophenyl	CO_2Me	H	428.4

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
14	4-chlorophenyl	4-fluorophenyl	cyano	H	395.4
15	2,4-difluorophenyl	3-(trifluoromethyl)phenyl	CO_2Me	H	480.4
16	2,4-difluorophenyl	2-fluoro-4-methylphenyl	CO_2Me	H	444.5
17	2,4-difluorophenyl	4-chlorophenyl	CO_2Me	H	446.4
18	2,6-dichloro-4-(trifluoromethyl)phenyl	4-chlorophenyl	CO_2Me	H	546.3
19	3-chlorophenyl	2-fluorophenyl	CO_2Me	H	442.5
20	3-chlorophenyl	3-fluorophenyl	CO_2Et	H	442.4
21	3-chlorophenyl	4-fluorophenyl	CO_2Et	H	442.4
22	3,4-dichlorophenyl	2-fluorophenyl	CO_2Et	H	476.4
23	3,4-dichlorophenyl	3-fluorophenyl	CO_2Et	H	476.4
24	3,4-dichlorophenyl	4-fluorophenyl	CO_2Et	H	476.4
25	3-chlorophenyl	3-fluorophenyl	CF_3	H	438.4
26	3-chlorophenyl	2-fluorophenyl	NHC(O)OEt	H	457.5
27	3-chlorophenyl	3-fluorophenyl	NHC(O)OEt	H	457.5
28	3-chlorophenyl	4-fluorophenyl	NHC(O)OEt	H	457.5
29	3,4-dichlorophenyl	2-fluorophenyl	C(O)Me	H	446.4
30	3,4-dichlorophenyl	3-fluorophenyl	C(O)Me	H	446.4
31	3,4-dichlorophenyl	4-fluorophenyl	C(O)Me	H	446.4
32	3,4-dichlorophenyl	4-fluorophenyl	CO_2Me	H	462.4
33	3,4-dichlorophenyl	4-fluorophenyl	cyano	H	429.4
34	3,5-bis(trifluoromethyl)phenyl	4-fluorophenyl	CO_2Me	H	530.5
35	3,5-dichlorophenyl	4-fluorophenyl	CO_2Et	H	476.4
36	3,5-dichlorophenyl	4-fluorophenyl	cyano	H	429.4
37	3-chloro-2-pyridinyl	4-fluorophenyl	cyano	H	396.5
38	3,5-bis(trifluoromethyl)phenyl	4-fluorophenyl	cyano	H	497.4
39	2-fluorophenyl	2-fluorophenyl	cyano	H	379.5
40	3-fluorophenyl	2-fluorophenyl	cyano	H	379.5
41	3-chloro-4-fluorophenyl	2-fluorophenyl	cyano	H	413.4
42	4-cyanophenyl	4-fluorophenyl	cyano	H	386.5
43	2-fluorophenyl	2-fluorophenyl	CO_2Me	H	412.5

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
44	3-fluorophenyl	2-fluorophenyl	CO_2Me	H	412.5
45	3-chloro-4-fluorophenyl	2-fluorophenyl	CO_2Me	H	446.4
46	4-(trifluoromethyl)-2-pyrimidinyl	2-fluorophenyl	cyano	H	431.5
47	4-(trifluoromethyl)-2-pyrimidinyl	2-fluorophenyl	CO_2Me	H	464.5
48	4-(trifluoromethyl)phenyl	2-fluorophenyl	cyano	H	429.4
49	4-(trifluoromethyl)phenyl	2-fluorophenyl	NHC(O)OEt	H	491.5
50	4-(trifluoromethyl)phenyl	2-fluorophenyl	CO_2Me	H	462.5
51	4-bromophenyl	2-fluorophenyl	cyano	H	440.4
52	4-bromophenyl	2-fluorophenyl	CO_2Me	H	472.4
53	4-chloro-3-fluorophenyl	2-fluorophenyl	cyano	H	393.5
54	4-chloro-3-fluorophenyl	2-fluorophenyl	NHC(O)OEt	H	455.5
55	4-chloro-3-fluorophenyl	2-fluorophenyl	CO_2Me	H	426.5
56	3,4-dichlorophenyl	2-fluorophenyl	cyano	H	429.4
57	3,4-dichlorophenyl	2-fluorophenyl	NHC(O)OEt	H	491.4
58	4-(trifluoromethyl)phenyl	2-fluorophenyl	cyano	Ph	505.5
59	4-(trifluoromethyl)phenyl	2-fluorophenyl	NHC(O)Me	H	461.5
60	4-bromophenyl	2-fluorophenyl	NHPh	H	505.4
61	4-chloro-3-fluorophenyl	2-fluorophenyl	NHC(O)Me	H	425.5
62	3,4-dichlorophenyl	2-fluorophenyl	NHC(O)Me	H	461.4
63	4-(trifluoromethoxy)phenyl	2-fluorophenyl	cyano	H	445.5
64	4-(trifluoromethoxy)phenyl	2-fluorophenyl	CO_2Me	H	478.5
65	4-(trifluoromethoxy)phenyl	2-fluorophenyl	NHC(O)Me	H	477.4
66	4-(trifluoromethoxy)phenyl	2,4-difluorophenyl	cyano	H	463.4
67	4-(trifluoromethoxy)phenyl	2,4-difluorophenyl	CO_2Me	H	496.4
68	4-(trifluoromethoxy)phenyl	2,4-difluorophenyl	NHC(O)Me	H	495.5
69	4-(trifluoromethoxy)phenyl	2-fluorophenyl	cyano	Ph	521.5
70	4-(trifluoromethoxy)phenyl	2,4-difluorophenyl	cyano	Ph	539.5
71	3-(trifluoromethyl)phenyl	2-fluorophenyl	cyano	H	429.4
72	3-(trifluoromethyl)phenyl	2-fluorophenyl	CO_2Me	H	462.5
73	3-(trifluoromethyl)phenyl	2-fluorophenyl	cyano	Ph	505.5
74	3-(trifluoromethyl)phenyl	2-fluorophenyl	NHC(O)Me	H	461.5
75	4-chlorophenyl	2-fluorophenyl	CO_2Me	H	428.4

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
76	4-chlorophenyl	2-fluorophenyl	NHC(O)Me	H	427.5
77	4-chlorophenyl	2-fluorophenyl	cyano	H	395.4
78	5-(trifluoromethyl)-2-pyridinyl	2-fluorophenyl	cyano	H	#
79	4-(trifluoromethoxy)phenyl	2,6-difluorophenyl	cyano	H	463.4
80	4-(trifluoromethoxy)phenyl	2,6-difluorophenyl	CO_2Me	H	496.5
81	5-(trifluoromethyl)-2-pyridinyl	2-fluorophenyl	CO_2Me	H	463.4
82	4-(trifluoromethoxy)phenyl	2-fluorophenyl	1-BZT*	H	537.6
83	3,4-dichlorophenyl	2-chlorophenyl	cyano	H	445.4
84	3,4-dichlorophenyl	2-chlorophenyl	CO_2Me	H	478.4
85	3-chloro-4-cyanophenyl	2-fluorophenyl	cyano	H	420
86	3,4-dichlorophenyl	2-methylphenyl	cyano	H	425
87	3-chlorophenyl	2-fluorophenyl	cyano	H	395
88	3-chlorophenyl	2-fluorophenyl	CO_2Me	H	428
89	4-(methylsulfonyl)phenyl	2-fluorophenyl	cyano	H	439
90	4-(methylsulfonyl)phenyl	2-fluorophenyl	CO_2Me	H	472
91	4-(trifluoromethyl)phenyl	2-furanyl	cyano	H	401.5
92	4-(trifluoromethyl)phenyl	2-furanyl	CO_2Me	H	434
94	3,4-difluorophenyl	2-fluorophenyl	cyano	H	397
95	3,4-difluorophenyl	2-fluorophenyl	CO_2Me	H	430
96	3-chloro-4-methylphenyl	2-fluorophenyl	cyano	H	409
97	3-chloro-4-methylphenyl	2-fluorophenyl	CO_2Me	H	442.5
98	3,4-dichlorophenyl	3-pyridinyl	cyano	H	412.4
99	4-cyano-3-(trifluoromethyl)phenyl	2-fluorophenyl	cyano	H	454
100	4-cyano-3-(trifluoromethyl)phenyl	2-fluorophenyl	CO_2Me	H	487
101	4-cyano-3-(trifluoromethyl)phenyl	2-fluorophenyl	CO_2Et	H	501
102	3,4-dichlorophenyl	2-fluorophenyl	CO_2Me	H	463
103	4-chlorophenyl	2-fluorophenyl	CHO	H	398
104	4-(trifluoromethyl)-2-pyrimidinyl	2-fluorophenyl	NHC(O)Me	H	463.5
105	4-(trifluoromethoxy)phenyl	2,6-difluorophenyl	NHC(O)Me	H	495.5

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
106	5-(trifluoromethyl)-2-pyridinyl	2-fluorophenyl	NHC(O)Me	H	462.5
107	3,4-dichlorophenyl	2-chlorophenyl	NHC(O)Me	H	477
108	3,4-dichlorophenyl	2-methylphenyl	NHC(O)Me	H	457.4
109	3-chlorophenyl	2-fluorophenyl	NHC(O)Me	H	427.5
110	4-(methylsulfonyl)phenyl	2-fluorophenyl	NHC(O)Me	H	471.5
111	4-(trifluoromethyl)phenyl	2-furanyl	NHC(O)Me	H	433.4
112	3,4-difluorophenyl	2-fluorophenyl	NHC(O)Me	H	429.5
113	3-chloro-4-methylphenyl	2-fluorophenyl	NHC(O)Me	H	441.5
114	3,4-dichlorophenyl	2-fluorophenyl	$NHC(O)OC(Me)_3$	H	519.4
115	3,4-dichlorophenyl	2-(trifluoromethyl)phenyl	cyano	H	479.4
116	3,4-dichlorophenyl	2-(trifluoromethyl)phenyl	CO_2Me	H	512.4
117	3,4-dichlorophenyl	2-(trifluoromethyl)phenyl	NHC(O)Me	H	511.4
118	3,4-dichlorophenyl	2-thienyl	cyano	H	417.4
119	3,4-dichlorophenyl	2-thienyl	NHC(O)Me	H	201-202 °C
120	3,4-dichlorophenyl	2-fluorophenyl	NH_2	H	419.5
121	3,4-dichlorophenyl	2-fluorophenyl	$NHC(O)CF_3$	H	515
122	3,4-difluorophenyl	2-fluorophenyl	$CH_2NHC(O)Me$	H	443.5
123	3,4-dichlorophenyl	2-(trifluoromethyl)phenyl	$CH_2NHC(O)Me$	H	525.4
124	3,4-dichlorophenyl	2-chlorophenyl	$CH_2NHC(O)Me$	H	492.4
125	3-(trifluoromethyl)phenyl	2-fluorophenyl	$CH_2NHC(O)Me$	H	475.5
126	4-(trifluoromethoxy)phenyl	2-fluorophenyl	$CH_2NHC(O)Me$	H	491.5
127	3-chloro-4-methylphenyl	2-fluorophenyl	$CH_2NHC(O)Me$	H	455.5
128	3,4-dichlorophenyl	5-chloro-2-thienyl	cyano	H	451
129	5-(trifluoromethyl)-3-pyridinyl	2-fluorophenyl	cyano	H	430.5
130	3,4-dimethylphenyl	2-fluorophenyl	CO_2Me	H	422.5
131	3,4-dimethylphenyl	2-fluorophenyl	cyano	H	389.5
132	3-bromophenyl	2-fluorophenyl	CO_2Me	H	472.4
133	3-bromophenyl	2-fluorophenyl	cyano	H	439.4
134	4-fluorophenyl	2-methylphenyl	cyano	H	375.5

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
135	3-bromophenyl	2-fluorophenyl	C(O)NHMe	H	471.4
136	3,4-difluorophenyl	2-fluorophenyl	C(O)NHMe	H	429.5
137	3-chloro-4-methylphenyl	2-fluorophenyl	C(O)NHMe	H	441.5
138	3,4-dichlorophenyl	2-(trifluoromethyl)phenyl	C(O)NHMe	H	511.5
500	4-methylphenyl	4-fluorophenyl	C(O)N(-$(CH_2)_4$-)	H	
505	2,5-dimethylphenyl	phenyl	CO_2Me	H	
506	4-methylphenyl	3-methylphenyl	OMe	H	
510	4-chlorophenyl	2-fluorophenyl	CH_2OH	H	400
511	3,4-dichlorophenyl	2-fluorophenyl	$NHC(O)OC(Me)_3$	H	519.4
512	4-fluorophenyl	2-methylphenyl	CO_2Me	H	408.4
516	3,4-dichlorophenyl	5-chloropyridin-2-yl	cyano	H	448
517	3-methylphenyl	2-methylphenyl	cyano	H	371.5
519	3,4-dichlorophenyl	5-methylthiophen-2-yl	cyano	H	431
520	3,4-dichlorophenyl	thiophen-2-yl	cyano	H	417
530	3,4-difluorophenyl	2-chlorophenyl	cyano	H	413.5
531	3,4-difluorophenyl	2-chlorophenyl	CO_2Me	H	446.4
534	3,4-difluorophenyl	2-bromophenyl	cyano	H	457.4
535	3,4-difluorophenyl	2-bromophenyl	CO_2Me	H	490.4
538	3,4-difluorophenyl	2-(trifluoromethyl)phenyl	cyano	H	447.5
539	3,4-difluorophenyl	2-(trifluoromethyl)phenyl	CO_2Me	H	480.4
542	3,4-dichlorophenyl	2,5-dichlorothiophen-3-yl	cyano	H	487
543	3,4-dichlorophenyl	2,5-dimethylthiophen-3-yl	cyano	H	445
544	3,4-dichlorophenyl	3-methylthiophen-2-yl	cyano	H	431
546	4-chloro-3-fluorophenyl	2-fluorophenyl	cyano	H	413.5
547	4-chloro-3-fluorophenyl	2-fluorophenyl	CO_2Me	H	446.4
549	4-chloro-3-fluorophenyl	2-fluorophenyl	NHC(O)Me	H	445.5
550	4-chloro-3-fluorophenyl	2-chlorophenyl	cyano	H	429.4
551	4-chloro-3-fluorophenyl	2-chlorophenyl	CO_2Me	H	462.4
553	4-chloro-3-fluorophenyl	2-chlorophenyl	NHC(O)Me	H	461.5

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
556	4-(trifluoromethoxy)phenyl	2-chlorophenyl	cyano	H	461.5
557	4-(trifluoromethoxy)phenyl	2-chlorophenyl	NHC(O)Me	H	493.5
559	4-(trifluoromethoxy)phenyl	2-methylphenyl	cyano	H	441.5
560	4-(trifluoromethoxy)phenyl	2-methylphenyl	NHC(O)Me	H	473.5
562	4-(trifluoromethoxy)phenyl	2-methylphenyl	CO_2Me	H	474.5
563	4-(trifluoromethoxy)phenyl	2-(trifluoromethyl)phenyl	cyano	H	495.5
565	2-thienyl	2-fluorophenyl	CO_2Me	H	400.2
566	3,4-dichlorophenyl	2-fluoropyridin-3-yl	cyano	H	430
567	4-methylphenyl	2-fluorophenyl	cyano	H	375.5
568	4-methylphenyl	2-fluorophenyl	NHC(O)Me	H	407.6
570	4-methylphenyl	2-fluorophenyl	CO_2Me	H	408.5
571	4-methylphenyl	2-methylphenyl	cyano	H	371.6
572	4-fluorophenyl	2-fluorophenyl	cyano	H	379.5
573	4-fluorophenyl	2-fluorophenyl	NHC(O)Me	H	411.5
575	4-fluorophenyl	2-fluorophenyl	CO_2Me	H	412.5
576	3,4-difluorophenyl	2-fluorophenyl	OH	H	388.5
577	3-chloro-4-fluorophenyl	4-fluorophenyl	cyano	H	413.4
579	3-chloro-4-fluorophenyl	4-chlorophenyl	cyano	H	429.4
581	3-chloro-4-fluorophenyl	2,6-difluorophenyl	cyano	H	431.4
583	3-chloro-4-fluorophenyl	2,4-difluorophenyl	cyano	H	431.4
585	3-chloro-4-fluorophenyl	2-fluorophenyl	Cl	H	422.4
586	3-chloro-4-fluorophenyl	2-fluorophenyl	F	H	406.4
587	4-chloro-2-fluorophenyl	2-fluorophenyl	cyano	H	390.4
591	3-chloro-2-fluorophenyl	2-fluorophenyl	cyano	H	413.4
594	3-chloro4-fluorophenyl	2-fluorophenyl	$C(S)NH_2$	H	447.4
597	3-chloro-4-fluorophenyl	2-fluorophenyl	OH	H	404.4
602	4-chlorophenyl	2,4,6-trifluorophenyl	cyano	H	431.4
604	4-chlorophenyl	2-chloro-4-fluorophenyl	cyano	H	429.4
606	4-chlorophenyl	3-chloro-5-fluorophenyl	cyano	H	429.4
609	5-bromopyrinidin-2-yl	2-fluorophenyl	cyano	H	443.1
610	2-thiophen-2-yl	2-fluorophenyl	cyano	H	367.1
613	5-bromopyridin-2-yl	2-fluorophenyl	cyano	H	440.4
615	4-chloro-2-methylphenyl	2-fluorophenyl	cyano	H	409.5

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
617	3-chloro-4-fluorophenyl	2,4-difluorophenyl	cyano	CO_2Me	489.4
618	4-chloro-3-fluorophenyl	2-fluorophenyl	cyano	CO_2Me	471.4
626	4-chlorophenyl	2-fluorophenyl	NHC(O)Me	$C(O)NHC(Me)_3$	526.5
627	4-chlorophenyl	2-fluorophenyl	NHC(O)Me	$C(O)NH_2$	470.5
629	4-chlorophenyl	2,4-difluorophenyl	cyano	H	413.5
632	4-chloro-3-(trifluoromethyl)phenyl	2-fluorophenyl	cyano	H	463.4
633	4-chlorophenyl	2,4-difluorophenyl	N(Me)C(O)Me	H	459.5
634	4-chlorophenyl	2-fluorophenyl	N(Me)C(O)Me	H	441.5
641	4-chlorophenyl	2-fluorophenyl	SO_2CH_3	H	448
643	4-chlorophenyl	2,4-difluorophenyl	cyano	NHC(O)Me	470.4
644	4-chlorophenyl	2,4-difluorophenyl	NHC(O)Me	$C(O)NH_2$	488.4
645	4-chlorophenyl	2-fluorophenyl	cyano	NHC(O)Me	452.4
646	3-chloro-4-fluorophenyl	2,4-difluorophenyl	NHC(O)Me	$C(O)NH_2$	506.4
647	3-chloro-4-fluorophenyl	2,4-difluorophenyl	cyano	NHC(O)Me	488.4
648	4-(trifluoromethoxy)phenyl	2,4-difluorophenyl	cyano	NHC(O)Me	520.4
649	4-(trifluoromethoxy)phenyl	2,4-difluorophenyl	NHC(O)Me	$C(O)NH_2$	538.5
650	2,4-difluorophenyl	2,4-difluorophenyl	cyano	H	415.4
652	5-chloropyridin-2-yl	2,4-difluorophenyl	cyano	H	414.4
654	5-(trifluoromethyl)pyridine-2-yl	2-fluorophenyl	cyano	H	430.5
663	4-chlorophenyl	2,4-difluorophenyl	1*H*-imidazol-2-yl	H	454.4
664	5-chloropyridin-2-yl	2,4-difluorophenyl	1*H*-imidazol-2-yl	H	455.4
667	4-chlorophenyl	2-fluorophenyl	1*H*-imidazol-2-yl	H	436.5
674	2-benzotriazolyl	2-fluorophenyl	NHC(O)Me	H	450.4
676	2-benzotriazolyl	2-fluorophenyl	cyano	H	418.4
677	4-chlorophenyl	2-fluorophenyl	OH	H	386.4
678	4-chlorophenyl	2-fluorophenyl	OC(O)Me	H	428.4
679	4-chlorophenyl	2-fluorophenyl	COOH	H	414
680	4-chlorophenyl	2-fluorophenyl	C(O)NHNHC(O)Me	H	470
681	4-chlorophenyl	2-fluorophenyl	C(O)NHNHC(O)OEt	H	500
686	4-(trifluoromethoxy)phenyl	2-fluorophenyl	$NHC(O)OC(Me)_3$	H	535.1
690	4-(trifluoromethoxy)phenyl	2-fluorophenyl	$NHSO_2Me$	H	513
691	4-(trifluoromethoxy)phenyl	2-fluorophenyl	$NHC(O)CF_3$	H	531

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
692	4-(trifluoromethoxy)phenyl	2-fluorophenyl	NHCHO	H	463.1
693	4-bromophenyl	2-fluorophenyl	$CH(OH)CH_3$	H	414
694	3-chloro-4-fluorophenyl	2-fluorophenyl	1,2,4-triazol-1-yl	H	455.4
695	4-chlorophenyl	2-fluorophenyl	1,2,4-triazol-1-yl	H	437.4
696	4-(trifluoromethoxy)phenyl	2,4-difluorophenyl	1,2,4-triazol-1-yl	H	505.4
697	3-chloro-4-fluorophenyl	2-fluorophenyl	imidazol-1-yl	H	454.4
698	4-chlorophenyl	2-fluorophenyl	imidazol-1-yl	H	436.4
699	3,4-difluorophenyl	2-chlorophenyl	imidazol-1-yl	H	454.4
700	3-chloro-4-fluorophenyl	2-fluorophenyl	$CH_2N(Me)_2$	H	445.2
702	3-chloro-4-fluorophenyl	2-fluorophenyl	$N(Me)_2$	H	431.31
704	3-chloro-4-fluorophenyl	2-fluorophenyl	$NHC(O)NH_2$	H	196-198 °C
706	3,4-dichlorophenyl	2-fluorophenyl	$NHC(O)NH_2$	H	214-216 °C
707	3,4-dichlorophenyl	2-fluorophenyl	$CH_2N(Me)_2$	H	460.97
708	3,4-dichlorophenyl	2-fluorophenyl	$N(Me)_2$	H	447.1
710	3-chloro-4-fluorophenyl	2-fluorophenyl	cyano	cyano	438.3
717	4-chlorophenyl	2-fluorophenyl	CH_2Br	H	463
718	4-chlorophenyl	2-fluorophenyl	CH_2OCH_3	H	415
719	4-chlorophenyl	2-fluorophenyl	$C(O)NHNH_2$	H	428.4
720	4-chlorophenyl	2-fluorophenyl	1,3,4-oxadiazol-2-yl	H	438.3
721	4-chlorophenyl	2-fluorophenyl	5-methyl-1,3,4-oxadiazol-2-yl	H	452.4
727	4-chlorophenyl	2-fluorophenyl	5-CF_3-pyrazol-1-yl	H	518
729	2,3,4-trifluorophenyl	2-fluorophenyl	NHC(O)Me	H	505.2
730	2,3,4-trifluorophenyl	2-fluorophenyl	cyano	H	415.3
736	4-(trifluoromethoxy)phenyl	2,4-difluorophenyl	1,2,4-triazol-4-yl	H	505.3
737	3-chloro-4-fluorophenyl	2-fluorophenyl	1,2,4-triazol-4-yl	H	455.3
738	4-chlorophenyl	2,4,6-trifluorophenyl	1,2,4-triazol-4-yl	H	473.3
742	4-chlorophenyl	2-fluorophenyl	3-CH_3-1,2,4-oxadiazol-5-yl	H	452.4
743	4-chlorophenyl	2-fluorophenyl	2-oxo-1,3-oxazolidin-3-yl	H	455.3
744	3-chloro-4-fluorophenyl	2-fluorophenyl	2-oxo-1,3-oxazolidin-3-yl	H	473.4

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
745	4-chlorophenyl	2,4,6-trifluorophenyl	2-oxo-1,3-oxazolidin-3-yl	H	491.4
746	4-chlorophenyl	2-fluorophenyl	pyridin-4-yl	H	446.7
747	3-chloro-4-fluorophenyl	2-fluorophenyl	pyridin-4-yl	H	464.6
748	4-chlorophenyl	2,4,6-trifluorophenyl	pyridin-4-yl	H	483
755	4-chlorophenyl	phenyl	cyano	H	377.3
765	4-chlorophenyl	2-cyanophenyl	cyano	H	402.4
767	4-bromophenyl	2-fluorophenyl	$C(O)NHNH_2$	H	474.3
768	4-bromophenyl	2-fluorophenyl	1,3,4-oxadiazol-2-yl	H	484.3
769	4-bromophenyl	2-fluorophenyl	5-methyl-1,3,4-oxadiazol-2-yl	H	498.3
770	4-bromophenyl	2,4,6-trifluorophenyl	cyano	H	475.2
771	4-bromophenyl	2,4-difluorophenyl	cyano	H	457.2
772	4-chlorophenyl	phenyl	CO_2Me	H	410.4
773	4-bromophenyl	2,4-difluorophenyl	CO_2Me	H	490.2
774	4-bromophenyl	2,4,6-trifluorophenyl	CO_2Me	H	508.3
778	2'-fluoro[1,1'-biphenyl]-4-yl	2,4,6-trifluorophenyl	cyano	H	491.4
779	3'-fluoro[1,1'-biphenyl]-4-yl	2,4,6-trifluorophenyl	cyano	H	491.3
780	4'-fluoro[1,1'-biphenyl]-4-yl	2,4,6-trifluorophenyl	cyano	H	491.3
784	2'-fluoro[1,1'-biphenyl]-4-yl	2,4-difluorophenyl	cyano	H	473.4
785	3'-fluoro[1,1'-biphenyl]-4-yl	2,4-difluorophenyl	cyano	H	473.4
786	4'-fluoro[1,1'-biphenyl]-4-yl	2,4-difluorophenyl	cyano	H	473.4
787	4-chlorophenyl	phenyl	$C(O)NHNH_2$	H	410.4
788	4-bromophenyl	2,4-difluorophenyl	$C(O)NHNH_2$	H	492.2
789	3-chloro-4-fluorophenyl	2-fluorophenyl	$C(O)NHNH_2$	H	446.3
790	4-(trifluoromethoxy)phenyl	2-fluorophenyl	$C(O)NHNH_2$	H	478.3
791	3,4-dichlorophenyl	2-fluorophenyl	$C(O)NHNH_2$	H	462.3
792	4-chlorophenyl	phenyl	5-oxo-1,3,4-oxadiazol-2-yl	H	436.3
793	4-chlorophenyl	2,4,6-trifluorophenyl	5-oxo-1,3,4-oxadiazol-2-yl	H	490.2
794	5-chloropyridin-2-yl	2,4-difluorophenyl	5-oxo-1,3,4-oxadiazol-2-yl	H	473.3
795	4-chlorophenyl	2-fluorophenyl	5-oxo-1,3,4-oxadiazol-2-yl	H	454.3

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
798	4-chlorophenyl	phenyl	1,3,4-oxadiazol-2-yl	H	420.3
799	4-bromophenyl	2,4-difluorophenyl	1,3,4-oxadiazol-2-yl	H	502.3
800	3-chloro-4-fluorophenyl	2-fluorophenyl	1,3,4-oxadiazol-2-yl	H	456.3
801	4-(trifluoromethoxy)phenyl	2-fluorophenyl	1,3,4-oxadiazol-2-yl	H	488.3
802	3,4-dichlorophenyl	2-fluorophenyl	1,3,4-oxadiazol-2-yl	H	472.3
803	4-(trifluoromethoxy)phenyl	2,6-difluorophenyl	1,3,4-oxadiazol-2-yl	H	506.4
804	3-bromophenyl	2-fluorophenyl	1,3,4-oxadiazol-2-yl	H	484.2
805	3-(triflyuoromethyl)phenyl	2-fluorophenyl	1,3,4-oxadiazol-2-yl	H	472.4
806	5-chloropyridin-2-yl	2,4,6-trifluorophenyl	cyano	H	432.4
807	5-chloropyridin-2-yl	2-fluorophenyl	cyano	H	396.4
808	4-isopropylphenyl	2-fluorophenyl	cyano	H	403.5
809	4-chlorophenyl	phenyl	cyano	H	376.4
810	4-chlorophenyl	2,4,6-trifluorophenyl	cyano	H	430.3
811	4-bromophenyl	2,4,6-trifluorophenyl	cyano	H	474.2
812	4-chlorophenyl	pyridin-2-yl	cyano	H	378.4
814	4-chlorophenyl	pyridin-2-yl	NHC(O)Me	H	410.4
815	quinolin-2-yl	2-fluorophenyl	cyano	H	412.4
816	quinolin-2-yl	2,4-difluorophenyl	cyano	H	430.4
817	3'-(trifluoromethyl)[1,1'-biphenyl]-3-yl	2-fluorophenyl	cyano	H	505.8
818	2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl	2-fluorophenyl	cyano	H	505.3
819	4'-(trifluoromethyl)[1,1'-biphenyl]-3-yl	2-fluorophenyl	cyano	H	505.2
822	4-chlorophenyl	2-fluorophenyl	1,3-oxazol-5-yl	H	437.4
823	4-chlorophenyl	2-fluorophenyl	4,5-dihydro-1,3-oxazol-2-yl	H	439.4
824	3,5-difluorophenyl	2,4,6-trifluorophenyl	cyano	H	433.3
825	4-chlorophenyl	2,4-difluorophenyl	CO_2Me	Me	460.4
826	5-chloropyridin-2-yl	2,4-difluorophenyl	CO_2Me	Me	461.4
827	4-chlorophenyl	pyridin-2-yl	1,2,4-oxadiazol-3-yl	H	421.4
828	4-bromophenyl	2,4,6-trifluorophenyl	1,2,4-oxadiazol-3-yl	H	518.4
829	5-chloropyridin-2-yl	2-fluorophenyl	1,2,4-oxadiazol-3-yl		439.4
830	4-chlorophenyl	2-fluorophenyl	1,2,4-oxadiazol-3-yl		438.4

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
831	4-chlorophenyl	2-fluorophenyl	1,2,4-triazol-3-yl	H	437.4
832	4-chlorophenyl	2-fluorophenyl	$C(O)CH_3$	H	412.4
834	4-chlorophenyl	2-fluorophenyl	4-methyl-4*H*-1,2,4-triazol-3-yl	H	451.4
835	5-chloropyridin-2-yl	2,4-difluorophenyl	4-methyl-4*H*-1,2,4-triazol-3-yl	H	470.4
836	4-bromophenyl	2,4,6-trifluorophenyl	4-methyl-4*H*-1,2,4-triazol-3-yl	H	531.3
837	3-chloro-4-fluorophenyl	2,6-difluorophenyl	4-methyl-4*H*-1,2,4-triazol-3-yl	H	487.3
838	4-chlorophenyl	2-fluorophenyl	1*H*-tetrazol-5-yl	H	438.3
839	5-chloropyridin-2-yl	2,4-difluorophenyl	1*H*-tetrazol-5-yl	H	457.4
840	4-bromophenyl	2,4,6-trifluorophenyl	1*H*-tetrazol-5-yl	H	518.3
841	3-chloro-4-fluorophenyl	2,6-difluorophenyl	1*H*-tetrazol-5-yl	H	474.3
846	4-chlorophenyl	2,3,4,5,6-tetrafluorophenyl	cyano	H	467.3
847	4-chlorophenyl	2-bromo-4-fluorophenyl	cyano	H	473.2
848	4-chlorophenyl	2,3-difluorophenyl	cyano	H	413.3
849	4-chlorophenyl	2,4,5-trifluorophenyl	cyano	H	431.3
850	4-chlorophenyl	5-chloro-2-methoxyphenyl	cyano	H	441.3
851	4-chlorophenyl	2-chloro-6-fluorophenyl	cyano	H	429.3
852	4-chlorophenyl	5-fluoro-2-methoxyphenyl	cyano	H	425.4
853	4-chlorophenyl	2,5-difluorophenyl	cyano	H	413.3
854	4-chlorophenyl	2,6-difluoro-3-methylphenyl	cyano	H	427.3
855	4-chlorophenyl	2,3,6-trifluorophenyl	cyano	H	431.3
856	4-chlorophenyl	4-fluoro-2-methoxyphenyl	cyano	H	425.4
857	quinoxalin-2-yl	2-fluorophenyl	cyano	H	413.4
858	quinolin-6-yl	2-fluorophenyl	cyano	H	412.4
860	4-chlorophenyl	2-fluorophenyl	thiazol-2-yl	H	453
861	4-chlorophenyl	2-fluorophenyl	isoxazol-5-yl	H	437.4
862	3,4-dichlorophenyl	2-fluorophenyl	isoxazol-5-yl	H	471.3

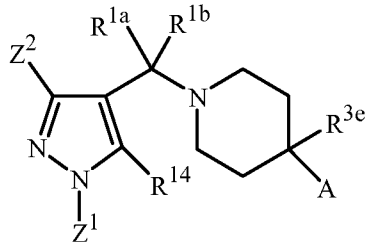
Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
863	3,5-dichloropyridin-2-yl	4-fluorophenyl	cyano	H	430.3
864	2,3-dibromopyridin-5-yl	4-fluorophenyl	cyano	H	520.2
865	4-phenoxyphenyl	2-fluorophenyl	cyano	H	453.5
866	4-(4-chlorophenoxy)phenyl	2-fluorophenyl	cyano	H	487.4
867	5-chloro-3-fluoropyridin-2-yl	2-fluorophenyl	cyano	H	414.4
868	5-chloropyridin-2-yl	2-fluorophenyl	1,3,4-oxadiazol-2-yl	H	439.4
877	4-(2,2,2-trifluoroethoxy)phenyl	2-fluorophenyl	cyano	H	459.4
878	6-chloropyridin-2-yl	2-fluorophenyl	cyano	H	396.4
879	5-chloropyridin-2-yl	2,4,6-trifluorophenyl	pyrimidin-2-yl	H	485.4
880	4-chlorophenyl	2,4,6-trifluorophenyl	pyrimidin-2-yl	H	484.4
881	5-bromopyridin-2-yl	2-fluorophenyl	pyrimidin-2-yl	H	493.4
882	5-chloro-6-fluoropyridin-2-yl	2-fluorophenyl	cyano	H	414.4
883	5-bromo-6-fluoropyridin-2-yl	2,4,6-trifluorophenyl	cyano	H	494.3
884	1,3-benzodioxol-5-yl	2-fluorophenyl	cyano	H	405.2
885	4-chlorophenyl	2-fluorophenyl	pyrimidin-5-yl	H	448.5
886	4-chlorophenyl	2-methoxyphenyl	cyano	H	407.3
887	2-chloropyridin-4-yl	2,4,6-trifluorophenyl	cyano	H	432.4
888	4-chlorophenyl	2-fluoro-4-methoxyphenyl	cyano	H	425.4
889	4-chlorophenyl	2,6-difluoro-4-methoxyphenyl	cyano	H	443.4
890	4-chlorophenyl	4-methoxyphenyl	cyano	H	407.2
891	5-chloropyridin-2-yl	2,6-difluorophenyl	cyano	H	414
893	5-bromopyridin-2-yl	2,6-difluorophenyl	cyano	H	458.4
895	5-chloropyridin-2-yl	4-fluorophenyl	cyano	H	396.2
897	5-bromopyridin-2-yl	4-fluorophenyl	cyano	H	440.4
899	5-bromopyridin-2-yl	2,4,6-trifluorophenyl	cyano	H	476.4
904	3,4-dichlorophenyl	phenyl	cyano	H	411.4
905	5-fluoropyridin-2-yl	4-fluorophenyl	cyano	H	380.3
907	3,4-dichlorophenyl	4-fluorophenyl	NHC(O)Me	H	461.5
908	3,4-dichlorophenyl	phenyl	NHC(O)Me	H	443.4
909	5-chloropyridin-2-yl	4-fluorophenyl	NHC(O)Me	H	428.5

Cmpd	Z^1	Z^2	A	R^{3e}	m.p. (°C) or AP+ (M+1)
924	3-chloro-4-fluorophenyl	2,4,6-trifluorophenyl	cyano	H	449.5
927	4-(trifluoromethyl)pyridin-2-yl	4-fluorophenyl	cyano	H	430.5
928	4-(trifluoromethyl)pyridin-2-yl	4-fluorophenyl	NHC(O)Me	H	462.5
930	6-(trifluoromethyl)pyridin-2-yl	4-fluorophenyl	cyano	H	430.4
932	3-chloro-4-fluorophenyl	2,4,6-trifluorophenyl	CO_2Me	H	482.5
933	3,4-dichlorophenyl	1*H*-1,2,3-triazol-4-yl	cyano	H	402.1
937	3-chloro-4-fluorophenyl	2,4,6-trifluorophenyl	1,3,4-oxadiazol-2-yl	H	492.5
938	3,4-dichlorophenyl	4-fluorophenyl	1,3,4-oxadiazol-2-yl	H	472.5
939	6-chloropyridin-2-yl	4-fluorophenyl	cyano	H	396.5
941	6-chloropyridin-2-yl	4-fluorophenyl	NHC(O)Me	H	428.5

See Index Table F for ^{1}H NMR data.

* 1-BZT means 1-benzotriazole

INDEX TABLE A1

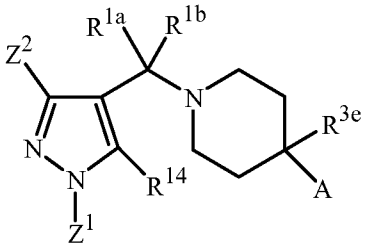


R^{1a} and R^{14} are H

Cmpd	Z^1	Z^2	R^{1b}	A	R^{3e}	m.p. (°C) or AP+ (M+1)
545	3-(trifluoromethyl)phenyl	2-fluorophenyl	cyano	NHC(O)Me	H	193-195 °C
590	3-(trifluoromethyl)phenyl	4-fluorophenyl	cyano	CN	H	127-129 °C
635	3-(trifluoromethyl)phenyl	4-fluorophenyl	Me	NHC(O)Me	H	185-187 °C
636	3-(trifluoromethyl)phenyl	2-fluorophenyl	Me	CO_2Me	H	124-125 °C
655	3-(trifluoromethyl)phenyl	2-fluorophenyl	Me	CN	H	95-97 °C
656	3-(trifluoromethyl)phenyl	4-fluorophenyl	Me	CO_2Me	H	165-166 °C
658	3-(trifluoromethyl)phenyl	4-fluorophenyl	Me	CN	H	157-160 °C

Cmpd	Z^1	Z^2	R^{1b}	A	R^{3e}	m.p. (°C) or AP+ (M+1)
659	3-(trifluoromethyl)phenyl	2-fluorophenyl	Me	NHC(O)Me	H	110-113 °C
701	3-chloro-4-fluorophenyl	2-fluorophenyl	Me	CN	H	264-268 °C
703	3-chloro-4-fluorophenyl	2-fluorophenyl	Me	NHC(O)Me	H	459.2
709	3-chloro-4-fluorophenyl	2-fluorophenyl	Me	CO_2Me	H	460.2

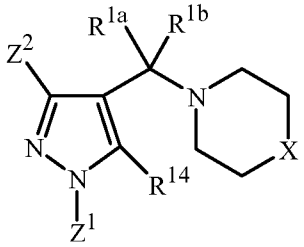
INDEX TABLE A2



R^{1a} and R^{1b} are H

Cmpd	Z^1	Z^2	R^{14}	A	R^{3e}	AP+ (M+1)
739	4-chlorophenyl	2-fluorophenyl	Cl	CO_2Me	H	462.3
740	4-chlorophenyl	2-fluorophenyl	Cl	cyano	H	429.3
741	4-chlorophenyl	2-fluorophenyl	Cl	NHC(O)Me	H	461.3
759	4-chlorophenyl	2-fluorophenyl	F	CO_2Me	H	446.3
760	4-chlorophenyl	2-fluorophenyl	F	cyano	H	413.3
761	4-chlorophenyl	2-fluorophenyl	F	NHC(O)Me	H	445.3
762	4-chlorophenyl	2-fluorophenyl	OMe	CO_2Me	H	458.3
763	4-chlorophenyl	2-fluorophenyl	OMe	cyano	H	425.3
764	4-chlorophenyl	2-fluorophenyl	OMe	NHC(O)Me	H	457.3

INDEX TABLE B



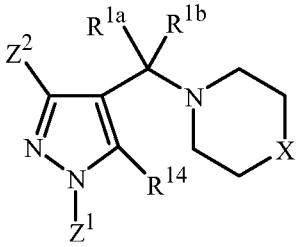
R^{1a}, R^{1b} and R^{14} are H

Cmpd	Z^1	Z^2	X	AP+ (M+1)
201	3-methylphenyl	3-fluorophenyl	$NCH_2C(O)NMe_2$	
202	3-chlorophenyl	2-fluorophenyl	NCO_2Et	443.5
203	3,4-dichlorophenyl	2-fluorophenyl	NCO_2Et	477.4
204	3,4-dichlorophenyl	3-fluorophenyl	NCO_2Et	477.4
205	3,5-bis(trifluoromethyl)phenyl	4-fluorophenyl	NCO_2Et	545.5
206	3,5-dichlorophenyl	4-fluorophenyl	NCO_2Et	477.4
207	2-fluorophenyl	2-fluorophenyl	NCO_2Et	427.5
208	3-fluorophenyl	2-fluorophenyl	NCO_2Et	427.5
209	3-chloro-4-fluorophenyl	2-fluorophenyl	NCO_2Et	461.4
210	4-(trifluoromethoxy)phenyl	2-fluorophenyl	N(2-pyrimidinyl)	499.5
211	4-(trifluoromethoxy)phenyl	2-fluorophenyl	O	422.5
212	2,4-difluorophenyl	2-methylphenyl	$CHC(O)NH_2$	411.5
213	4-cyano-3-(trifluoromethyl)phenyl	2-fluorophenyl	NCO_2Et	502.5
214	4-cyano-3-(trifluoromethyl)phenyl	2-fluorophenyl	$S(O)_2$	479
215	3,4-dichlorophenyl	2-(trifluoromethyl)phenyl	NC(O)Me	497.4
216	3,4-dimethylphenyl	2-fluorophenyl	O	366.5
217	3-bromophenyl	2-fluorophenyl	O	416.4
218	4-fluorophenyl	2-methylphenyl	O	352.5
219	3-(trifluoromethyl)phenyl	2-fluorophenyl	O	406.4
220	3,4-dichlorophenyl	2-fluorophenyl	NC(O)Me	447.4
501	3-chlorophenyl	2-fluorophenyl	$C(-OCH_2CH_2O-)$	429.7
502	3-chlorophenyl	3-fluorophenyl	$C(-OCH_2CH_2O-)$	429.7
503	3-chlorophenyl	4-fluorophenyl	$C(-OCH_2CH_2O-)$	428.7
504	4-(trifluoromethoxy)phenyl	2-fluorophenyl	$C(-OC(O)NHCH_2-)$	492.2
525	3,4-dichlorophenyl	2-fluorophenyl	O	406.4
526	3,4-dichlorophenyl	2-chlorophenyl	O	422.3
527	3,4-dichlorophenyl	2-methylphenyl	O	402.4

Cmpd	Z^1	Z^2	X	AP+ (M+1)
528	3,4-dichlorophenyl	2-(trifluoromethyl)phenyl	O	456.4
532	3,4-difluororophenyl	2-chlorophenyl	O	390.4
533	3,4-difluororophenyl	2-chlorophenyl	S	406.4
536	3,4-difluororophenyl	2-bromophenyl	O	434.4
537	3,4-difluororophenyl	2-bromophenyl	S	450.4
540	3,4-difluororophenyl	2-(trifluoromethyl)phenyl	O	424.5
541	3,4-difluororophenyl	2-(trifluoromethyl)phenyl	S	440.5
548	4-chloro-3-fluorophenyl	2-fluorophenyl	O	390.4
552	4-chloro-3-fluorophenyl	2-chlorophenyl	O	406.4
554	4-chloro-3-fluorophenyl	2-chlorophenyl	NC(O)Me	447.4
555	3-chloro-4-fluorophenyl	2-fluorophenyl	O	390.1
558	4-(trifluoromethoxy)phenyl	2-chlorophenyl	O	438.4
561	4-(trifluoromethoxy)phenyl	2-methylphenyl	O	418.5
569	4-methylphenyl	2-fluorophenyl	O	352.5
574	4-fluorophenyl	2-fluorophenyl	O	356.5
578	3-chloro-4-fluorophenyl	4-fluorophenyl	O	390.4
580	3-chloro-4-fluorophenyl	4-chlorophenyl	O	406.4
582	3-chloro-4-fluorophenyl	2,6-difluorophenyl	O	408.4
584	3-chloro-4-fluorophenyl	2,4-difluorophenyl	O	408.4
588	4-chloro-2-fluorophenyl	2-fluorophenyl	O	390.4
593	3-chloro-2-fluorophenyl	2-luorophenyl	O	390.4
595	3-chloro-4-fluorophenyl	2-fluorophenyl	$NC(O)OC(Me)_3$	489.5
596	3-chloro-4-fluorophenyl	2-fluorophenyl	NCN	414.4
598	4-chlorophenyl	2-fluorophenyl	$C(-OC(O)CH_2CH_2-)$	440
599	3,4-dichlorophenyl	2-fluorophenyl	$C(-OC(O)NHCH_2-)$	476
600	3,4-dichlorophenyl	2-fluorophenyl	$C(-CH_2C(O)NHCH_2-)$	474
601	3,4-dichlorophenyl	2-fluorophenyl	$C(-OC(O)CH_2CH_2-)$	475
603	4-chlorophenyl	2,4,6-trifluorophenyl	O	408.4
605	4-chlorophenyl	2-chloro-4-fluorophenyl	O	406.4
607	4-chlorophenyl	4-chloro-2-fluorophenyl	O	406.1
611	4-chlorophenyl	2-fluorophenyl	$C(-CH_2C(O)NHCH_2-)$	439
612	4-chlorophenyl	2-fluorophenyl	$C(-OC(O)NHCH_2-)$	441
614	5-bromopyridin-2-yl	2-fluorophenyl	O	417.4
616	4-chloro-2-methylphenyl	2-fluorophenyl	O	386.5
622	4-chlorophenyl	2-fluorophenyl	$C(-CH_2CH(CN))CH_2-)$	435

Cmpd	Z^1	Z^2	X	AP+ (M+1)
623	4-chlorophenyl	2-fluorophenyl	C(-O CH_2 CH_2CH_2-)	426
624	4-chlorophenyl	2-fluorophenyl	C(-CH_2 OCH_2-)	412
630	4-chlorophenyl	2,4-difluorophenyl	O	390.4
631	4-chlorophenyl	2-fluorophenyl	O	372.4
651	2,4-difluorophenyl	2,4-difluorophenyl	O	392.4
653	5-chloropyridin-2-yl	2,4-difluorophenyl	O	391.4
668	4-chlorophenyl	2-fluorophenyl	NCH_2CN	410.5
669	4-chlorophenyl	2,4-difluorophenyl	NCH_2CN	428.4
670	3-chloro-4-fluorophenyl	2,6-difluorophenyl	NCH_2CN	446.4
675	benzothiazol-2-yl	2-fluorophenyl	O	395.4
683	4-chlorophenyl	2-fluorophenyl	C(-C(O)NHC(O)NH-)	454.3
684	4-(trifluoromethoxy)phenyl	2,4-difluorophenyl	C(-C(O)NHC(O)NH-)	522.3
685	3-chloro-4-fluorophenyl	2,6-difluorophenyl	C(-C(O)NHC(O)NH-)	490.3
688	3,4-dichlorophenyl	2-fluorophenyl	S(O)	438.3
705	4-chlorophenyl	2-fluorophenyl	$C(-C(O)OCH_2CH_2-)$	440
711	3-chloro-4-fluorophenyl	2-fluorophenyl	$C[-CH_2N(C(O)OC(Me)_3)CH_2-]$	529.4
712	4-chlorophenyl	2-fluorophenyl	$C[-CH_2N(C(O)OC(Me)_3)CH_2-]$	511.4
713	3,4-difluororophenyl	2-chlorophenyl	$C[-CH_2N(C(O)OC(Me)_3)CH_2-]$	529.4
731	2,3,4-trifluorophenyl	2-fluorophenyl	O	391.8
756	4-chlorophenyl	phenyl	O	354.3
757	3-chloro-4-fluorophenyl	2-fluorophenyl	NCH_2(c-Pr)	443.4
758	5-chloropyridin-2-yl	2,4-difluorophenyl	NCH_2(c-Pr)	444.3
766	4-chlorophenyl	2-cyanophenyl	O	379.4
775	4-chlorophenyl	phenyl	$C(-CH_2CH_2C(O)NH-)$	421.4
776	3-chloro-4-fluorophenyl	2-fluorophenyl	$C(-CH_2CH_2C(O)NH-)$	457.3
777	4-chlorophenyl	2,4,6-trifluorophenyl	$C(-CH_2CH_2C(O)NH-)$	475.3
813	4-chlorophenyl	pyridin-2-yl	O	355.4
926	3-chloro-4-fluorophenyl	2,4,6-trifluorophenyl	O	427.2
940	6-chloropyridin-2-yl	4-fluorophenyl	O	373.4

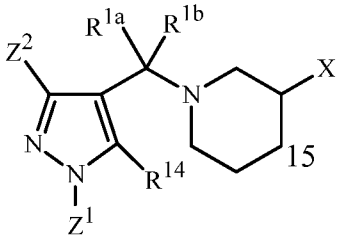
INDEX TABLE B1



R^{1a} and R^{14} are H

Cmpd	Z^1	Z^2	R^{1b}	X	m.p. (°C)
592	3-(trifluoromethyl)phenyl	2-fluorophenyl	cyano	O	110-113 °C
657	3-(trifluoromethyl)phenyl	2-fluorophenyl	CH_3	O	135-137 °C

INDEX TABLE C

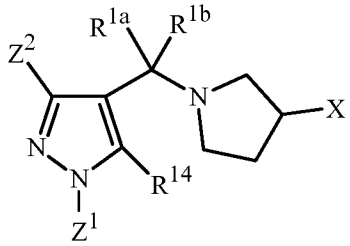


R^{1a}, R^{1b} and R^{14} are H

Cmpd	Z^1	Z^2	X	AP+ (M+1)
301	4-bromophenyl	2-fluorophenyl	CO_2Et	486.4
302	4-chloro-3-fluorophenyl	2-fluorophenyl	CO_2Et	440.6
303	3-(trifluoromethyl)phenyl	2-fluorophenyl	CO_2Et	476.5
304	3,4-dichlorophenyl	2-methylphenyl	CO_2Et	472
305	3-chlorophenyl	2-fluorophenyl	CO_2Et	442
306	4-(methylsulfonyl)phenyl	2-fluorophenyl	CO_2Et	486
307	4-(trifluoromethyl)phenyl	2-furanyl	CO_2Et	448
308	4-methylphenyl	4-fluorophenyl	CH_2OMe	394.5
309	3,4-difluorophenyl	2-fluorophenyl	CO_2Et	444.5

Cmpd	Z^1	Z^2	X	AP+ (M+1)
310	4-chlorophenyl	2-fluorophenyl	CHO	398
311	4-cyano-3-(trifluoromethyl)phenyl	2-fluorophenyl	NHC(O)Me	486
312	4-cyano-3-(trifluoromethyl)phenyl	2-fluorophenyl	CO_2Et	501
313	3,4-dichlorophenyl	2-fluorophenyl	NHC(O)Me	462
314	3,4-dichlorophenyl	2-fluorophenyl	CO_2Me	462.4
315	3,4-dichlorophenyl	2-(trifluoromethyl)phenyl	NHC(O)Me	511.4
316	3,4-dichlorophenyl	2-(trifluoromethyl)phenyl	CO_2Me	512.4
507	3-chloro-4-methylphenyl	2-fluorophenyl	CO_2Et	456.4
508	4-chlorophenyl	2-fluorophenyl	CH_2OH	400
521	3,4-dichlorophenyl	2-fluorophenyl	cyano	429.4
522	3,4-dichlorophenyl	2-chlorophenyl	cyano	445.3
523	3,4-dichlorophenyl	2-methylphenyl	cyano	425.4
524	3,4-dichlorophenyl	2-(trifluoromethyl)phenyl	cyano	479.4
608	3-chloro-4-fluorophenyl	2,4-difluorophenyl	cyano	431.4
620	3-chloro-4-fluorophenyl	2,4-difluorophenyl	NHC(O)Me	463.5
621	4-chllrofluorophenyl	2,4,6-trifluorophenyl	NHC(O)Me	463.5
726	3,4-dichlorophenyl	2-fluorophenyl	$NHC(O)OC(Me)_3$	519.07

INDEX TABLE D



R^{1a}, R^{1b} and R^{14} are H

Cmpd	Z^1	Z^2	X	AP+ (M+1)
402	4-(trifluoromethoxy)phenyl	2-fluorophenyl	CO_2Me	464
403	3-chloro-4-fluorophenyl	2-fluorophenyl	CO_2Me	432
404	3-(trifluoromethyl)phenyl	4-fluorophenyl	CO_2Me	448
408	3-(trifluoromethyl)phenyl	4-fluorophenyl	NHC(O)Me	447.1
513	3,4-dichlorophenyl	2-fluorophenyl	CO_2Me	448
514	3,4-dichlorophenyl	2-fluorophenyl	CO_2H	434

Cmpd	Z^1	Z^2	X	AP+ (M+1)
515	3,4-dichlorophenyl	2-fluorophenyl	$C(O)NH_2$	433
518	3,4-dichlorophenyl	2-fluorophenyl	cyano	415
637	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*R*)-$NHC(O)OC(Me)_3$	505.2
638	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*S*)-$NHC(O)OC(Me)_3$	505.2
639	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*R*)-NH_2-TFA**	405.1
640	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*R*)-NHC(O)Me	447.1
642	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*S*)-NH_2-TFA**	#
660	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*S*)-NHC(O)Me	447.2
661	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*R*)-$NHSO_2Me$	483.2
662	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*S*)-$NHSO_2Me$	483.1
665	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*R*)-NHCHO	433.2
666	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*S*)-NHCHO	#
749	3-chloro-4-fluorophenyl	2-fluorophenyl	(*S*)-NHC(O)Me	431
750	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*S*)-$NHC(O)C(Me)_3$	489
751	4-chlorophenyl	2-fluorophenyl	(*S*)-NHC(O)Me	413
752	4-chlorophenyl	2,4,6-trifluorophenyl	(*S*)-NHC(O)Me	449.3
753	3,4-dichlorophenyl	2-fluorophenyl	(*S*)-NHC(O)Me	447
781	3,4-dichlorophenyl	2-fluorophenyl	(*S*)-$NHC(O)C(Me)_3$	490
782	3,4-dichlorophenyl	2-fluorophenyl	(*S*)-NHC(O)-c-Pr	473
783	3,4-dichlorophenyl	2-fluorophenyl	(*S*)-$NHC(O)CF_3$	500.9
820	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-NHC(O)Me	447
821	3,4-dichlorophenyl	3-thienyl	(*S*)-NHC(O)Me	
833	5-bromo-2-pyridinyl	2-fluorophenyl	(*S*)-NHC(O)Me	460.1
842	3,4-dichlorophenyl	2,4,6-trifluorophenyl	(*S*)-NHC(O)Me	483.1
843	3,4-dichlorophenyl	2,4,6-trifluorophenyl	(*S*)-NHC(O)-c-Pr	509
844	3-(trifluoromethyl)phenyl	2-fluorophenyl	(*S*)-NHC(O)Me	447.1
845	3-(trifluoromethyl)phenyl	2-fluorophenyl	(*S*)-NHC(O)-c-Pr	473.1
859	3-(trifluoromethyl)phenyl	4-fluorophenyl	(*S*)-$NHC(O)C(Me)_3$	489.1
869	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-NHC(O)-c-Pr	473.1
870	3,4-dichlorophenyl	3-fluorophenyl	(*S*)-NHC(O)-c-Pr	473.1
871	3-chloro-4-fluorophenyl	4-fluorophenyl	(*S*)-NHC(O)-c-Pr	457.1
872	3-chloro-4-fluorophenyl	4-chlorophenyl	(*S*)-NHC(O)-c-Pr	473.1
873	3,4-dichlorophenyl	2-methylphenyl	(*S*)-NHC(O)-c-Pr	469.1
874	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-$NHC(O)CF_3$	501
892	5-chloro-2-pyridinyl	2,6-difluorophenyl	(*S*)-NHC(O)Me	432

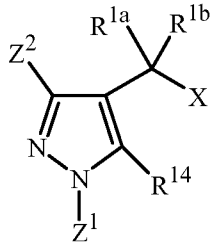
Cmpd	Z^1	Z^2	X	AP+ (M+1)
894	5-bromo-2-pyridinyl	2,6-difluorophenyl	(*S*)-NHC(O)Me	476.4
896	5-chloro-2-pyridinyl	4-fluorophenyl	(*S*)-NHC(O)Me	414
898	5-bromo-2-pyridinyl	4-fluorophenyl	(*S*)-NHC(O)Me	458.4
900	5-bromo-2-pyridinyl	2,4,6-trifluorophenyl	(*S*)-NHC(O)Me	495.4
901	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-NHC(O)CH(-CH_2CF_2-)	509.1
902	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-NHC(O)CH(-CH_2CCl_2-)	541.1
903	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-NHC(O)C(CF_3)(-CH_2CH_2-)	591.1
906	5-fluoro-2-pyridinyl	4-fluorophenyl	(*S*)-NHC(O)Me	398.3
910	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-1-imidazolyl	456.4
911	4-chlorophenyl	2-fluorophenyl	(*S*)-1-imidazolyl	422.5
912	3,4-dichlorophenyl	4-fluorophenyl	3-pyridinyl	467.5
913	4-chlorophenyl	2-fluorophenyl	3-pyridinyl	433.5
914	3,4-dichlorophenyl	4-fluorophenyl	4-pyridinyl	467.5
915	4-chlorophenyl	2-fluorophenyl	4-pyridinyl	433.5
916	3,4-dichlorophenyl	4-fluorophenyl	2-pyridinyl	467.5
917	4-chlorophenyl	2-fluorophenyl	2-pyridinyl	433.5
918	3-chlorophenyl	2-fluorophenyl	(*S*)-NHC(O)Me	413.2
919	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-OC(O)Me	448.1
920	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-OC(O)-c-Pr	474.1
921	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-N(Me)C(O)$OC(Me)_3$	519.5
922	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-N(Me)C(O)-c-Pr	487.6
923	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-N(Me)C(O)Me	461.5
925	3-chloro-4-fluorophenyl	2,4,6-trifluorophenyl	(*S*)-NHC(O)Me	467.5
929	4-(trifluoromethyl)-2-pyridinyl	4-fluorophenyl	(*S*)-NHC(O)Me	448.5
931	6-(trifluoromethyl)-2-pyridinyl	4-fluorophenyl	(*S*)-NHC(O)Me	448.5
934	3,4-dichlorophenyl	4-fluorophenyl	(*S*)-1-pyrrolidinone	473.5
935	6-(trifluoromethyl)-2-pyridinyl	4-fluorophenyl	(*S*)-1-pyrrolidinone	474.6
936	4-(trifluoromethyl)-2-pyridinyl	4-fluorophenyl	(*S*)-1-pyrrolidinone	474.6
942	6-chloro-2-pyridinyl	4-fluorophenyl	(*S*)-NHC(O)Me	414.5
943	3,4-dichlorophenyl	2-fluorophenyl	(*S*)-NHC(O)$OC(Me)_3$	505.3
944	3,4-dichlorophenyl	2-fluorophenyl	(*S*)-$NHCH(Me)_2$	447.2
945	3,4-dichlorophenyl	2-fluorophenyl	(*S*)-NHC(O)-c-Pn	501.18
946	3,4-dichlorophenyl	2-fluorophenyl	(*R*)-NHC(O)$OC(Me)_3$	505.2
947	3,4-dichlorophenyl	2-fluorophenyl	(*S*)-NH_2	405.14
948	3,4-dichlorophenyl	2-fluorophenyl	(*R*)-NH_2	405.1

Cmpd	Z^1	Z^2	X	AP+ (M+1)
949	3,4-dichlorophenyl	phenyl	(*S*)-NHC(O)Me	429.2

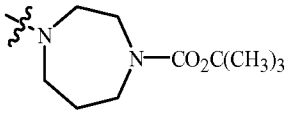
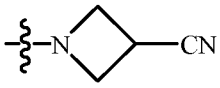
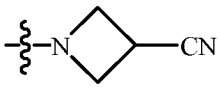
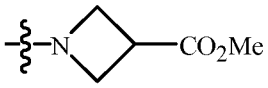
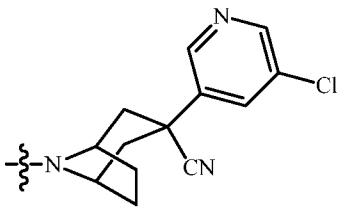
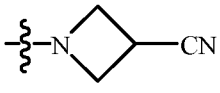
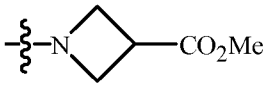
See Index Table F for ^{1}H NMR data.

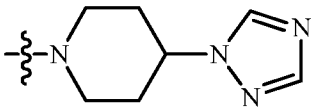
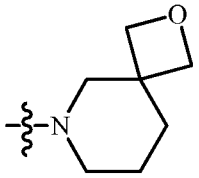
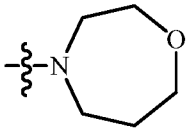
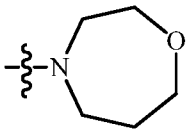
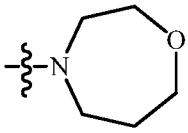
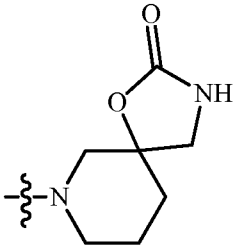
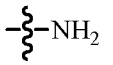
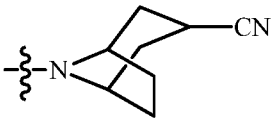
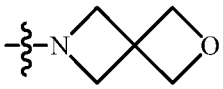
** TFA is trifluoracetic acid

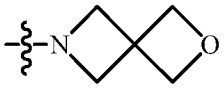
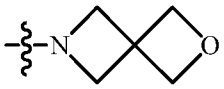
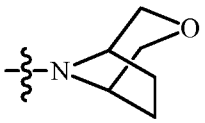
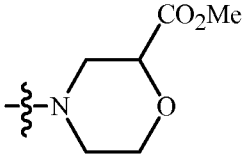
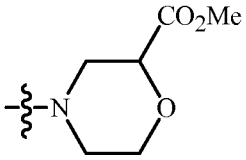
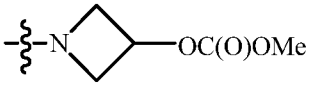
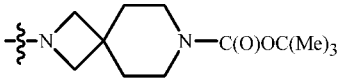
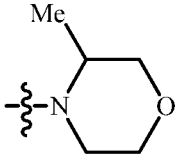
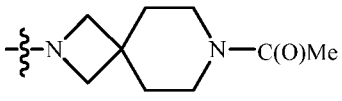
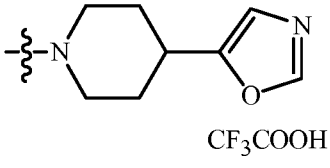
INDEX TABLE E



R^{1a}, R^{1b} and R^{14} are H

Cmpd	Z^1	Z^2	X	m.p. (°C) or AP+ (M+1)
401	4-(trifluoromethoxy)phenyl	2-fluorophenyl		535.6
405	4-fluorophenyl	2-fluorophenyl		351.4
406	4-chlorophenyl	2-fluorophenyl		367.5
407	4-chlorophenyl	2-fluorophenyl		400.5
529	3,4-dichlorophenyl	2-fluorophenyl		566.4
564	3-(trifluoromethyl)phenyl	2-fluorophenyl		74-76 °C
589	3-(trifluoromethyl)phenyl	2-fluorophenyl		434

Cmpd	Z^1	Z^2	X	m.p. (°C) or AP+ (M+1)
619	4-fluorophenyl	2-fluorophenyl	 CF_3COOH	421.5
625	4-chlorophenyl	2-fluorophenyl		412
671	4-chlorophenyl	2-fluorophenyl		386.4
672	3-(trifluoromethyl)phenyl	4-fluorophenyl		420.4
673	3,4-difluorophenyl	2-chlorophenyl		404.3
682	4-chlorophenyl	2-fluorophenyl		441
687	4-(trifluoromethoxy)phenyl	2-fluorophenyl	 CF_3COOH	435.4
689	4-chlorophenyl	2-fluorophenyl		421.4
714	3-chloro-4-fluorophenyl	2-fluorophenyl		402.4

Cmpd	Z^1	Z^2	X	m.p. (°C) or AP+ (M+1)
715	2-chlorophenyl	2-fluorophenyl		384.3
716	3,4-difluorophenyl	2-chlorophenyl		402.4
722	3-chloro-4-fluorophenyl	2-fluorophenyl		416.4
723	4-chlorophenyl	2-fluorophenyl		398.4
724	3-chloro-4-fluorophenyl	2-fluorophenyl		448.4
725	3,4-dichlorophenyl	2-chlorophenyl		482.3
728	4-chlorophenyl	2-fluorophenyl		416
732	4-chlorophenyl	2,4,6-trifluorophenyl		547.4
733	4-chlorophenyl	2,4,6-trifluorophenyl		422.3
734	4-chlorophenyl	2,4,6-trifluorophenyl		489.3
796	4-chlorophenyl	2-fluorophenyl	 CF_3COOH	505.3

INDEX TABLE F

Cmpd No.	^{1}H NMR Data [a]
78	δ 8.66 (s, 1H), 8.58 (s, 1H), 8.15 (d, 1H), 8.02 (dd, 1H), 7.61 (dt, 1H), 7.42 (dq, 1H), 7.24 (t, 1H), 7.17 (t, 1H), 3.50 (s, 2H), 2.63 (m, 2H), 2.56 (m, 1H), 2.28 (m, 2H), 1.80-1.84 (m, 2H), 1.70-1.76 (m, 2H).
642	δ 8.45 (br s, 1H), 8.03 (br s, 1H), 7.92-7.90 (m, 1H), 7.64 (d, 2H), 7.51-7.57 (m, 2H), 7.21 (t, 2H), 5.43 (br s, 2H), 4.51 (d, 1H), 4.23-4.41 (m, 2H), 3.92 (d, 1H), 3.62 (br s, 1H), 3.31 (br s, 1H), 2.74 (br s, 1H), 2.61 (br s, 1H), 2.16-2.23 (m, 1H).
666	δ 8.04 (s, 1H), 8.02 (s, 1H), 7.84-7.96 (m, 4), 7.59 (t, 1H), 7.54 (d, 1H), 7.15 (t, 2 H), 5.72 (d, 1H), 4.57-4.51 (m, 1H), 3.69 (d, 1H), 3.62 (d, 1H), 2.87-2.97 (m, 1H), 2.27-2.43 (m, 2H) 2.56-2.70 (m, 2H), 1.65-1.69 (m, 1H).

[a] ^{1}H NMR data are in ppm downfield from tetramethylsilane. $CDCl_3$ solution unless indicated otherwise. Couplings are designated by (s)-singlet, (d)-doublet, (t)-triplet, (m)-multiplet, (dd)-doublet of doublets, (dt)-doublet of triplets, (dq)-doublet of quartets, (br s)-broad singlet.

The following Tests demonstrate the control efficacy of compounds of this invention on specific pests. "Control efficacy" represents inhibition of invertebrate pest development (including mortality) that causes significantly reduced feeding. The pest control protection afforded by the compounds is not limited, however, to these species. Compound numbers refer to compounds in Index Tables A–E.

BIOLOGICAL EXAMPLES OF THE INVENTION

TEST A

For evaluating control of diamondback moth (*Plutella xylostella*) the test unit consisted of a small open container with a 12–14-day-old radish plant inside. This was pre-infested with ~50 neonate larvae that were dispensed into the test unit via corn cob grits using a bazooka inoculator. The larvae moved onto the test plant after being dispensed into the test unit.

Test compounds were formulated using a solution containing 10% acetone, 90% water and 300 ppm X-77® Spreader Lo-Foam Formula non-ionic surfactant containing alkylarylpolyoxyethylene, free fatty acids, glycols and isopropanol (Loveland Industries, Inc. Greeley, Colorado, USA). The formulated compounds were applied in 1 mL of liquid through a SUJ2 atomizer nozzle with 1/8 JJ custom body (Spraying Systems Co., Wheaton, Illinois, USA) positioned 1.27 cm (0.5 inches) above the top of each test unit. Test compounds were sprayed at 250 ppm and/or 50 ppm, and replicated three times. After spraying of the formulated test compound, each test unit was allowed to dry for 1 h and then

a black, screened cap was placed on top. The test units were held for 6 days in a growth chamber at 25 °C and 70% relative humidity. Plant feeding damage was then visually assessed based on foliage consumed.

Of the compounds of Formula **1** tested at 250 ppm, the following provided very good to excellent levels of control efficacy (40% or less feeding damage and/or 100% mortality): 3, 4, 7, 9, 10, 11, 12, 13, 14, 16, 17, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 79, 80, 81, 82, 83, 84, 85, 86, 103, 202, 203, 207, 208, 209, 210, 211, 301, 302, 303, 310, 401, 403, 404, 508 and 510.

Of the compounds of Formula **1** tested at 50 ppm, the following provided very good to excellent levels of control efficacy (40% or less feeding damage and/or 100% mortality): 4, 9, 10, 11, 12, 13, 14, 19, 22, 24, 26, 28, 29, 30, 31, 32, 33, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 62, 63, 64, 65, 66, 67, 68, 69, 71, 72, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 86, 87, 88, 91, 94, 95, 96, 97, 98, 99, 102, 105, 106, 107, 108, 109, 112, 114, 116, 117, 118, 121, 124, 129, 130, 131, 132, 133, 134, 135, 203, 207, 209, 211, 216, 217, 218, 219, 220, 301, 309, 315, 404, 408, 508, 510, 511, 512, 513, 515, 516, 517, 518, 519, 520, 521, 522, 523, 525, 526, 527, 528, 530, 531, 532, 534, 535, 536, 539, 546, 547, 548, 549, 550, 551, 553, 555, 556, 558, 560, 562, 566, 572, 581, 583, 596, 602, 629, 630, 631, 632, 633, 634, 640, 648, 649, 650, 651, 652, 653, 654, 660, 661, 662, 665, 666, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 780, 781, 782, 783, 784, 785, 786, 792, 793, 794, 795, 796, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 815, 816, 820, 821, 822, 824, 825, 826, 827, 829, 830, 831, 832, 833, 835, 839, 842, 843, 844, 845, 847, 848, 849, 851, 852, 854, 855, 856, 857, 858, 860, 861, 862, 863, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 884, 885, 886, 887, 889, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902 and 903.

TEST B

For evaluating control of fall armyworm (*Spodoptera frugiperda*) the test unit consisted of a small open container with a 4–5-day-old maize (corn) plant inside. This was pre-infested (using a core sampler) with 10–15 1-day-old larvae on a piece of insect diet.

Test compounds were formulated and sprayed at 250 ppm and/or 50 ppm as described for Test A. The applications were replicated three times. After spraying, the test units were maintained in a growth chamber at 25 °C and 70% relative humidity and then visually rated as described for Test A.

Of the compounds of Formula **1** tested at 250 ppm, the following provided very good to excellent levels of control efficacy (40% or less feeding damage and/or 100% mortality): 4, 13, 14, 57, 82, 83, 84, 85, 86, 203, 211, 404, 559, 561, 563, 567, 569, 571, 574, 577, 578, 579, 582, 584, 585, 586, 587, 588, 591, 594, 601, 603, 604, 605, 606, 607, 608, 609, 613, 614, 619, 620, 621, 622, 624, 675, 676, 691, 694, 695, 696, 705, 720, 721, 726, 727, 730,

731, 733, 740, 742, 745, 746, 747, 748, 749, 750, 752, 753, 754, 755, 756, 757, 758, 759, 760, 768, 769, 770, 771, 773, 774, 776, 778, 780, 781, 782 and 796.

Of the compounds of Formula **1** tested at 50 ppm, the following provided very good to excellent levels of control efficacy (40% or less feeding damage and/or 100% mortality): 10, 12, 14, 33, 40, 41, 42, 48, 49, 51, 53, 56, 57, 63, 65, 66, 71, 77, 78, 79, 83, 86, 87, 91, 94, 115, 118, 121, 129, 131, 133, 134, 209, 211, 216, 217, 218, 219, 220, 408, 517, 520, 521, 523, 525, 526, 527, 530, 532, 534, 536, 544, 546, 548, 550, 552, 555, 556, 559, 563, 566, 567, 569, 571, 572, 574, 577, 578, 581, 582, 583, 584, 587, 588, 594, 602, 603, 604, 605, 606, 607, 608, 613, 614, 629, 630, 632, 633, 637, 650, 651, 652, 653, 654, 660, 676, 705, 720, 721, 733, 742, 748, 750, 753, 754, 755, 760, 768, 769, 770, 771, 777, 778, 780, 781, 782, 783, 784, 785, 786, 794, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 809, 810, 811, 815, 820, 821, 822, 824, 825, 826, 829, 842, 843, 845, 847, 848, 849, 851, 854, 855, 857, 858, 860, 861, 862, 868, 869, 870, 871, 872, 873, 874, 875, 876, 878, 879, 880, 884, 885, 886, 888, 889, 891, 893, 895, 897, 899, 900, 901, 902 and 903.

TEST C

For evaluating control of green peach aphid (*Myzus persicae*) through contact and/or systemic means, the test unit consisted of a small open container with a 12–15-day-old radish plant inside. This was pre-infested by placing on a leaf of the test plant 30–40 aphids on a piece of leaf excised from a culture plant (cut-leaf method). The aphids moved onto the test plant as the leaf piece desiccated. After pre-infestation, the soil of the test unit was covered with a layer of sand.

Test compounds were formulated and sprayed at 250 ppm and/or 50 ppm as described for Test A. The applications were replicated three times. After spraying of the formulated test compound, each test unit was allowed to dry for 1 h and then a black, screened cap was placed on top. The test units were held for 6 days in a growth chamber at 19–21 °C and 50–70% relative humidity. Each test unit was then visually assessed for insect mortality.

Of the compounds of Formula **1** tested at 250 ppm, the following resulted in at least 80% mortality: 3, 41, 63, 77, 79, 86, 88, 94, 131, 132, 512, 521, 522, 523, 525, 529, 531, 546, 556, 567, 581, 587, 602, 603, 613, 625, 629, 650, 720, 733, 748, 770, 784, 806, 807, 810, 825, 826, 830, 861 and 880.

Of the compounds of Formula **1** tested at 50 ppm, the following resulted in at least 80% mortality: 806.

TEST D

For evaluating control of cotton melon aphid (*Aphis gossypii*) through contact and/or systemic means, the test unit consisted of a small open container with a 6–7-day-old cotton plant inside. This was pre-infested with 30–40 insects on a piece of leaf according to the

cut-leaf method described for Test C, and the soil of the test unit was covered with a layer of sand.

Test compounds were formulated and sprayed at 250 ppm as described for Test C. The applications were replicated three times. After spraying, the test units were maintained in a growth chamber and then visually rated as described for Test C.

Of the compounds of Formula **1** tested at 250 ppm, the following resulted in at least 80% mortality: 529 and 806.

TEST E

For evaluating control of corn planthopper (*Peregrinus maidis*) through contact and/or systemic means, the test unit consisted of a small open container with a 3–4-day-old maize plant (spike) inside. White sand was added to the top of the soil prior to application. Test compounds were formulated and sprayed at 250 ppm, and replicated three times as described for Test A. After spraying, the test units were allowed to dry for 1 h before they were post-infested with ~15-20 nymphs (18 to 21 day old) by sprinkling them onto the sand with a salt shaker. A black, screened cap was placed on the top of each test unit, and the test units were held for 6 days in a growth chamber at 22–24 °C and 50–70% relative humidity. Each test unit was then visually assessed for insect mortality.

Of the compounds of Formula **1** tested at 250 ppm the following provided very good to excellent levels of control efficacy (80% or more mortality): 64, 66, 742, 863, 880 and 881.

TEST F

For evaluating control of potato leafhopper (*Empoasca fabae*) through contact and/or systemic means, the test unit consisted of a small open container with a 5–6-day-old Soleil bean plant (primary leaves emerged) inside. White sand was added to the top of the soil and one of the primary leaves was excised prior to application.

Test compounds were formulated and sprayed at 250 ppm and/or 50 ppm, and the tests were replicated three times as described for Test A. After spraying, the test units were allowed to dry for 1 h before they were post-infested with 5 potato leafhoppers (18–21-day-old adults). A black, screened cap was placed on the top of each test unit, and the test units were held for 6 days in a growth chamber at 24 °C and 70% relative humidity. Each test unit was then visually assessed for insect mortality.

Of the compounds of Formula **1** tested at 250 ppm the following provided very good to excellent levels of control efficacy (80% or more mortality): 11, 12, 22, 32, 33, 34, 41, 45, 46, 47, 50, 56, 57, 59, 62, 63, 71, 72, 74, 76, 78, 79, 80, 81, 83, 84, 95, 99, 102, 105, 106, 107, 108, 109, 112, 113, 114, 117, 121, 122, 124, 125, 126, 127, 129, 130, 132, 135, 136, 137, 209, 211, 213, 216, 218, 219, 220, 304, 311, 314, 408, 511, 525, 526, 527, 530, 531, 532, 534, 546, 547, 549, 550, 551, 553, 555, 557, 558, 560, 561, 568, 569, 570, 573, 581, 582, 584, 600, 602, 603, 605, 608, 609, 619, 620, 621, 622, 624, 630, 633, 634, 647, 650,

651, 660, 670, 685, 692, 694, 696, 702, 705, 720, 729, 733, 738, 742, 744, 747, 748, 749, 750, 751, 752, 753, 754, 761, 768, 770, 774, 781, 782, 783, 793, 794, 800, 801, 802, 803, 804, 805, 806, 810, 820, 821, 824, 829, 833, 837, 842, 843, 844, 845, 862, 868, 871, 874, 875, 876, 879, 880, 891, 892, 893, 894, 896, 900, 902 and 903.

Of the compounds of Formula **1** tested at 50 ppm the following provided very good to excellent levels of control efficacy (80% or more mortality): 62, 74, 76, 105, 106, 107, 108, 112, 113, 121, 136, 137, 525, 548, 549, 582, 584, 602, 603, 633, 647, 660, 685, 729, 744, 761, 800, 806, 879, 892 and 896.

TEST G

For evaluating control of Western Flower Thrips (*Frankliniella occidentalis*) through contact and/or systemic means, the test unit consisted of a small open container with a 5–7-day-old Soleil bean plant inside.

Test compounds were formulated and sprayed at 250 and/or 50 ppm, and the tests were replicated three times as described for Test A. After spraying, the test units were allowed to dry for 1 hour, and then 22–27 adult thrips were added to the unit. A black, screened cap was placed on the top of each test unit, and the test units were held for 7 days at 25 °C and 45–55% relative humidity.

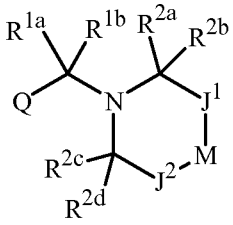
Of the compounds of Formula **1** tested at 250 ppm, the following provided very good to excellent levels of control efficacy (40% or less plant damage and/or 100% mortality): 50, 52, 56, 57, 63, 66, 67, 77, 79, 80, 81, 92, 102 and 211.

Of the compounds of Formula **1** tested at 50 ppm, the following provided very good to excellent levels of control efficacy (40% or less plant damage and/or 100% mortality): 86, 211 or 404.

CLAIMS

What is claimed is:

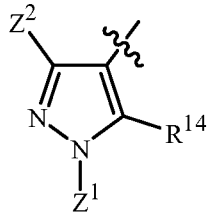
1. A composition comprising a compound of Formula **1**, an *N*-oxide, or salt thereof,



1

wherein

Q is



Q-1 ;

R^{1a} is H, cyano, C_1–C_6 alkyl, C_3–C_6 cycloalkyl, C_1–C_6 haloalkyl, C(O)OH, $C(O)R^{5a}$, $C(O)OR^{6a}$ or $C(O)NR^{7a}R^{8a}$;

R^{1b} is H or C_1–C_6 alkyl;

R^{2a} and R^{2c} are each independently H, halogen, cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ or $S(O)_nR^{11}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$;

R^{2b} and R^{2d} are each independently H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

J^1 is direct bond, $–C(R^{3a}R^{3b})–$ or $–C(R^{3a}R^{3b})C(R^{3a}R^{3b})–$;

J^2 is direct bond or $-C(R^{3c}R^{3d})-$;

M is $-C(R^{3e})(A)-$, $-N(A^1)-$, $-O-$ or $-S(O)_n-$;

A is halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, C_1–C_4 alkyl, C_1–C_4 haloalkyl, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a} and $S(O)_nR^{11a}$; or phenyl, a 5- or 6-membered heteroaromatic ring or a 7- to 11-membered heteroaromatic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^4;

A^1 is cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, C_1–C_4 alkyl, C_1–C_4 haloalkyl, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a} and $S(O)_nR^{11a}$; or phenyl, a 5- or 6-membered heteroaromatic ring or a 7- to 11-membered heteroaromatic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^4; or benzyl unsubstituted or substituted with 1 to 3 R^4;

R^{3a} and R^{3c} are each independently H, halogen, cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, OR^{12} or $S(O)_nR^{11}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$;

R^{3b} and R^{3d} are each independently H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

R^{3e} is H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group

consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4; or

R^{3e} and A can be taken together with the carbon atom to which they are attached to form a 3- to 7-membered ring containing ring members selected from carbon atoms and up to 2 heteroatoms independently selected from one oxygen atom, one sulfur atom, and up to 2 nitrogen atoms, wherein up to 2 carbon atom ring members are independently selected from C(=O) and C(=S) and the sulfur atom ring member is selected from S, S(O) or $S(O)_2$, said ring being unsubstituted or substituted with up to 4 substituents independently selected from the group consisting of halogen, cyano and C_1–C_4 alkyl; or

or when any two substituents independently selected from the group consisting of R^{2a}, R^{2b}, R^{2c}, R^{2d}, R^{3a}, R^{3b}, R^{3c}, R^{3d} and R^{3e} are C_1–C_4 alkyl, then said two substituents can be taken together to form a ring;

Z^1 is phenyl substituted with 1 to 4 R^{4a}; or Z^1 is a 5- or 6-membered heteroaromatic ring or an 8- to 10-membered heteroaromatic bicyclic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^{4a};

Z^2 is phenyl, unsubstituted or substituted with 1 to 4 R^{4b}; or Z^2 is a 5- or 6-membered heteroaromatic ring or an 8- to 10-membered heteroaromatic bicyclic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^{4b};

each R^4, R^{4a} and R^{4b} is independently halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13}; provided that when two R^4, two R^{4a} or two R^{4b} groups are attached to adjacent carbon atoms, then said two R^4, two R^{4a} or two R^{4b} groups can be taken together with the carbon atoms to which they are attached to form a ring;

each R^5 is independently H; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{5a} is independently C_1–C_4 alkyl, C_1–C_4 haloalkyl or C_3–C_7 cycloalkyl;

each R^6 is independently C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{6a} is independently C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^7 and R^8 is independently H; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13}; or R^7 and R^8 can be taken together with the nitrogen atom to which they are attached to form a 5-, 6- or 7-membered ring;

each R^{7a} and R^{8a} is independently H, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^{7b} is independently $N(R^{7a})_2$, OH or OR^{12a};

each R^9 and R^{10} is independently H, $C(X)R^5$, $C(O)OR^6$ or $C(X)NR^7R^8$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13}; or R^9 and R^{10} can be taken together with the nitrogen atom to which they are attached to form a 5-, 6- or 7-membered ring;

each R^{9a} and R^{10a} is independently H, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^{11} is independently C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{11a} is independently C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^{12} is independently H; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at

least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^{13};

each R^{12a} is independently H, C_1–C_4 alkyl or C_1–C_4 haloalkyl;

each R^{13} is independently halogen, cyano, nitro, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a}, $S(O)_nR^{11a}$ or $SO_2NR^{9a}R^{10a}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl or C_4–C_8 cycloalkylalkyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$; provided that when two R^{13} groups are attached to adjacent carbon atoms, then said two R^{13} groups can be taken together with the carbon atoms to which they are attached to form a ring;

R^{14} is H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or C_1–C_6 alkyl, C_2–C_6 alkenyl, C_2–C_6 alkynyl, C_3–C_7 cycloalkyl, C_4–C_8 cycloalkylalkyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, C_1–C_4 alkyl, C_1–C_4 haloalkyl and $S(O)_nR^{11a}$;

each X is independently O or S; and

each n is independently 0, 1 or 2;

and at least one additional component selected from the group consisting of surfactants, solid diluents and liquid diluents.

2. The composition of Claim 1 further comprising at least one additional biologically active compound or agent.

3. The composition of Claim 2 wherein the at least one additional biologically active compound or agent is selected from the group consisting of abamectin, acephate, acequinocyl, acetamiprid, acrinathrin, amidoflumet, amitraz, avermectin, azadirachtin, azinphos-methyl, benfuracarb, bensultap, bifenthrin, bifenazate, bistrifluron, borate, buprofezin, cadusafos, carbaryl, carbofuran, cartap, carzol, chlorantraniliprole, chlorfenapyr, chlorfluazuron, chlorpyrifos, chlorpyrifos-methyl, chromafenozide, clofentezin, clothianidin, cyantraniliprole, cycloprothrin, cyflumetofen, cyfluthrin, beta-cyfluthrin, cyhalothrin, gamma-cyhalothrin, lambda-cyhalothrin, cypermethrin, alpha-cypermethrin, zeta-cypermethrin, cyromazine, deltamethrin, diafenthiuron, diazinon, dieldrin, diflubenzuron, dimefluthrin, dimehypo, dimethoate, dinotefuran, diofenolan, emamectin, endosulfan,

esfenvalerate, ethiprole, etofenprox, etoxazole, fenbutatin oxide, fenitrothion, fenothiocarb, fenoxycarb, fenpropathrin, fenvalerate, fipronil, flonicamid, flubendiamide, flucythrinate, flufenerim, flufenoxuron, fluvalinate, tau-fluvalinate, fonophos, formetanate, fosthiazate, halofenozide, hexaflumuron, hexythiazox, hydramethylnon, imidacloprid, indoxacarb, insecticidal soaps, isofenphos, lufenuron, malathion, meperfluthrin, metaflumizone, metaldehyde, methamidophos, methidathion, methiodicarb, methomyl, methoprene, methoxychlor, metofluthrin, monocrotophos, methoxyfenozide, nitenpyram, nithiazine, novaluron, noviflumuron, oxamyl, parathion, parathion-methyl, permethrin, phorate, phosalone, phosmet, phosphamidon, pirimicarb, profenofos, profluthrin, propargite, protrifenbute, pymetrozine, pyrafluprole, pyrethrin, pyridaben, pyridalyl, pyrifluquinazon, pyriprole, pyriproxyfen, rotenone, ryanodine, silafluofen, spinetoram, spinosad, spirodiclofen, spiromesifen, spirotetramat, sulprofos, sulfoxaflor, tebufenozide, tebufenpyrad, teflubenzuron, tefluthrin, terbufos, tetrachlorvinphos, tetramethrin, tetramethylfluthrin, thiacloprid, thiamethoxam, thiodicarb, thiosultap-sodium, tolfenpyrad, tralomethrin, triazamate, trichlorfon, triflumuron, *Bacillus thuringiensis* delta-endotoxins, entomopathogenic bacteria, entomopathogenic viruses and entomopathogenic fungi.

4. A method for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biologically effective amount of a compound of Formula **1** as described in Claim 1.

5. A treated seed comprising a compound of Formula **1** as described in Claim 1 in an amount of from about 0.0001 to 1 % by weight of the seed before treatment.

6. The compound of Formula **1** as described in Claim 1 wherein
J^1 is $-C(R^{3a}R^{3b})-$;
J^2 is $-C(R^{3c}R^{3d})-$; and
M is $-C(R^{3e})(A)-$;
provided that when A is $C(X)NR^7R^8$ and X is O, then both R^7 and R^8 are not H.

7. The compound of Claim 6 wherein
X is O;
R^{1a} is H; and
R^{1b} is H.

8. The compound of Claim 7 wherein
R^{2a}, R^{2b}, R^{2c} and R^{2d} are H;
R^{3e} is H, halogen or C_1–C_6 alkyl; and

A is cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ or NR^9R^{10}; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

9. The compound of Claim 8 wherein

A is cyano, $C(O)OR^{6a}$ or $NHC(O)R^{5a}$; or a 5-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^4.

10. The compound of Formula **1** as described in Claim 1 wherein

R^{1a} and R^{1b} are H;

J^1 is $–C(R^{3a}R^{3b})–$;

J^2 is a direct bond;

M is $–C(R^{3e})(A)–$;

R^{2a} and R^{2c} are H;

R^{2b} and R^{2d} are each independently H, $C_1–C_4$ alkyl or $C_1–C_4$ haloalkyl;

R^{3a} and R^{3b} are H;

R^{3e} is H, halogen, cyano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or $C_1–C_6$ alkyl, $C_2–C_6$ alkenyl, $C_2–C_6$ alkynyl, $C_3–C_7$ cycloalkyl, $C_4–C_8$ cycloalkylalkyl or $C_3–C_6$ cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, OR^{12a}, $C_1–C_4$ alkyl, $C_1–C_4$ haloalkyl and $S(O)_nR^{11a}$; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4;

A is cyano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ or $SO_2NR^9R^{10}$; or $C_1–C_6$ alkyl, $C_2–C_6$ alkenyl, $C_2–C_6$ alkynyl, $C_3–C_7$ cycloalkyl, $C_4–C_8$ cycloalkylalkyl or $C_3–C_6$ cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, cyano, nitro, $C_1–C_4$ alkyl, $C_1–C_4$ haloalkyl, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$ and $S(O)_nR^{11a}$; or phenyl, a 5- or 6-membered heteroaromatic ring or a 7- to 11-membered heteroaromatic ring system, each ring or ring system unsubstituted or substituted with 1 to 3 R^4; provided that when A is $NHC(O)CH_3$ and R^{3e} is H, then Z^1 is other than 2-fluorophenyl, 3-methylphenyl, 4-methylphenyl or 2,5-dimethylphenyl; or

R^{3e} and A can be taken together with the carbon atom to which they are attached to form a 3- to 7-membered ring containing ring members selected from carbon atoms and up to 2 heteroatoms independently selected from one oxygen atom, one sulfur atom, and up to 2 nitrogen atoms, wherein up to 2 carbon atom ring members are independently selected from C(=O) and C(=S) and the sulfur atom

ring member is selected from S, S(O) or $S(O)_2$, said ring being unsubstituted or substituted with up to 4 substituents independently selected from the group consisting of halogen, cyano and C_1–C_4 alkyl;

provided that R^{3e} and A are other than $N(CH_3)_2$.

11. The compound of Claim 10 wherein

R^{3e} is H, halogen, $C(X)R^5$ or $C(O)OR^6$; or C_1–C_6 alkyl, C_2–C_6 alkenyl or C_3–C_6 cycloalkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen, OR^{12a}, C_1–C_4 alkyl and C_1–C_4 haloalkyl; or phenyl or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

12. The compound of Claim 11 wherein

R^{3e} is H or halogen; or C_1–C_6 alkyl or C_2–C_6 alkenyl, each unsubstituted or substituted with at least one substituent independently selected from the group consisting of halogen and C_1–C_4 haloalkyl; or a 5- or 6-membered heteroaromatic ring, each ring unsubstituted or substituted with 1 to 3 R^4.

13. The compound of Claim 10 wherein

A is $NHC(O)R^{5a}$; or a 5- or 6-membered heteroaromatic ring, unsubstituted or substituted with 1 to 3 R^4.

14. The compound of Formula **1** as described in Claim 1 that is selected from the group consisting of:

methyl 1-[[3-(4-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarboxylate;

1-[[3-(4-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(3,4-dichlorophenyl)-3-(4-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[3-(2-fluorophenyl)-1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[3-(2,4-difluorophenyl)-1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(4-chlorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(3-chloro-4-fluorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;

1-[[1-(4-bromophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-

piperidinecarbonitrile;
1-[[3-(2-fluorophenyl)-1-[4-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[3-(2-fluorophenyl)-1-[5-(trifluoromethyl)-2-pyridinyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[3-(2,6-difluorophenyl)-1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
N-[(3*S*)-1-[[1-(3,4-dichlorophenyl)-3-(4-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-3-pyrrolidinyl]cyclopropanecarboxamide;
1-[[1-(3-chloro-4-fluorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-(1,3,4-oxadiazol-2-yl)piperidine;
1-[[1-(3,4-dichlorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-(1,3,4-oxadiazol-2-yl)piperidine;
1-[[1-(5-chloro-2-pyridinyl)-3-(2,4,6-trifluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[1-(4-chlorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-(1,3,4-oxadiazol-2-yl)piperidine;
1-[[1-(3-chloro-4-fluorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[1-(4-chloro-3-fluorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
N-[(3*S*)-1-[[1-(3,4-dichlorophenyl)-3-(4-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-3-pyrrolidinyl]acetamide;
1-[[1-(4-chlorophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[1-(5-chloro-2-pyridinyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[3-(2-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]-1*H*-pyrazol-4-yl]methyl]-4-(1,3,4-oxadiazol-2-yl)piperidine;
1-[[1-(3-bromophenyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-(1,3,4-oxadiazol-2-yl)piperidine;
1-[[1-(5-bromo-2-pyridinyl)-3-(2-fluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile;
1-[[1-(5-chloro-2-pyridinyl)-3-(2,4-difluorophenyl)-1*H*-pyrazol-4-yl]methyl]-4-piperidinecarbonitrile; and
1-[[3-(2-fluorophenyl)-1-[4-(trifluoromethoxy)phenyl]-1*H*-pyrazol-4-yl]methyl]-

4-(1,3,4-oxadiazol-2-yl)piperidine.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
INV. A01N43/56
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, CHEM ABS Data, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2004/089910 A1 (MERCK PATENT GMBH [DE]; SCHIEMANN KAI [DE]; SCHADT OLIVER [DE]; VAN AM) 21 October 2004 (2004-10-21) cited in the application	1,2,6-14
A	page 9, l. 27-35, pages 10-14, page 17, l. 19-36, page 18, l. 1-13; eg Ex 1-4, 6, 9, 14, 19, 25, 28-29, 36-40, 42, 45-50, 54 claims 1-16	3-5

X	WO 2006/134459 A1 (PFIZER LTD [GB]; CRITCHER DOUGLAS JAMES [GB]; KYNE GRAHAM MICHAEL [GB]) 21 December 2006 (2006-12-21) cited in the application the whole document	1-14

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
4 March 2013	13/03/2013

Name and mailing address of the ISA/	Authorized officer
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1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2012/061948

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2004089910 A1	21-10-2004	AR 043838 A1	17-08-2005
		AT 478052 T	15-09-2010
		AU 2004228121 A1	21-10-2004
		BR PI0409002 A	28-03-2006
		CA 2521202 A1	21-10-2004
		CN 1768043 A	03-05-2006
		DE 10315573 A1	14-10-2004
		EP 1611107 A1	04-01-2006
		ES 2349922 T3	13-01-2011
		JP 4740116 B2	03-08-2011
		JP 2006522036 A	28-09-2006
		KR 20050119194 A	20-12-2005
		MX PA05010646 A	12-12-2005
		US 2007105871 A1	10-05-2007
		WO 2004089910 A1	21-10-2004
		ZA 200508951 A	28-03-2007
WO 2006134459 A1	21-12-2006	AU 2006257638 A1	21-12-2006
		CA 2611979 A1	21-12-2006
		WO 2006134459 A1	21-12-2006

PESTICIDAS HETEROCICLICOS SUSTITUIDOS CON 1,3-DIARILO

CAMPO DE LA INVENCIÓN

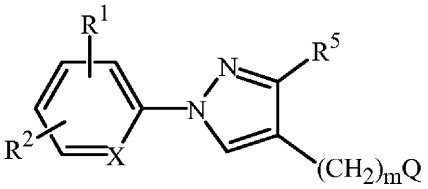
La presente invención se relaciona con ciertos compuestos heterocíclicos sustituidos con 1,3-diarilo, sus *N*-óxidos, sales y sus composiciones adecuadas para usos agronómicos y no agronómicos, y métodos de uso para controlar plagas de invertebrados, tales como artrópodos, en ambientes agronómicos y no agronómicos.

ANTECEDENTES DE LA INVENCIÓN

El control de plagas de artrópodos es de vital importancia para obtener cultivos altamente eficientes. Los daños causados por artrópodos a cultivos agronómicos en crecimiento o almacenados pueden causar una disminución significativa en la productividad y, de ese modo, ocasionar mayores costos para el consumidor. También es importante controlar las plagas de invertebrados en silvicultura, cultivos de invernaderos, plantas ornamentales, cultivos de viveros, productos de fibra y alimentos almacenados, ganado, casas de familia, céspedes, productos de madera, y en la salud pública. Existe un gran número de productos que están comercialmente disponibles para estos fines, pero persiste la necesidad de contar con nuevos compuestos que sean más

eficaces, de menor costo y toxicidad, más seguros para el medioambiente o que tengan distintos sitios de acción.

La patente de los Estados Unidos núm. 7.566.709. B2 describe compuestos de pirazol de la Fórmula **i** como antagonistas del receptor 5-HT para el tratamiento de psicosis y trastornos neurológicos

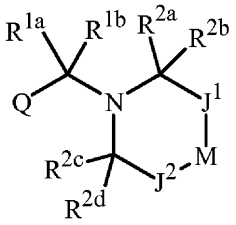


i

en donde, *entre otros*, R^1 y R^2 son independientemente H, A o halógeno, X es N o CH, R^5 es alquilo o un anillo aromático, A es alquilo, y Q es NR^3R^4 o un radical que contiene un heteroátomo.

BREVE DESCRIPCIÓN DE LA INVENCIÓN

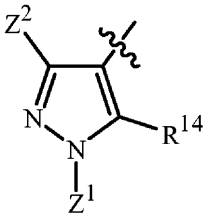
La presente invención está dirigida a una composición que comprende un compuesto de la Fórmula **1** (que incluye todos los estereoisómeros), *N*-óxidos y sales de estos:



1

en donde

Q es



Q-1 ;

R^{1a} es H, ciano, alquilo de C_1–C_6, cicloalquilo de C_3–C_6, haloalquilo de C_1–C_6, C(O)OH, $C(O)R^{5a}$, $C(O)OR^{6a}$ o $C(O)NR^{7a}R^{8a}$;

R^{1b} es H o alquilo de C_1–C_6;

R^{2a} y R^{2c} son, independientemente cada uno, H, halógeno, ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ o $S(O)_nR^{11}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del

grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$;

R^{2b} y R^{2d} son, independientemente cada uno H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

J^1 es un enlace directo, $-C(R^{3a}R^{3b})-$ o $-C(R^{3a}R^{3b})C(R^{3a}R^{3b})-$;

J^2 es un enlace directo o $-C(R^{3c}R^{3d})-$;

M es $-C(R^{3e})(A)-$, $-N(A^1)-$, $-O-$ o $-S(O)_n-$;

A es halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, alquilo de C_1–C_4, haloalquilo de C_1–C_4, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a} y $S(O)_nR^{11a}$; o fenilo, un anillo

heteroaromático de 5 o 6 miembros o un sistema anular heteroaromático de 7 a 11 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^4;

A^1 es ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, alquilo de C_1–C_4, haloalquilo de C_1–C_4, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a} y $S(O)_nR^{11a}$; o fenilo, un anillo heteroaromático de 5 o 6 miembros o un sistema anular heteroaromático de 7 a 11 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^4; o bencilo no sustituido o sustituido con 1 a 3 R^4;

cada R^{3a} y cada R^{3c} son independientemente H, halógeno, ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, OR^{12} o $S(O)_nR^{11}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$;

cada R^{3b} y R^{3d} son, independientemente cada uno, H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

R^{3e} es H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4; o

R^{3e} y A se pueden tomar en conjunto con el átomo de carbono al cual se unen para formar un anillo de 3 a 7 miembros que contiene miembros anulares seleccionados de átomos de carbono y hasta 2 heteroátomos

independientemente seleccionados de un átomo de oxígeno, un átomo de azufre y hasta 2 átomos de nitrógeno, en donde hasta 2 miembros del anillo de átomos de carbono se seleccionan independientemente de C(=O) y C(=S) y el miembro del anillo de átomos de azufre se selecciona de S, S(O) o $S(O)_2$, el anillo no sustituido o sustituido con hasta 4 sustituyentes independientemente seleccionados del grupo que consiste en halógeno, ciano y alquilo de C_1–C_4; o

o cuando dos sustituyentes independientemente seleccionados del grupo que consiste en R^{2a}, R^{2b}, R^{2c}, R^{2d}, R^{3a}, R^{3b}, R^{3c}, R^{3d} y R^{3e} son alquilo de C_1–C_4, entonces los dos sustituyentes se pueden tomar juntos para formar un anillo;

Z^1 es fenilo sustituido con 1 a 4 R^{4a}; o Z^1 es un anillo heteroaromático de 5 o 6 miembros o un sistema anular bicíclico heteroaromático de 8 a 10 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^{4a};

Z^2 es fenilo, no sustituido o sustituido con 1 a 4 R^{4b}; o Z^2 es un anillo heteroaromático de 5 o 6 miembros o un sistema anular bicíclico heteroaromático de 8 a 10 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^{4b};

cada R^4, R^{4a} y R^{4b} es independientemente halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o

$SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13}; y cuando dos grupos R^4, dos grupos R^{4a} o dos grupos R^{4b} se unen a átomos de carbono adyacentes, entonces los dos grupos R^4, dos grupos R^{4a} o dos grupos R^{4b} se pueden tomar en conjunto con los átomos de carbono a los cuales se unen para formar un anillo;

cada R^5 es independientemente H; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{5a} es independientemente alquilo de C_1–C_4, haloalquilo de C_1–C_4 o cicloalquilo de C_3–C_7;

cada R^6 es independientemente alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{6a} es independientemente alquilo de C_1 a C_4 o haloalquilo de C_1 a C_4;

cada R^7 y cada R^8 son independientemente H; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13}; o R^7 y R^8 se pueden tomar en conjunto con el átomo de nitrógeno al cual se unen para formar un anillo de 5, 6 o 7 miembros;

cada R^{7a} y R^{8a} es independientemente H, alquilo de C_1–C_4 o haloalquilo de C_1–C_4;

R^{7b} es $N(R^{7a})_2$, OH o OR^{12a};

cada R^9 y cada R^{10} son independientemente H, $C(X)R^5$, $C(O)OR^6$ o $C(X)NR^7R^8$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8 cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13}; o R^9 y R^{10} se pueden tomar en conjunto con el átomo de nitrógeno al cual se unen para formar un anillo de 5, 6 o 7 miembros;

cada R^{9a} y R^{10a} es independientemente H, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, alquilo de C_1–C_4 o haloalquilo de C_1–C_4;

cada R^{11} es independientemente alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8 cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{11a} es independientemente alquilo de C_1 a C_4 o haloalquilo de C_1 a C_4;

cada R^{12} es independientemente H; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8 cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{12a} es independientemente H, alquilo de C_1 a C_4 o haloalquilo de C_1 a C_4;

cada R^{13} es independientemente halógeno, ciano, nitro, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a}, $S(O)_nR^{11a}$ o $SO_2NR^{9a}R^{10a}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; siempre que cuando dos grupos R^{13} se unen a átomos de carbono adyacentes, entonces los dos grupos R^{13} se pueden tomar en conjunto con los átomos de carbono a los cuales se unen para formar un anillo;

R^{14} es H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de

C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$;

cada X es independientemente O o S; y

cada n es independientemente 0, 1 o 2;

y por lo menos un componente adicional seleccionado del grupo que consiste en surfactantes, diluyentes sólidos y diluyentes líquidos. En una modalidad, la presente invención proporciona, además, una composición para controlar una plaga invertebrada; la composición comprende un compuesto de la Fórmula **1**, un *N*-óxido o una sal de estos, y al menos un componente adicional seleccionado del grupo que consiste en surfactantes, diluyentes sólidos y diluyentes líquidos; esa composición comprende, además, al menos un agente o compuesto adicional biológicamente activo.

La presente invención proporciona, además, un método para controlar una plaga invertebrada; el método comprende poner la plaga invertebrada o su ambiente en contacto con una cantidad con eficacia biológica de un compuesto de la Fórmula **1**, un *N*-óxido o una sal de estos (por ejemplo, como una composición descrita en la presente descripción). La presente invención se refiere, además, al método en el cual

la plaga invertebrada o su ambiente se pone en contacto con una composición que comprende una cantidad biológicamente eficaz de un compuesto de la Fórmula **1**, un *N*-óxido o una sal de estos, y al menos un componente adicional seleccionado del grupo que consiste en surfactantes, diluyentes sólidos y diluyentes líquidos; esa composición también comprende, opcionalmente, una cantidad biológicamente eficaz de al menos un agente o compuesto adicional biológicamente activo.

Esta invención proporciona, además, un método para controlar una plaga de invertebrados; el método comprende poner en contacto la plaga de invertebrados o su hábitat con una cantidad biológicamente eficaz de una de las composiciones antes mencionadas, en donde el hábitat es una planta.

La presente invención proporciona, además, un método para controlar una plaga invertebrada; el método comprende poner la plaga invertebrada o su ambiente en contacto con una cantidad con eficacia biológica de cualquiera de las composiciones mencionadas anteriormente, en donde el ambiente es un animal.

Esta invención proporciona, además, un método para controlar una plaga de invertebrados, el método comprende poner en contacto la plaga de invertebrados o su hábitat con una cantidad biológicamente eficaz de una de las composiciones antes mencionadas, en donde el hábitat es una semilla.

La presente invención proporciona, además, un método para proteger una semilla de una plaga invertebrada; el

método comprende poner la semilla en contacto con una cantidad biológicamente eficaz de un compuesto de la Fórmula **1**, un *N*-óxido o una sal de estos (por ejemplo, como una composición descrita en la presente invención). Esta invención también se refiere a la semilla tratada.

La presente invención está dirigida, además, a compuestos de la Fórmula **1** (que incluye todos los estereoisómeros), *N*-óxidos y sales de estos, como se describió anteriormente, en donde

J^1 es $-C(R^{3a}R^{3b})-$;

J^2 es $-C(R^{3c}R^{3d})-$; y

M es $-C(R^{3e})(A)-$;

siempre que cuando A es $C(X)NR^7R^8$ y X es O, entonces ni R^7 ni R^8 son H.

La presente invención está dirigida, además, a compuestos de la Fórmula **1** (que incluye todos los estereoisómeros), *N*-óxidos y sales de estos, como se describió anteriormente, en donde

R^{1a} y R^{1b} son H;

J^1 es $-C(R^{3a}R^{3b})-$;

J^2 es un enlace directo;

M es $-C(R^{3e})(A)-$;

R^{2a} y R^{2c} son H;

cada R^{2b} y cada R^{2d} son independientemente H, alquilo de C_1–C_4 o haloalquilo de C_1–C_4;

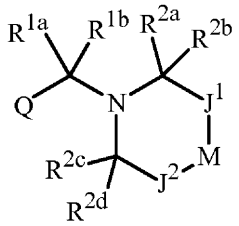
R^{3a} y R^{3b} son H;

R^{3e} es H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

A es ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, alquilo de C_1–C_4, haloalquilo de C_1–C_4, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$ y $S(O)_nR^{11a}$; o fenilo, un anillo heteroaromático de 5 o 6 miembros o un sistema anular heteroaromático de 7 a 11 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^4; siempre que cuando A es $NHC(O)CH_3$ y R^{3e} es H, entonces Z^1 no es 2-fluorofenilo, 3-metilfenilo, 4-metilfenilo ni 2,5-dimetilfenilo; o

R^{3e} y A se pueden tomar en conjunto con el átomo de carbono al cual se unen para formar un anillo de 3 a 7 miembros que contiene miembros anulares seleccionados de átomos de carbono y hasta 2 heteroátomos independientemente seleccionados de un átomo de oxígeno, un átomo de azufre y hasta 2 átomos de nitrógeno, en donde hasta 2 miembros del anillo de átomos de carbono se seleccionan independientemente de C(=O) y C(=S) y el miembro del anillo de átomos de azufre se selecciona de S, S(O) o $S(O)_2$, el anillo no sustituido o sustituido con hasta 4 sustituyentes independientemente seleccionados del grupo que consiste en halógeno, ciano y alquilo de C_1–C_4; siempre que cada R^{3e} y cada A son distintos a $N(CH_3)_2$.

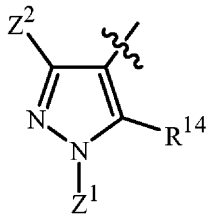
La presente invención está dirigida, además, a compuestos de la Fórmula **1p** (que incluye todos los estereoisómeros), *N*-óxidos y sales de estos:



1p

en donde

Q es



Q-1 ;

R^{1a} es H, ciano, alquilo de C_1–C_6, cicloalquilo de C_3–C_6, haloalquilo de C_1–C_6, C(O)OH, $C(O)R^{5a}$, $C(O)OR^{6a}$ o $C(O)NR^{7a}R^{8a}$;

R^{1b} es H o alquilo de C_1–C_6;

R^{2a} y R^{2c} son, independientemente cada uno, H, halógeno, ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, OR^{12} o $S(O)_nR^{11}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$;

R^{2b} y R^{2d} son, independientemente cada uno, H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7,

cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

J^1 es $-C(R^{3a}R^{3b})-$;

J^2 es $-C(R^{3c}R^{3d})-$;

M es $-C(R^{3e})(A)-$;

A es ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, alquilo de C_1–C_4, haloalquilo de C_1–C_4, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a} y $S(O)_nR^{11a}$; o fenilo, un anillo heteroaromático de 5 o 6 miembros o un sistema anular heteroaromático de 7 a 11 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^4; siempre que cuando A es $C(X)NR^7R^8$ y X es O, entonces ni R^7 ni R^8 son H;

R^{3a} y R^{3c} son, independientemente cada uno, H, halógeno, ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, OR^{12} o $S(O)_nR^{11}$; o

alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$;

R^{3b} y R^{3d} son, independientemente cada uno, H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

R^{3e} es H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste

en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

o cuando dos sustituyentes independientemente seleccionados del grupo que consiste en R^{2a}, R^{2b}, R^{2c}, R^{2d}, R^{3a}, R^{3b}, R^{3c}, R^{3d} y R^{3e} son alquilo de C_1–C_4, entonces los dos sustituyentes se pueden tomar juntos para formar un anillo;

Z^1 es fenilo sustituido con 1 a 4 R^4; o Z^1 es un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

Z^2 es fenilo sustituido con 1 a 4 R^4; o Z^2 es un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

cada R^4 es independientemente halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$;

cada R^5 es independientemente H; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de

C_3–C_7 o cicloalquilalquilo de C_4–C_8 cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{5a} es independientemente alquilo de C_1 a C_4 o haloalquilo de C_1 a C_4;

cada R^6 es independientemente alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente seleccionado independientemente del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{6a} es independientemente alquilo de C_1 a C_4 o haloalquilo de C_1 a C_4;

cada R^7 y cada R^8 son independientemente H; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo

que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{7a} y R^{8a} es independientemente H, alquilo de C_1–C_4 o haloalquilo de C_1–C_4;

cada R^{7b} es independientemente $N(R^{7a})_2$, OH o OR^{12a};

cada R^9 y cada R^{10} son independientemente H, $C(X)R^5$, $C(O)OR^6$ o $C(X)NR^7R^8$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{9a} y R^{10a} es independientemente H, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, alquilo de C_1–C_4 o halolaquilo de C_1–C_4;

cada R^{11} es independientemente alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8 cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4,

haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{11a} es independientemente alquilo de C_1 a C_4 o haloalquilo de C_1 a C_4;

cada R^{12} es independientemente H; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8 cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{12a} es independientemente H, alquilo de C_1 a C_4 o haloalquilo de C_1 a C_4;

cada R^{13} es independientemente halógeno, ciano, nitro, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a}, $S(O)_nR^{11a}$ o $SO_2NR^{9a}R^{10a}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$;

R^{14} es H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$;

cada X es independientemente O o S; y

cada n es independientemente 0, 1 o 2.

Una modalidad de la presente invención proporciona, además, una composición que comprende un compuesto de la Fórmula **1p**, un *N*-óxido o una sal de estos, y por lo menos un componente adicional seleccionado del grupo que consiste en surfactantes, diluyentes sólidos y diluyentes líquidos. En una modalidad, la presente invención proporciona, además, una composición para controlar una plaga invertebrada; la composición comprende un compuesto de la Fórmula **1p**, un *N*-óxido o una sal de estos, y al menos un componente adicional seleccionado del grupo que consiste en surfactantes, diluyentes sólidos y diluyentes líquidos; esa composición comprende, además, al menos un agente o compuesto adicional biológicamente activo.

Una modalidad de la presente invención proporciona un método para controlar una plaga invertebrada; el método

comprende poner la plaga invertebrada o su ambiente en contacto con una cantidad con eficacia biológica de un compuesto de la Fórmula **1p**, un *N*-óxido o una sal de estos (por ejemplo, como una composición descrita en la presente descripción). La presente invención se refiere, además, al método en el cual la plaga invertebrada o su ambiente se pone en contacto con una composición que comprende una cantidad biológicamente eficaz de un compuesto de la Fórmula **1p**, un *N*-óxido o una sal de estos, y al menos un componente adicional seleccionado del grupo que consiste en surfactantes, diluyentes sólidos y diluyentes líquidos; esa composición comprende, además, opcionalmente, una cantidad biológicamente eficaz de al menos un agente o compuesto adicional biológicamente activo.

DESCRIPCIÓN DETALLADA DE LA INVENCIÓN

Como se usa en la presente descripción, los términos “comprende”, “que comprende”, “incluye”, “que incluye”, “tiene”, “que tiene”, “contiene”, “que contiene”, “caracterizado por”, o cualquier otra variación de estos, pretenden abarcar una inclusión no exclusiva sujeta a cualquier limitación explícitamente indicada. Por ejemplo, una composición, una mezcla, un proceso o método que comprenda una lista de elementos no se limita necesariamente solo a esos elementos, sino que puede incluir otros que no estén expresamente enumerados o sean inherentes a tal composición, mezcla, proceso o método.

La frase de transición “que consiste en” excluye cualquier elemento, etapa o ingrediente no especificado. Si se encontrara en la reivindicación, cerraría la reivindicación para incluir materiales aparte de los mencionados, excepto las impurezas que normalmente se asocian a estos. Cuando en una cláusula del cuerpo de la reivindicación aparece la frase “que consiste en”, en lugar de seguir al preámbulo inmediatamente, solo limita al elemento que se expone en esa cláusula; no se excluyen de la reivindicación otros elementos en su totalidad.

La frase de transición “que consiste esencialmente de” se usa para definir una composición o método que incluye materiales, etapas, características, componentes o

elementos, adicionalmente a aquellos descritos literalmente, siempre y cuando estos materiales, etapas, características, componentes o elementos adicionales no afecten materialmente la(s) característica(s) básica(s) y novedosa(s) de la invención reivindicada. El término “que consiste esencialmente en” ocupa una posición intermedia entre “que comprende” y “que consiste en”.

Cuando los solicitantes han definido una invención o una porción de esta con un término abierto tal como “que comprende”, se debe entender fácilmente que (a menos que se indique de cualquier otra forma) la descripción debe interpretarse como que también describe una invención por medio del uso de los términos “que consiste esencialmente de” o “que consiste en”.

Además, a menos que se especifique expresamente en contrario, la disyunción se relaciona con un “o” incluyente y no con un “o” excluyente. Por ejemplo, una condición A o B se satisface mediante cualquiera de los siguientes criterios: A es verdadero (o actual) y B es falso (o no actual), A es falso (o no actual) y B es verdadero (o actual), y tanto A como B son verdaderos (o actuales).

Asimismo, los artículos indefinidos “un(a)” y “unos(as)” que preceden a un elemento o componente de la invención están previstos para ser no restrictivos con respecto a la

cantidad de instancias (es decir, ocurrencias) del elemento o componente. Por consiguiente, “un(a)” o “unos(as)” deben interpretarse para incluir uno o por lo menos uno, y la forma singular de la palabra del elemento o componente también incluye el plural, a menos que el número obviamente implique que es singular.

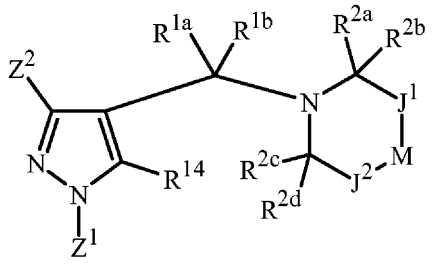
Como se hace referencia en esta descripción, la frase “plaga de invertebrados” incluye artrópodos, gastrópodos y nemátodos de importancia económica como plagas. El término “artrópodo” incluye insectos, ácaros, arañas, escorpiones, centípedos, milípedos, cochinillas de la humedad y cienmpiés del jardín. El término “gastrópodo” incluye caracoles terrestres, babosas y otros del orden de los estilomatóforos. El término “nematodo” se refiere a un organismo vivo del Philum Nematoda. El término “helmintos” incluye los ascáridos, parásitos cardíacos de los perros y nematodos fitófagos (Nematoda), tremátodos (Tematoda), Acanthocephala y tenias (Cestoda).

En el contexto de esta descripción “control de plagas de invertebrados” significa la inhibición del desarrollo de plagas de invertebrados (que incluye mortalidad, reducción de la alimentación y/o alteración del apareamiento), y las expresiones relacionadas se definen análogamente.

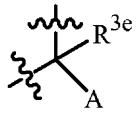
El término “agronómico” se refiere a cultivos de campo, tales como los de alimentos y fibras, e incluye el cultivo de maíz, frijoles de soya y otras leguminosas, arroz, cereales (por ejemplo, trigo, avena, cebada, centeno, arroz y maíz), verduras de hoja (por ejemplo, lechuga, repollo y otros cultivos de coles), verduras que provienen de frutos (por ejemplo, tomates, pimientos, berenjenas, crucíferas y cucurbitáceas), papas, camotes, uvas, algodón, frutos de los árboles (por ejemplo, frutas de pepita, con hueso y cítricos), frutos pequeños (bayas, cerezas) y otros cultivos especializados (por ejemplo, canola, girasol y olivo).

El término “no agronómico” se refiere a cultivos distintos de los de campo, tales como cultivos hortícolas (por ejemplo, plantas de invernadero, de vivero u ornamentales que no se cultivan en un campo), aplicaciones de estructuras residenciales, agrícolas, comerciales e industriales, césped (por ejemplo, granjas de césped, pastizales, campos de golf, jardines, campos deportivos, etc.), productos de madera, productos almacenados, administración de recursos de vegetación y agrosilvicultura, salud pública (es decir, humana) y salud animal (por ejemplo, animales domésticos, tales como mascotas, ganado y aves de corral, y animales no domesticados, tales como la fauna silvestre).

Una línea ondulada en un fragmento de la estructura indica el punto de unión del fragmento al remanente de la molécula. Por ejemplo, cuando la variable Q en la Fórmula **1** se define como Q-1, la línea ondulada que divide el enlace en la posición 4 del pirazol Q-1 significa que el pirazol Q-1 está unido al remanente de la estructura de la Fórmula **1** en la posición 4, tal como se muestra a continuación.



Cuando la variable M se define como $-C(R^{3e})(A)-$, esto es equivalente a un miembro del anillo de átomos de carbono sustituido con un R^{3e} y un A, tal como se muestra a continuación.



En las definiciones anteriores, el término “alquilo”, cuando se usa solo o en palabras compuestas, tales como “haloalquilo”, incluye alquilo de cadena lineal o ramificada,

tal como, metilo, etilo, *n*-propilo, *i*-propilo o los diferentes isómeros de butilo, pentilo o hexilo. “Alquenilo” incluye alcanos de cadena recta o ramificada, tales como etenilo, 1-propenilo, 2-propenilo y los distintos isómeros de butenilo, pentenilo y hexenilo. “Alquenilo” incluye, además, polienos tales como 1,2-propadienilo y 2,4-hexadienilo. “Alquinilo” incluye alquinos de cadena recta o ramificada, tales como etinilo, 1-propinilo, 2-propinilo y los distintos isómeros de butinilo, pentinilo y hexinilo. “Alquinilo” puede incluir, además, entidades compuestas de múltiples enlaces triples, tales como 2,5-hexadiinilo.

“Cicloalquilo” incluye, por ejemplo, ciclopropilo, ciclobutilo, ciclopentilo y ciclohexilo. El término “cicloalquilalquilo” indica una sustitución cicloalquilo en una porción alquilo. Los ejemplos de “cicloalquilalquilo” incluyen ciclopropilmetilo, ciclopentiletilo y otras porciones cicloalquilo unidas a grupos alquilo de cadena recta o ramificada. “Cicloalquenilo” incluye grupos, tales como ciclopentenilo y ciclohexenilo, además de grupos con más de un enlace doble, tales como 1,3- y 1,4-ciclohexadienilo. La fórmula “$C(O)CH(CH_2)_2$” representa un grupo carbonilo sustituido con un grupo ciclopropilo.

El término “halógeno”, ya sea solo o en palabras compuestas, tales como “haloalquilo”, o cuando se usa en

descripciones tales como “alquilo sustituido con halógeno” incluye flúor, cloro, bromo o yodo. Además, cuando se usa en palabras compuestas tales como “haloalquilo”, o cuando se usa en descripciones tales como “alquilo sustituido con halógeno”, el alquilo puede estar parcial o totalmente sustituido con átomos de halógeno que pueden ser iguales o diferentes. Los ejemplos de “haloalquilo” o “alquilo sustituido con halógeno” incluyen CF_3, CH_2Cl, CH_2CF_3 y CCl_2CF_3.

Las abreviaturas químicas S(O) y S(=O), como se usan en la presente descripción, representan una porción sulfinilo. Las abreviaturas químicas SO_2, $S(O)_2$ y $S(=O)_2$, como se usan en la presente descripción, representan una entidad sulfonilo. Las abreviaturas químicas C(O) y C(=O), como se usan en la presente descripción, representan una entidad carbonilo. Las abreviaturas químicas CO_2, C(O)O y C(=O)O, tal como se usan en la presente descripción, representan una porción oxicarbonilo. “CHO” significa formilo.

Cuando A^1 es bencilo sustituido con 1 a 3 R^4, el sustituyente o sustituyentes R^4 pueden estar unidos a cualquier átomo de carbono disponible del grupo bencilo (por ejemplo, el sustituyente o sustituyentes R^4 pueden estar unidos al átomo de carbono bencílico o a cualquier átomo de carbono disponible del grupo fenilo).

Los compuestos de la Fórmula **1p** son un subgrupo de los compuestos de la Fórmula **1**.

La cantidad total de átomos de carbono en un grupo sustituyente se indica con el sufijo "de C_i a C_j", en donde "i" y "j" son números del 1 al 8. Por ejemplo, alquilo de C_1–C_4 designa de metilo a butilo.

Cuando un grupo contiene un sustituyente que puede ser hidrógeno, por ejemplo, R^{1a} o R^{1b}, entonces cuando este sustituyente se toma como hidrógeno, se reconoce que es equivalente de tal grupo no sustituido. Cuando se indica que un grupo variable está opcionalmente unido a una posición, por ejemplo, $(R^v)_r$ en U-36 de la Exhibición 1, en donde r puede ser 0, entonces en esa posición puede haber hidrógeno aun cuando no se haya indicado en la definición del grupo variable. Cuando se dice que una o más posiciones en un grupo "no están sustituidas" o son "no sustituidas", entonces los átomos de hidrógeno están unidos para ocupar cualquier valencia libre.

A menos que se indique de cualquier otra forma, un "anillo" o "sistema anular" como un componente de la Fórmula **1** es carbocíclico o heterocíclico. El término "sistema anular" indica dos o más anillos conectados. El término "sistema anular bicíclico" designa un sistema anular que consiste en dos anillos que comparten dos o más átomos comunes.

Un anillo o sistema anular bicíclico puede ser parte de un sistema anular extendido que contiene más de dos anillos, en donde los sustituyentes en el anillo o sistema anular bicíclico se combinan para formar los anillos adicionales que pueden estar en relaciones bicíclicas con otros anillos en el sistema anular extendido.

El término "aromático" indica que cada átomo del anillo está prácticamente en el mismo plano y tiene un orbital *p* perpendicular al plano del anillo y que (4n + 2) π electrones, en donde n es un entero positivo se asocian con el anillo o sistema anular para cumplir con la regla de Hückel.

Los términos "anillo heterocíclico" o "heterociclo" designan un anillo, en donde al menos uno de los átomos que forma la cadena principal del anillo es distinto de carbono. A menos que se indique de cualquier otra manera, un anillo heterocíclico puede ser un anillo saturado, parcialmente insaturado o totalmente insaturado. "Anillo heterocíclico saturado" se refiere a un anillo heterocíclico que contiene únicamente enlaces sencillos entre miembros anulares. "Anillo heterocíclico parcialmente saturado" se refiere a un anillo heterocíclico que contiene por lo menos un enlace doble pero que no es aromático. El término "anillo heteroaromático" designa un anillo aromático totalmente insaturado en el cual al menos un átomo que forma la cadena principal del anillo no es

carbono. Típicamente, un anillo heteroaromático contiene no más de 4 nitrógenos, no más de 1 oxígeno y no más de 1 azufre. A menos que se indique de otra manera, los anillos heteroaromáticos pueden estar unidos mediante cualquier carbono o nitrógeno disponible mediante el reemplazo de un hidrógeno en el carbono o nitrógeno. El término "sistema anular bicíclico heteroaromático" designa un sistema anular que consiste en dos anillos fundidos, en el cual al menos uno de los dos anillos es un anillo heteroaromático tal como se definió anteriormente.

Cuando un radical está opcionalmente sustituido con los sustituyentes enumerados con el número de sustituyentes estipulado (por ejemplo, "hasta 5"), entonces, el radical podría estar no sustituido o sustituido con un número de sustituyentes que se encuentra en el intervalo de hasta el número alto establecido (por ejemplo, "5"), y los sustituyentes unidos se seleccionan independientemente de los sustituyentes enumerados.

Cuando un sustituyente es un anillo o sistema anular, puede estar unido al remanente de la Fórmula **1** a través de cualquier miembro anular disponible, a menos que se describa de cualquier otra manera.

El término "no sustituido" en relación con un grupo, tal como un anillo o sistema anular, significa que el grupo no

tiene sustituyentes además de su o sus uniones al resto de la Fórmula **1**.

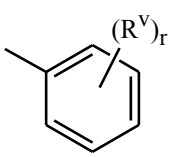
La frase "fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4" se refiere a que cada anillo fenilo es no sustituido o sustituido con 1 a 3 R^4, cada anillo heteroaromático de 5 miembros es no sustituido o sustituido con 1 a 3 R^4, y cada anillo heteroaromático de 6 miembros es no sustituido o sustituido con 1 a 3 R^4.

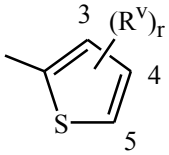
Cuando la cantidad de sustituyentes opcionales no está restringida por una limitación expresa (por ejemplo, la frase "no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado de"), se entiende que significa que la cantidad de sustituyentes opcionales puede estar en el intervalo de 0 a la cantidad de posiciones disponibles. Una persona con experiencia en la técnica apreciará que mientras algunos sustituyentes tales como halógeno pueden estar presentes en cada posición disponible (por ejemplo, el sustituyente C_2F_5 es un grupo alquilo de C_2 sustituido con el número máximo de 5 átomos de fluor), los factores prácticos tales como el costo y la accesibilidad sintética pueden limitar el número de ocurrencias de otros sustituyentes. Estas limitaciones son parte del conocimiento general que los expertos en la técnica tienen sobre la

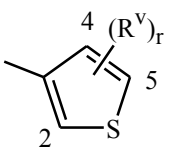
síntesis. Deben destacarse las modalidades, en donde en la ausencia de una limitación expresa de la cantidad de sustituyentes opcionales, la cantidad de sustituyentes opcionales es de hasta 3 (es decir, 0, 1, 2 o 3) si se adapta a la cantidad de posiciones disponibles.

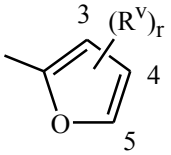
Como se indicó anteriormente, los sustituyentes, tales como A, Z^1 o Z^2, pueden ser (entre otros) un anillo heteroaromático de 5 o 6 miembros opcionalmente sustituido con uno o más sustituyentes seleccionados de un grupo de sustituyentes, tal como se definió en la sección Breve descripción de la invención. Los ejemplos de un anillo heteroaromático de 5 o 6 miembros sustituidos opcionalmente con uno o más sustituyentes incluyen los anillos U-2 a U-61 ilustrados en la Exhibición 1, en donde R^v es cualquier sustituyente tal como se definió en la Breve descripción de la invención (por ejemplo, para R^1) y r es un entero de 0 a 5, limitado por el número de posiciones disponibles en cada grupo U. Dado que U-29, U-30, U-36, U-37, U-38, U-39, U-40, U-41, U-42 y U-43 tienen solamente una posición disponible, en estos grupos U “r” está limitado a los enteros 0 o 1, y cuando “r” es 0 significa que el grupo U no está sustituido y que un hidrógeno está presente en la posición indicada por $(R^v)_r$.

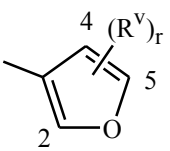
Exhibición 1

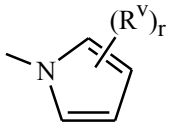

U-1 ,

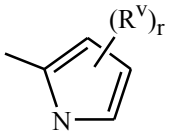

U-2 ,

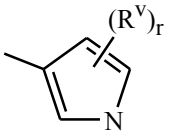

U-3 ,

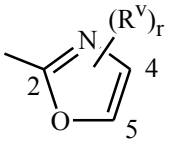

U-4 ,

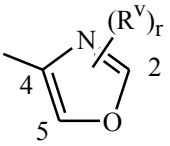

U-5 ,

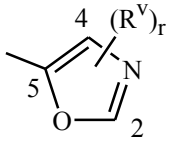

U-6 ,

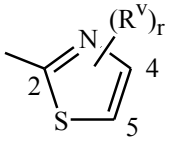

U-7 ,

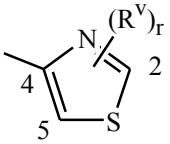

U-8 ,

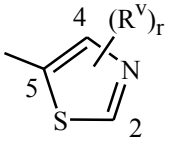

U-9 ,

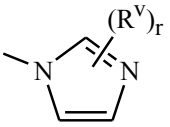

U-10 ,

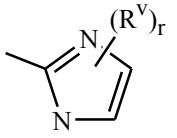

U-11 ,

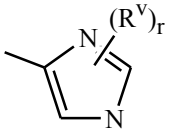

U-12 ,

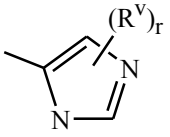

U-13 ,

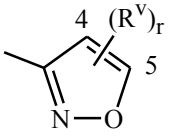

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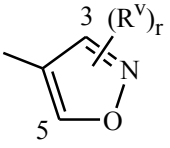

U-15 ,

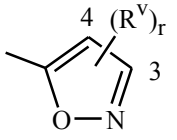

U-16 ,

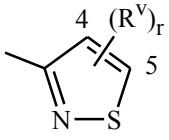

U-17 ,

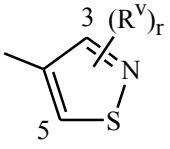

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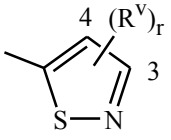

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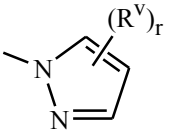

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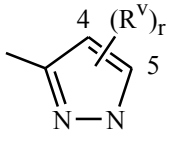

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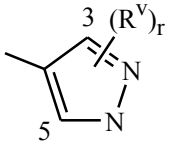

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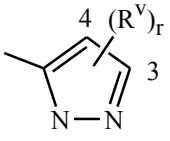

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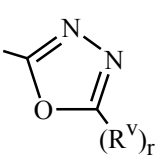

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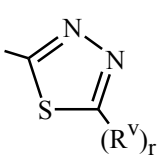

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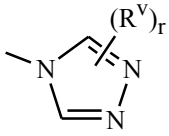

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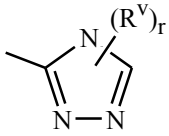

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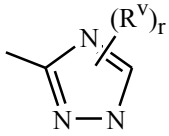

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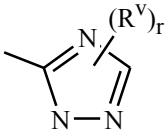

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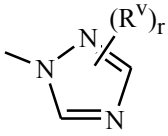

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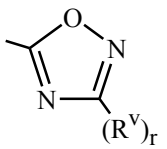

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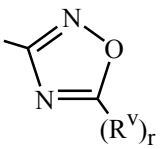

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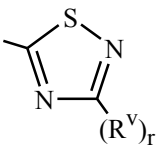

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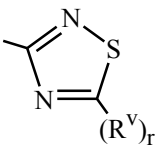

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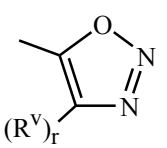

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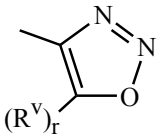

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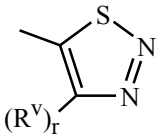

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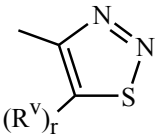

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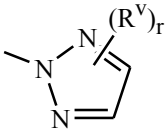

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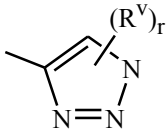

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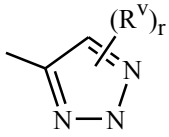

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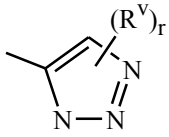

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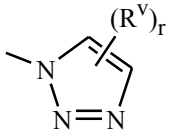

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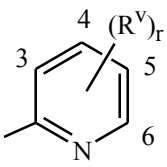

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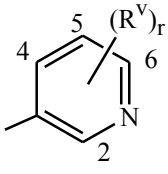

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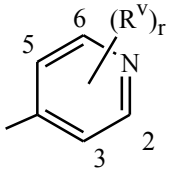

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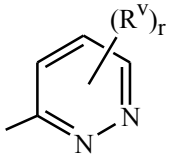

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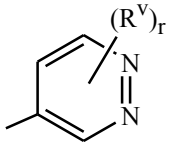

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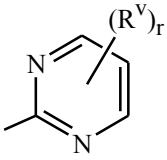

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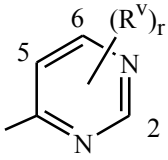

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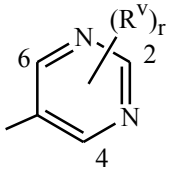

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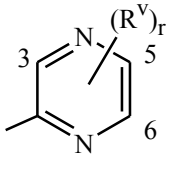

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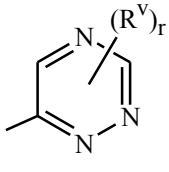

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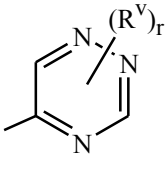

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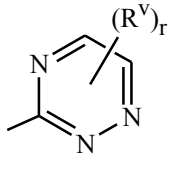

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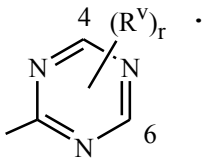

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U-57 ,


U-58 ,


U-59 ,

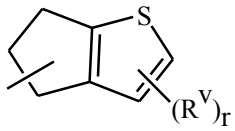

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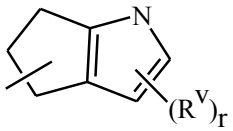
U-61

Como se indicó anteriormente, los sustituyentes, tales como A, pueden ser (entre otros) un sistema anular bicíclico heteroaromático de 7, 8, 9, 10 u 11 miembros opcionalmente sustituido con hasta 3 sustituyentes seleccionados de un grupo de sustituyentes, tal como se definió en la sección Breve descripción de la invención. Los ejemplos de un sistema anular bicíclico heteroaromático de 8, 9 o 10 miembros opcionalmente sustituido con hasta 3 sustituyentes incluyen los sistemas anulares H-1 a H-23 ilustrados en la Exhibición 2, en donde R^v es cualquier sustituyente, tal como se definió en la sección Breve descripción de la invención (por ejemplo, para A) y r es un entero de 0 a 3, limitados por la cantidad de posiciones disponibles en cada grupo H.

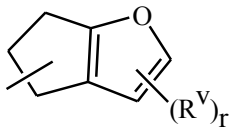
Exhibición 2



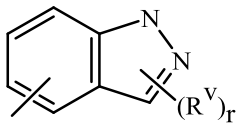
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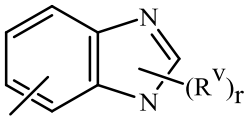
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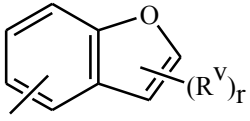
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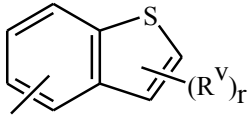
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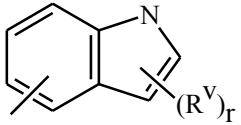
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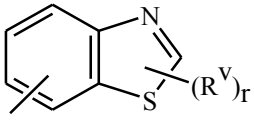
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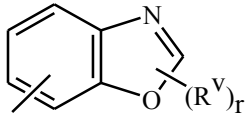
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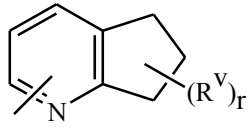
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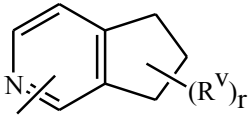
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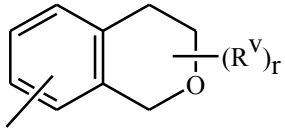
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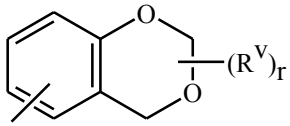
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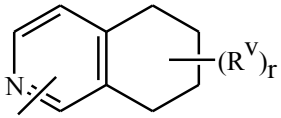
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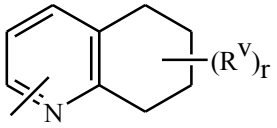
H-13 ,



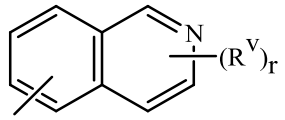
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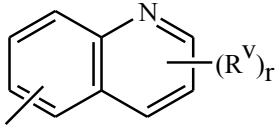
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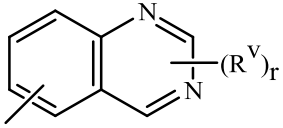
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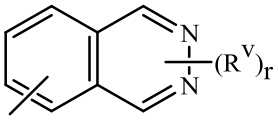
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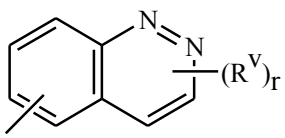


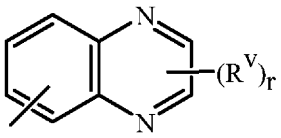
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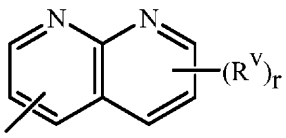


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H-17 H-18 H-19 H-20



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y


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H-21 H-22 H-23

Aunque los grupos R^v se muestran en las estructuras U-1 a U-61 y H-1 a H-23, no es necesario que dichos grupos estén presentes ya que son sustituyentes opcionales. Los átomos de nitrógeno que requieren sustitución para completar su valencia están sustituidos con H o R^v. Debe mencionarse que cuando el punto de unión entre $(R^v)_r$ y el grupo U o H se ilustra como un punto flotante, $(R^v)_r$ puede estar unido a cualquier átomo de carbono o nitrógeno disponible del grupo U o H. Se destaca que cuando el punto de unión en el grupo U o H se ilustra como un punto flotante, el grupo U o H se puede unir al resto de la Fórmula **1** a través de cualquier carbono o nitrógeno disponible del grupo U o H por medio del reemplazo de un átomo de hidrógeno.

En la técnica se conoce una variedad amplia de métodos sintéticos para la preparación de anillos y sistemas anulares heterocíclicos aromáticos y no aromáticos; para revisiones amplias, ver el grupo de 8 volúmenes de *Comprehensive Heterocyclic Chemistry*, editores en jefe A. R. Katritzky y C. W. Rees, Pergamon Press, Oxford, 1984 y el grupo de 12 volúmenes de *Comprehensive Heterocyclic Chemistry II*, editores en jefe A. R. Katritzky, C. W. Rees y E. F. V. Scriven, Pergamon Press, Oxford, 1996.

Los compuestos de la presente invención pueden estar en la forma de uno o más estereoisómeros. Los diversos estereoisómeros incluyen isómeros enantiómeros,

diastereómeros, atropisómeros y geométricos. Una persona con experiencia en la técnica comprenderá que un estereoisómero puede ser más activo o puede exhibir efectos beneficiosos cuando está enriquecido con respecto al (a los) otro(s) estereoisómero(s) o cuando está separado del (de los) otro(s) estereoisómero(s). Además, el experimentado en la técnica sabrá cómo separar, enriquecer o preparar selectivamente tales estereoisómeros. Los compuestos de la presente invención pueden estar presentes como una mezcla de estereoisómeros, como estereoisómeros individuales o como una forma ópticamente activa.

Los compuestos de la presente invención pueden existir como uno o más isómeros conformacionales debido a la rotación restringida del enlace provocada por impedimento estérico. Esta invención comprende mezclas de isómeros conformacionales. Además, esta invención incluye compuestos que están enriquecidos en un conformador respecto de otros.

Los compuestos seleccionados de la Fórmula **1** (que incluyen todos los estereoisómeros, *N*-óxidos y sales de estos) existen, típicamente, en más de una forma, y así, la Fórmula **1** incluye todas las formas cristalinas y no cristalinas de los compuestos que representa la Fórmula **1**. Las formas no cristalinas incluyen modalidades que son sólidas, tales como ceras y gomas, así como modalidades que son líquidas, tales como soluciones y líquidos fundidos. Las

formas cristalinas incluyen modalidades que representan, esencialmente, un tipo de cristal único, y modalidades que representan un mezcla de polimorfos (es decir, tipos cristalinos diferentes). El término “polimorfo” se refiere a una forma cristalina particular de un compuesto químico que se puede cristalizar en diferentes formas cristalinas; estas formas tienen distintos arreglos y/o configuraciones moleculares de las moléculas en la retícula cristalina. Aunque los polimorfos pueden tener la misma composición química, también pueden diferir en su composición debido a la presencia o ausencia de agua u otras moléculas co-cristalizadas, las cuales pueden estar débilmente o fuertemente enlazadas en la red. Los polimorfos pueden diferir en cuanto a propiedades químicas, físicas y biológicas tales como forma, densidad, dureza, color, estabilidad química, temperatura de fusión, higroscopicidad, capacidad de suspensión, velocidad de disolución y disponibilidad biológica del cristal. Una persona con experiencia en la técnica comprenderá que un polimorfo de un compuesto representado por la Fórmula **1** puede exhibir efectos benéficos (por ejemplo, conveniencia de preparación de formulaciones útiles, rendimiento biológico mejorado) con respecto a otro polimorfo o una mezcla de polimorfos del mismo compuesto representado por la Fórmula **1.** La preparación y el aislamiento de un polimorfo particular de

un compuesto representado por la Fórmula **1** puede lograrse por métodos conocidos para los experimentados en la técnica y que incluyen, por ejemplo, cristalización mediante el uso selectivo de solventes y temperaturas.

Una persona con experiencia en la técnica comprenderá que no todos los heterociclos que contienen nitrógeno pueden formar *N*-óxidos, ya que el nitrógeno requiere un par aislado disponible para oxidación con el óxido; una persona con experiencia en la técnica reconocerá los heterociclos que contienen nitrógeno que pueden formar *N*-óxidos. Un experimentado en la técnica también reconocerá que las aminas terciarias pueden formar *N*-óxidos. Los métodos de síntesis para preparar *N*-óxidos de heterociclos y aminas terciarias son del conocimiento de una persona con experiencia en la técnica e incluyen la oxidación de heterociclos y aminas terciarias con peroxiácidos tales como ácido peracético y 3-cloroperbenzoico (MCPBA), peróxido de hidrógeno, hidroperóxidos de alquilo, tales como hidroperóxido de *t*-butilo, perborato de sodio y dioxiranos tales como dimetildioxirano. Estos métodos para la preparación de *N*-óxidos han sido descritos y analizados extensamente en la literatura. Véanse, por ejemplo: T. L. Gilchrist en *Comprehensive Organic Synthesis*, vol. 7, págs. 748–750, S. V. Ley, Ed., Pergamon Press; M. Tisler y B. Stanovnik en *Comprehensive Heterocyclic Chemistry*, vol. 3, págs. 18–20, A.

J. Boulton y A. McKillop, Eds., Pergamon Press; M. R. Grimmett y B. R. T. Keene en *Advances in Heterocyclic Chemistry*, vol. 43, págs. 149–161, A. R. Katritzky, Ed., Academic Press; M. Tisler y B. Stanovnik en *Advances in Heterocyclic Chemistry*, vol. 9, págs. 285–291, A. R. Katritzky y A. J. Boulton, Eds., Academic Press; y G. W. H. Cheeseman y E. S. G. Werstiuk en *Advances in Heterocyclic Chemistry*, vol. 22, págs. 390–392, A. R. Katritzky y A. J. Boulton, Eds., Academic Press.

Las personas con experiencia en la técnica reconocen que dado que en el medio ambiente y en condiciones fisiológicas las sales de los compuestos químicos están en equilibrio con sus correspondientes formas que no son sales, las sales comparten la utilidad biológica de las formas que no son sales. Así, una amplia variedad de sales de los compuestos de la Fórmula **1** son útiles para el control de las plagas de invertebrados. Las sales de los compuestos de la Fórmula **1** incluyen sales ácidas de adición con ácidos orgánicos e inorgánicos, tales como ácidos bromhídrico, clorhídrico, nítrico, fosfórico, sulfúrico, acético, butírico, fumárico, láctico, maleico, malónico, oxálico, propiónico, salicílico, tartárico, 4-toluenosulfónico o valérico. Cuando un compuesto de la Fórmula **1** contiene una porción acídica, tal como un ácido carboxílico o fenol, las sales también incluyen aquellas formadas con bases orgánicas o inorgánicas, tales como piridina, trietilamina o amoníaco

o amidas, hidruros, hidróxidos o carbonatos de sodio, potasio, litio, calcio, magnesio o bario. Por lo tanto, la presente invención se relaciona con compuestos seleccionados de la Fórmula **1**, *N*-óxidos y sales de estos.

Las modalidades de la presente invención, tal como se describe en la Breve descripción de la invención, incluyen las que se describen a continuación. En las siguientes modalidades la Fórmula **1** incluye los estereoisómeros, *N*-óxidos, y sales de estos y, la referencia a "un compuesto de la Fórmula **1**" incluye las definiciones de los sustituyentes que se especifican en la Breve descripción de la invención a menos que se defina en las modalidades.

Modalidad 1. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, en donde R^{1a} es H, ciano, alquilo de C_1–C_6, cicloalquilo de C_3–C_6, haloalquilo de C_1–C_6, C(O)OH, $C(O)R^{5a}$, $C(O)OR^{6a}$ o $C(O)NR^{7a}R^{8a}$.

Modalidad 1a. Un compuesto o composición de la modalidad 1, en donde R^{1a} es H, ciano o alquilo de C_1–C_6.

Modalidad 1b. Un compuesto o composición de la modalidad 1a, en donde R^{1a} es H, ciano o metilo.

Modalidad 1c. Un compuesto o composición de la modalidad 1b, en donde R^{1a} es H.

Modalidad 2. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 1c, en donde R^{1b} es H o metilo.

Modalidad 2a. Un compuesto o composición de la modalidad 2, en donde R^{1b} es H.

Modalidad 3. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, en donde R^{1a} y R^{1b} son H.

Modalidad 4. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 3, en donde R^{2a}, R^{2b}, R^{2c} y R^{2d} son independientemente ciano, alquilo de C_1–C_6, $C(O)OR^6$, $NHC(O)R^{5a}$ o $NHC(O)OR^{6a}$.

Modalidad 4a. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 3, en donde R^{2a} y R^{2c} son H; y cada R^{2b} y cada R^{2d} son independientemente H, alquilo de C_1–C_4 o haloalquilo de C_1–C_4.

Modalidad 4b. Un compuesto o composición de la modalidad 4, en donde cada R^{2a}, cada R^{2b}, cada R^{2c} y cada R^{2d} son H.

Modalidad 5. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o de cualquiera de las Modalidades 1 a 4b, en donde J^1 es $-C(R^{3a}R^{3b})-$ y J^2 es un enlace directo o $-C(R^{3c}R^{3d})-$.

Modalidad 5a. Un compuesto o una composición de la Modalidad 5, en donde J^1 es $-C(R^{3a}R^{3b})-$ y J^2 es un enlace directo.

Modalidad 5b. Un compuesto o una composición de la Modalidad 5, en donde J^1 es $-C(R^{3a}R^{3b})-$ y J^2 es $-C(R^{3c}R^{3d})-$.

Modalidad 6. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 5b, en donde R^{3a}, R^{3b}, R^{3c} y R^{3d} son independientemente H, halógeno o alquilo de C_1–C_6.

Modalidad 6a. Un compuesto o composición de la modalidad 6, en donde R^{3a}, R^{3b}, R^{3c} y R^{3d} son independientemente H, F, Cl, Br o metilo.

Modalidad 6b. Un compuesto o composición de la modalidad 6a, en donde R^{3a} y R^{3b} son H.

Modalidad 6c. Un compuesto o composición de la modalidad 6a, en donde R^{3a}, R^{3b}, R^{3c} y R^{3d} son H.

Modalidad 7. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 6c, en donde M es $-C(R^{3e})(A)-$ u $-O-$.

Modalidad 7a. Un compuesto o composición de la modalidad 7, en donde M es $-C(R^{3e})(A)-$.

Modalidad 7b. Un compuesto o composición de la modalidad 7a, en donde M es $-C(R^{3e})(A)-$; siempre que cuando A es $C(X)NR^7R^8$ y X es O, entonces ni R^7 ni R^8 son H.

Modalidad 7c. Un compuesto o composición de la modalidad 7, en donde M es –O–.

Modalidad 8. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o de cualquiera de las Modalidades 1 a 7b, en donde A es ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, alquilo de C_1–C_4, haloalquilo de C_1–C_4, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$ y $S(O)_nR^{11a}$; o fenilo, un anillo heteroaromático de 5 o 6 miembros o un sistema anular heteroaromático de 7 a 11 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^4; siempre que cuando A es $NHC(O)CH_3$ y R^{3e} es H, entonces Z^1 no es 2-fluorofenilo, 3-metilfenilo, 4-metilfenilo ni 2,5-dimetilfenilo; o R^{3e} y A se pueden tomar en conjunto con el átomo de carbono al cual se unen para formar un anillo de 3 a 7 miembros que contiene miembros anulares seleccionados de átomos de

carbono y hasta 2 heteroátomos independientemente seleccionados de un átomo de oxígeno, un átomo de azufre y hasta 2 átomos de nitrógeno, en donde hasta 2 miembros del anillo de átomos de carbono se seleccionan independientemente de C(=O) y C(=S) y el miembro del anillo de átomos de azufre se selecciona de S, S(O) o $S(O)_2$, el anillo es no sustituido o sustituido con hasta 4 sustituyentes independientemente seleccionados del grupo que consiste en halógeno, ciano y alquilo de C_1–C_4; siempre que cada R^{3e} y cada A son distintos a $N(CH_3)_2$.

Modalidad 8a. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 7b, en donde A es ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ o NR^9R^{10}; o alquilo de C_1–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$ y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

Modalidad 8b. Un compuesto o una composición de la Modalidad 8a, en donde A es ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ o NR^9R^{10}; o fenilo o un anillo heteroaromático

de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

Modalidad 8c. Un compuesto o composición de la modalidad 8a, en donde A es ciano, $C(X)R^5$, $C(O)OR^6$ o NR^9R^{10}; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

Modalidad 8d. Un compuesto o composición de la modalidad 8c, en donde A es ciano, $C(X)R^5$, $C(O)OR^6$ o NR^9R^{10}.

Modalidad 8e. Un compuesto o composición de la modalidad 8d, en donde A es ciano, $C(O)OR^{6a}$, $NHC(O)R^{5a}$ o $NHC(O)OR^{6a}$.

Modalidad 8f. Un compuesto o composición de la modalidad 8c, en donde A es ciano, $C(O)OR^{6a}$ o $NHC(O)R^{5a}$; o un anillo heteroaromático de 5 miembros, no sustituido o sustituido con 1 a 3 R^4.

Modalidad 8g. Un compuesto o composición de la modalidad 8c, en donde A es $NHC(O)R^{5a}$; o un anillo heteroaromático de 5 o 6 miembros, no sustituido o sustituido con 1 a 3 R^4.

Modalidad 8h. Un compuesto o composición de la modalidad 8c, en donde A es ciano, $NHC(O)R^{5a}$ o 1,3,4-oxadiazol-2-ilo.

Modalidad 9. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las Modalidades 1 a 8h, en donde R^{3e} es H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$,

NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

Modalidad 9a. Un compuesto o composición de la modalidad 9, en donde R^{3e} es H, halógeno, $C(X)R^5$ o $C(O)OR^6$; o alquilo de C_1–C_6, alquenilo de C_2–C_6 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, OR^{12a}, alquilo de C_1–C_4 y haloalquilo de C_1–C_4; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

Modalidad 9b. Un compuesto o composición de la modalidad 9a, en donde R^{3e} es H o halógeno; o alquilo de C_1–C_6 o alquenilo de C_2–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno y haloalquilo de C_1–C_4; o un anillo

heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

Modalidad 9c. Un compuesto o composición de la modalidad 9b, en donde R^{3e} es H, halógeno o alquilo de C_1–C_6.

Modalidad 9c1. Un compuesto o composición de la modalidad 9c, en donde R^{3e} es H.

Modalidad 9d. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 8h, en donde R^{3e} y A se pueden tomar en conjunto con el átomo de carbono al cual se unen para formar un anillo de 3 a 7 miembros que contiene miembros anulares seleccionados de átomos de carbono y hasta 2 heteroátomos independientemente seleccionados de un átomo de oxígeno, un átomo de azufre y hasta 2 átomos de nitrógeno, en donde hasta 2 miembros del anillo de átomos de carbono se seleccionan independientemente de C(=O) y C(=S) y el miembro del anillo de átomos de azufre se selecciona de S, S(O) o $S(O)_2$, el anillo es no sustituido o sustituido con hasta 4 sustituyentes independientemente seleccionados del grupo que consiste en halógeno, ciano y alquilo de C_1–C_4.

Modalidad 10. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 9d, en donde Z^1 es fenilo sustituido con 1 a 4 R^{4a}.

Modalidad 10a. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 9d, en donde Z^1 es un anillo heteroaromático de 5 miembros no sustituido o sustituido con 1 a 3 R^{4a}.

Modalidad 10b. Un compuesto o composición de la modalidad 10a, en donde Z^1 es furanilo, tienilo, oxazolilo o tiazolilo, cada uno no sustituido o sustituido con 1 a 3 R^{4a}.

Modalidad 10c. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 9d, en donde Z^1 es un anillo heteroaromático de 6 miembros no sustituido o sustituido con 1 a 3 R^{4a}.

Modalidad 10d. Un compuesto o composición de la modalidad 10c, en donde Z^1 es piridinilo o pirimidinilo, cada uno no sustituido o sustituido con 1 a 3 R^{4a}.

Modalidad 11. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 9d, en donde Z^2 es fenilo sustituido con 1 a 4 R^{4b}.

Modalidad 11a. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 9d, en donde Z^2

es un anillo heteroaromático de 5 miembros no sustituido o sustituido con 1 a 3 R^{4b}.

Modalidad 11b. Un compuesto o composición de la modalidad 11a, en donde Z^2 es furanilo, tienilo, oxazolilo o tiazolilo, cada uno no sustituido o sustituido con 1 a 3 R^{4b}.

Modalidad 11c. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 9d, en donde Z^2 es un anillo heteroaromático de 6 miembros no sustituido o sustituido con 1 a 3 R^{4b}.

Modalidad 11d. Un compuesto o composición de la modalidad 11c, en donde Z^2 es piridinilo o pirimidinilo, cada uno no sustituido o sustituido con 1 a 3 R^{4b}.

Modalidad 12. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula 1, o cualquiera de las modalidades 1 a la 11d, en donde cada R^{4a} y cada R^{4b} son independientemente halógeno, ciano, alquilo de C_1–C_6, haloalquilo de C_1–C_6 o haloalcoxi de C_1–C_6.

Modalidad 12a. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 11d, en donde Z^1 es fenilo o piridinilo, cada uno sustituido con 1 a 3 R^{4a}.

Modalidad 12b. Un compuesto o composición de la modalidad 12a, en donde cada R^{4a} es independientemente halógeno, alquilo de C_1–C_4 o haloalquilo de C_1–C_4.

Modalidad 12c. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 11d, en donde Z^2 es fenilo sustituido con 1 a 3 R^{4b}.

Modalidad 12d. Un compuesto o composición de la modalidad 12c, en donde cada R^{4b} es independientemente halógeno, alquilo de C_1–C_4 o haloalquilo de C_1–C_4.

Modalidad 12e. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 11d, en donde Z^1 es fenilo o piridinilo, cada uno sustituido con 1 a 3 R^{4a}; Z^2 es fenilo sustituido con 1 a 3 R^{4b}; y cada R^{4a} y cada R^{4b} son independientemente halógeno, alquilo de C_1–C_4 o haloalquilo de C_1–C_4.

Modalidad 13. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 12e, en donde X es O.

Modalidad 13a. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, o cualquiera de las modalidades 1 a la 12e, en donde X es S.

Las modalidades de esta invención, que incluyen las Modalidades 1–13a anteriores, así como cualquier otra

modalidad descrita en la presente descripción, pueden combinarse de cualquier manera, y las descripciones de variables en las modalidades corresponden no solo a los compuestos de la Fórmula **1** sino, además, a los compuestos de partida y compuestos intermedios útiles para preparar los compuestos de la Fórmula **1**. Además, las modalidades de esta invención, que incluyen las Modalidades 1–13a anteriores así como también cualquier otra modalidad descrita en la presente descripción, y cualquier combinación de éstas, corresponden a las composiciones y métodos de la presente invención.

Las combinaciones de las Modalidades 1–13a se ilustran por:

Modalidad A. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, en donde:

J^1 es $-C(R^{3a}R^{3b})-$;

J^2 es $-C(R^{3c}R^{3d})-$; y

M es $-C(R^{3e})(A)-$;

siempre que cuando A es $C(X)NR^7R^8$ y X es O, entonces ni R^7 ni R^8 son H.

Modalidad B. El compuesto o composición de la modalidad A, en donde

X es O;

R^{1a} es H; y

R^{1b} es H.

Modalidad C. El compuesto o composición de la modalidad B, en donde

R^{2a}, R^{2b}, R^{2c} y R^{2d} son H;

R^{3e} es H, halógeno o alquilo de C_1 a C_6; y

A es ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ o NR^9R^{10}; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

Modalidad D. El compuesto o composición de la modalidad C, en donde

A es ciano, $C(O)OR^{6a}$ o $NHC(O)R^{5a}$; o un anillo heteroaromático de 5 miembros, no sustituido o sustituido con 1 a 3 R^4.

Modalidad E. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, en donde

R^{1a} y R^{1b} son H;

J^1 es $-C(R^{3a}R^{3b})-$;

J^2 es un enlace directo;

M es $-C(R^{3e})(A)-$;

R^{2a} y R^{2c} son H;

cada R^{2b} y cada R^{2d} son independientemente H, alquilo de C_1–C_4 o haloalquilo de C_1–C_4;

R^{3a} y R^{3b} son H;

R^{3e} es H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–

C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

A es ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, alquilo de C_1–C_4, haloalquilo de C_1–C_4, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$ y $S(O)_nR^{11a}$; o fenilo, un anillo heteroaromático de 5 o 6 miembros o un sistema anular heteroaromático de 7 a 11 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^4; siempre que cuando A es $NHC(O)CH_3$ y R^{3e} es H, entonces Z^1 no es 2-fluorofenilo, 3-metilfenilo, 4-metilfenilo ni 2,5-dimetilfenilo; o

R^{3e} y A se pueden tomar en conjunto con el átomo de carbono al cual se unen para formar un anillo de 3 a 7 miembros que contiene miembros anulares seleccionados de átomos de carbono y hasta 2 heteroátomos independientemente seleccionados de un átomo de oxígeno, un átomo de azufre y hasta 2 átomos de nitrógeno, en donde hasta 2 miembros del anillo de átomos de carbono se seleccionan independientemente de C(=O) y C(=S) y el miembro del anillo de átomos de azufre se selecciona de S, S(O) o $S(O)_2$, el anillo no sustituido o sustituido con hasta 4 sustituyentes independientemente seleccionados del grupo que consiste en halógeno, ciano y alquilo de C_1–C_4;

siempre que cada R^{3e} y cada A son distintos a $N(CH_3)_2$.

Modalidad F. El compuesto o composición de la modalidad E, en donde

R^{3e} es H, halógeno, $C(X)R^5$ o $C(O)OR^6$; o alquilo de C_1–C_6, alquenilo de C_2–C_6 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, OR^{12a}, alquilo de C_1–C_4 y haloalquilo de C_1–C_4; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

Modalidad G. El compuesto o composición de la modalidad F, en donde

R^{3e} es H o halógeno; o alquilo de C_1–C_6 o alquenilo de C_2–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno y haloalquilo de C_1–C_4; o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

Modalidad H. El compuesto o composición de la modalidad G, en donde

A es $NHC(O)R^{5a}$; o un anillo heteroaromático de 5 o 6 miembros, no sustituido o sustituido con 1 a 3 R^4.

Modalidad I. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, en donde

J^1 es $-C(R^{3a}R^{3b})-$ y J^2 es un enlace directo;

M es $-C(R^{3e})(A)-$;

R^{3e} es H;

A es ciano, $C(O)OR^{6a}$, $NHC(O)R^{5a}$ o $NHC(O)OR^{6a}$;

Z^1 es fenilo o piridinilo, cada uno sustituido con 1 a 3 R^{4a};

cada R^{4a} es independientemente halógeno, alquilo de C_1–C_4 o haloalquilo de C_1–C_4;

Z^2 es fenilo sustituido con 1 a 4 R^{4b}; y

cada R^{4b} es independientemente halógeno, alquilo de C_1–C_4 o haloalquilo de C_1–C_4.

Modalidad J. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, en donde

J^1 es $-C(R^{3a}R^{3b})-$ y J^2 es $-C(R^{3c}R^{3d})-$;

M es $-C(R^{3e})(A)-$;

R^{3e} es H;

A es ciano, $C(O)OR^{6a}$ o $NHC(O)R^{5a}$; o un anillo heteroaromático de 5 miembros, no sustituido o sustituido con 1 a 3 R^4;

Z^1 es fenilo o piridinilo, cada uno sustituido con 1 a 3 R^{4a};

cada R^{4a} es independientemente halógeno, alquilo de C_1–C_4 o haloalquilo de C_1–C_4;

Z^2 es fenilo sustituido con 1 a 4 R^{4b}; y

cada R^{4b} es independientemente halógeno, alquilo de C_1–C_4 o haloalquilo de C_1–C_4.

Modalidad K. Un compuesto de la Fórmula **1**, o una composición que comprende un compuesto de la Fórmula **1**, en donde

J^1 es $-C(R^{3a}R^{3b})-$ y J^2 es $-C(R^{3c}R^{3d})-$;

M es $-O-$;

Z^1 es fenilo o piridinilo, cada uno sustituido con 1 a 3 R^4a;

cada R^{4a} es independientemente halógeno, alquilo de C_1–C_4 o haloalquilo de C_1–C_4;

Z^2 es fenilo sustituido con 1 a 4 R^{4b}; y

cada R^{4b} es independientemente halógeno, alquilo de C_1–C_4 o haloalquilo de C_1–C_4.

Las modalidades específicas incluyen compuestos de Fórmula **1** seleccionados del grupo que consiste en:

metil 1-[[3-(4-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarboxilato;

1-[[3-(4-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(3,4-diclorofenil)-3-(4-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2-fluorofenil)-1-[4-(trifluorometoxi)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2,4-difluorofenil)-1-[4-(trifluorometoxi)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(4-clorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(3-cloro-4-fluorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(4-bromofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2-fluorofenil)-1-[4-(trifluorometil)fenil]-1*H*-

pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2-fluorofenil)-1-[5-(trifluorometil)-2-piridinil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2,6-difluorofenil)-1-[4-(trifluorometoxi)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

N-[(3*S*)-1-[[1-(3,4-diclorofenil)-3-(4-fluorofenil)-1*H*-pirazol-4-il]metil]-3-pirrolidinil]ciclopropanocarboxamida;

1-[[1-(3-cloro-4-fluorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina;

1-[[1-(3,4-diclorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina;

1-[[1-(5-cloro-2-piridinilo)-3-(2,4,6-trifluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(4-clorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina;

1-[[1-(3-cloro-4-fluorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(4-cloro-3-fluorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

N-[(3*S*)-1-[[1-(3,4-diclorofenil)-3-(4-fluorofenil)-1*H*-pirazol-4-il]metil]-3-pirrolidinil]acetamida;

1-[[1-(4-clorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(5-cloro-2-piridinil)-3-(2-fluorofenil)-1*H*-pirazol-4-

il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina;

1-[[1-(3-bromofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina;

1-[[1-(5-bromo-2-piridinil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(5-cloro-2-piridinil)-3-(2,4-difluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo; y

1-[[3-(2-fluorofenil)-1-[4-(trifluorometoxi)fenil]-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina.

Deben destacarse los compuestos de la modalidad I, en donde cuando A es $NHC(O)R^{5a}$, entonces el átomo de carbono al cual A y R^{3e} se unen tiene la estereoquímica (*S*).

Las modalidades de la presente invención, tal como se describió la sección Breve descripción de la invención, incluyen, además, las que se describen a continuación. En las siguientes modalidades la Fórmula **1p** incluye los estereoisómeros, *N*-óxidos, y sales de estos y, la referencia a "un compuesto de la Fórmula **1p**" incluye las definiciones de los sustituyentes que se especifican en la Breve descripción de la invención a menos que se defina en las modalidades. El grupo R^2 representa las instancias de R^{2a}, R^{2b}, R^{2c} y R^{2d}. El grupo R^3 representa las instancias de R^{3a}, R^{3b}, R^{3c} y R^{3d}.

Modalidad 1. Un compuesto de la Fórmula **1p**, en donde R^{1a} es H, ciano, alquilo de C_1–C_6, cicloalquilo de C_3–C_6, haloalquilo de C_1–C_6, C(O)OH, $C(O)R^{5a}$, $C(O)OR^{6a}$ o $C(O)NR^{7a}R^{8a}$.

Modalidad 1a. Un compuesto de la modalidad 1, en donde R^{1a} es H, ciano o alquilo de C_1–C_6.

Modalidad 1b. Un compuesto de la modalidad 1a, en donde R^{1a} es H, ciano o metilo.

Modalidad 1c. Un compuesto de la Modalidad 1b, en donde R^{1a} es H.

Modalidad 2. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 1c, en donde R^{1b} es H o metilo.

Modalidad 2a. Un compuesto de la Modalidad 2, en donde R^{1b} es H.

Modalidad 3. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 2a, en donde A es ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ o NR^9R^{10}; o alquilo de C_1–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$ y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

Modalidad 3a. Un compuesto de la modalidad 3, en donde A es ciano, $C(X)R^5$, $C(O)OR^6$ o NR^9R^{10}; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

Modalidad 3b. Un compuesto de la modalidad 3a, en donde A es ciano, $C(X)R^5$, $C(O)OR^6$ o NR^9R^{10}.

Modalidad 3c. Un compuesto de la modalidad 3b, en donde A es ciano, $C(O)OR^{6a}$, $NHC(O)R^{5a}$ o $NHC(O)OR^{6a}$.

Modalidad 4. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 3c, en donde cada R^2 es independientemente ciano, alquilo de C_1–C_6, $C(O)OR^6$, $NHC(O)R^{5a}$ o $NHC(O)OR^{6a}$.

Modalidad 5. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 4, en donde R^3 es H, halógeno o alquilo de C_1–C_6.

Modalidad 5a. Un compuesto de la modalidad 5, en donde R^3 es H, F, Cl, Br o metilo.

Modalidad 5b. Un compuesto de la Modalidad 5a, en donde R^3 es H.

Modalidad 6. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 5b, en donde Z^1 es fenilo sustituido con 1 a 4 R^4.

Modalidad 6a. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 5b, en donde Z^1 es

un anillo heteroaromático de 5 miembros no sustituido o sustituido con 1 a 3 R^4.

Modalidad 6b. Un compuesto de la modalidad 6a, en donde Z^1 es furanilo, tienilo, oxazolilo o tiazolilo, cada uno no sustituido o sustituido con 1 a 3 R^4.

Modalidad 6c. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 5b, en donde Z^1 es un anillo heteroaromático de 6 miembros no sustituido o sustituido con 1 a 3 R^4.

Modalidad 6d. Un compuesto de la modalidad 6c, en donde Z^1 es piridinilo o pirimidinilo, cada uno no sustituido o sustituido con 1 a 3 R^4.

Modalidad 7. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 5b, en donde Z^2 es fenilo sustituido con 1 a 4 R^4.

Modalidad 7a. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 5b, en donde Z^2 es un anillo heteroaromático de 5 miembros no sustituido o sustituido con 1 a 3 R^4.

Modalidad 7b. Un compuesto de la modalidad 6a, en donde Z^2 es furanilo, tienilo, oxazolilo o tiazolilo, cada uno no sustituido o sustituido con 1 a 3 R^4.

Modalidad 7c. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 5b, en donde Z^2 es

un anillo heteroaromático de 6 miembros no sustituido o sustituido con 1 a 3 R^4.

Modalidad 7d. Un compuesto de la modalidad 6c, en donde Z^2 es piridinilo o pirimidinilo, cada uno no sustituido o sustituido con 1 a 3 R^4.

Modalidad 8. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 7d, en donde cada R^4 es independientemente halógeno, ciano, alquilo de C_1–C_6, haloalquilo de C_1–C_6 o haloalquilo de C_1–C_6.

Modalidad 9. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 8, en donde Z^1 es fenilo y un R^4 se encuentra en la posición 3 o 4.

Modalidad 9a. Un compuesto de la modalidad 9, en donde R^4 es halógeno, ciano, alquilo de C_1–C_6, haloalquilo de C_1–C_6 o haloalquilo de C_1–C_6.

Modalidad 10. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 8, en donde Z^2 es fenilo y un R^4 se encuentra en la posición 2.

Modalidad 10a. Un compuesto de la modalidad 10, en donde R^4 es halógeno o metilo.

Modalidad 11. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 10a, en donde X es O.

Modalidad 11a. Un compuesto de la Fórmula **1p** o cualquiera de las modalidades 1 a la 10a, en donde X es S.

Modalidad 12. Un compuesto de la Fórmula**1p** o cualquiera de las modalidades 1 a la 11a, en donde m es 0, 1 o 2.

Modalidad 12a. Un compuesto de la modalidad 12, en donde m es 1 o 2.

Modalidad 12b. Un compuesto de la modalidad 12, en donde m es 0.

Las modalidades de esta invención, que incluyen las Modalidades 1–12b anteriores, así como cualquier otra modalidad descrita en la presente descripción, pueden combinarse de cualquier manera, y las descripciones de variables en las modalidades corresponden no solo a los compuestos de la Fórmula **1p** sino, además, a los compuestos de partida y compuestos intermedios útiles para preparar los compuestos de la Fórmula **1p**. Además, las modalidades de esta invención, que incluyen las Modalidades 1–12b anteriores así como también cualquier otra modalidad descrita en la presente descripción, y cualquier combinación de estas, corresponden a las composiciones y métodos de la presente invención.

Las combinaciones de las Modalidades 1–12b se ilustran por:

Modalidad A. Un compuesto de la fórmula **1p**, en donde

X es O;

R^{1a} es H; y

R^{1b} es H.

Modalidad B. Un compuesto de la modalidad A, en donde

R^3 es H, halógeno o alquilo de C_1 a C_6;

A es ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ o NR^9R^{10}; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4; y

cada R^2 es independientemente ciano, alquilo de C_1-C_6, $NHC(O)R^{5a}$ o $NHC(O)OR^{6a}$.

Modalidad C. Un compuesto de la Modalidad B, en donde

A es ciano, $C(O)OR^{6a}$, $NHC(O)R^{5a}$ o $NHC(O)OR^{6a}$.

Las modalidades específicas incluyen compuestos de Fórmula **1p** seleccionados del grupo que consiste en:

metil 1-[[3-(4-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarboxilato;

1-[[3-(4-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(3,4-diclorofenil)-3-(4-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2-fluorofenil)-1-[4-(trifluorometoxi)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2,4-difluorofenil)-1-[4-(trifluorometoxi)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(4-clorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(3-cloro-4-fluorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(4-bromofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2-fluorofenil)-1-[4-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2-fluorofenil)-1-[5-(trifluorometil)-2-piridinil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo; y

1-[[3-(2,6-difluorofenil)-1-[4-(trifluorometoxi)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo.

Es de interés observar que los compuestos de esta invención se caracterizan por patrones residuales metabólicos y/o de suelo favorables y exhiben una actividad que controla un espectro de plagas agronómicas y no agronómicas de invertebrados.

Es de particular interés, por motivos del espectro de control de las plagas de invertebrados y la importancia económica, la protección de cultivos agronómicos del daño o perjuicio causado por las plagas de invertebrados al controlar estas plagas con modalidades de la invención. Debido a sus propiedades favorables de translocación o sistematicidad en las plantas, los compuestos de la presente invención también protegen las hojas u otras partes de la planta que no están en contacto directo con un compuesto de la Fórmula **1** o una composición que comprende el compuesto.

También son de interés como modalidades de la presente invención las composiciones que comprenden un compuesto de

cualquiera de las modalidades anteriores, así como también cualquier otra modalidad descrita en la presente y cualquier combinación de éstas, y por lo menos un componente adicional seleccionado del grupo que consiste en un surfactante, un diluyente sólido y un diluyente líquido; las composiciones también comprenden, opcionalmente, por lo menos un compuesto o agente adicional biológicamente activo.

Además, destacan como modalidades de la presente invención las composiciones para controlar una plaga de invertebrados, que comprenden un compuesto (es decir, en una cantidad biológicamente eficaz) de cualquiera de las modalidades anteriores, así como cualquier otra modalidad descrita en la presente invención, y cualquier combinación de estas, y al menos un componente adicional seleccionado del grupo que consiste en un surfactante, un diluyente sólido y un diluyente líquido; las composiciones comprenden, además, opcionalmente, al menos un agente o compuesto biológicamente activo (es decir, en una cantidad biológicamente eficaz).

Las modalidades de la invención también incluyen métodos para controlar una plaga de invertebrados; el método comprende poner en contacto la plaga de invertebrados o su hábitat con una cantidad biológicamente eficaz de un compuesto de cualquiera de las modalidades anteriores (por ejemplo, como una composición descrita en la presente).

Algunas modalidades de la invención incluyen, además, una composición que comprende un compuesto de cualquiera de las modalidades anteriores en la forma de una formulación líquida para impregnar el suelo. Las modalidades de la invención también incluyen métodos para controlar una plaga de invertebrados; el método comprende poner en contacto el suelo con una composición líquida, tal como para la impregnación del suelo, que comprende una cantidad biológicamente eficaz de un compuesto de cualquiera de las modalidades anteriores.

Las modalidades de la invención incluyen, además, una composición rociable para controlar una plaga de invertebrados; la composición comprende un compuesto (es decir, en una cantidad biológicamente eficaz) de cualquiera de las modalidades anteriores y un propulsor. Las modalidades de la presente invención incluyen, además, una composición cebo para controlar una plaga de invertebrados; la composición comprende un compuesto (es decir, una cantidad biológicamente eficaz) de cualquiera de las modalidades anteriores, uno o más materiales alimenticios, opcionalmente, un agente atrayente y, opcionalmente, un humectante. Las modalidades de la invención también incluyen un dispositivo para controlar una plaga de invertebrados; el dispositivo comprende la composición de cebo y un alojamiento adaptado para recibir la composición de cebo, en donde el alojamiento tiene por lo menos una abertura

dimensionada para permitir que la plaga de invertebrados pase a través de la abertura para poder tener acceso a la composición de cebo desde un lugar fuera del alojamiento y, en donde, además, el alojamiento está adaptado para colocarse en o cerca de un sitio de actividad potencial o conocida para la plaga de invertebrados.

Las modalidades de la invención también incluyen un método para proteger una semilla contra una plaga de invertebrados; el método comprende poner en contacto la semilla con una cantidad biológicamente eficaz de un compuesto de cualquiera de las modalidades anteriores (por ejemplo, como una composición descrita en la presente).

Las modalidades de la invención incluyen, además, métodos para proteger un animal de una plaga de parásitos invertebrados; los métodos comprenden administrar al animal una cantidad eficaz como parasiticida de una compuesto de cualquiera de las modalidades precedentes.

Las modalidades de la invención incluyen, además, métodos para controlar una plaga de invertebrados; los métodos comprenden poner en contacto la plaga de invertebrados o su ambiente con una cantidad biológicamente eficaz de un compuesto de la Fórmula **1**, un *N*-óxido o una sal de estos, (por ejemplo, como una composición que se describe en la presente descripción), siempre que los métodos no sean

métodos de un tratamiento médico del cuerpo de un ser humano o un animal mediante terapia.

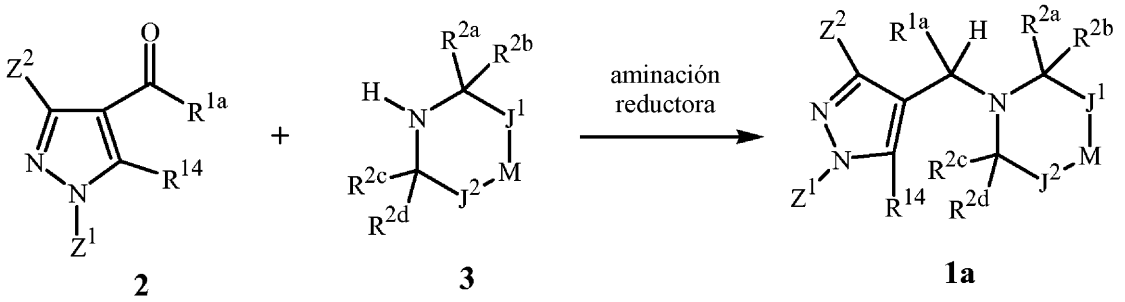
La presente invención también se relaciona con dichos métodos, en donde tal plaga de invertebrados o su ambiente se contacta con una composición que comprende una cantidad biológicamente eficaz de un compuesto de la Fórmula **1**, un *N*-óxido o una sal de estos y, al menos una componente adicional seleccionado del grupo que consiste en surfactantes, diluyentes sólidos y diluyentes líquidos; dicha composición comprende, además, opcionalmente, una cantidad biológicamente eficaz de al menos un compuesto o agente activo biológico adicional, siempre que los métodos no sean métodos de un tratamiento médico del cuerpo de un ser humano o un animal mediante terapia.

Pueden usarse uno o varios de los siguientes métodos o variantes de estos descritos en los Esquemas 1–11 para preparar los compuestos de la Fórmula **1**. Las definiciones de R^{1a}, R^{1b}, R^{2a}, R^{2b}, R^{2c}, R^{2d}, R^{14}, Z^1, Z^2, J^1, J^2 y M en los compuestos de las Fórmulas **1**–**10** a continuación son como se definieron anteriormente en la sección Breve descripción de la invención, a menos que se indique de otra manera. La temperatura ambiente o local se define como de aproximadamente 20–25 °C.

Los compuestos de la Fórmula **1a** (compuestos de la Fórmula **1**, en donde R^{1a} es H, alquilo, cicloalquilo o haloalquilo, y R^{1b} es H) pueden prepararse mediante aminación reductora de los compuestos de carbonilo adecuadamente

sustituidos de la Fórmula **2** con las aminas cíclicas opcionalmente sustituidas de la Fórmula **3** en presencia de reactivos reductores, tales como triacetoxiborohidruro sódico (*ver, por ejemplo, Li, J. et al. Bioorganic & Medicinal Chemistry Letters* **2010**, *20*(16), páginas 4932-4935). La reacción se lleva a cabo, típicamente, en un solvente orgánico inerte, tal como diclorometano, a temperatura ambiente. Este método se muestra en el Esquema 1 y se ejemplifica en la etapa C del Ejemplo de síntesis 2.

Esquema de reacción 1



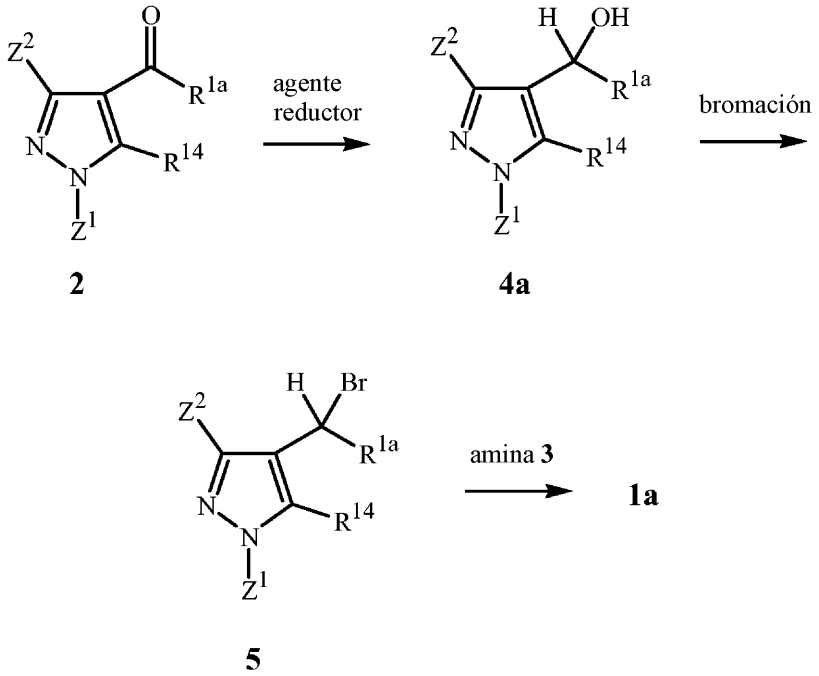
2 **3** **1a**

R^{1a} es H, alquilo, cicloalquilo o haloalquilo

Los compuestos de la Fórmula **1a** pueden prepararse, además, por el método mostrado en el Esquema 2. En este método, un compuesto carbonilo adecuadamente sustituido de la Fórmula **2** se reduce con un agente reductor, tal como hidruro de litio y aluminio, en un solvente inerte, tal como éter dietílico (ver,

por ejemplo, De Luca, Lidia; et al. *Synlett* **2004**, *13*, páginas 2299-2302) para obtener un alcohol intermedio de la Fórmula **4a**. El alcohol se convierte en el bromuro de la Fórmula **5** correspondiente mediante el tratamiento con un reactivo, tal como HBr o PBr_3 (ver, por ejemplo, Toja, Emilio; et al. *European Journal of Medicinal Chemistry* **1982**, *17*(3), páginas 223-227). La reacción del bromuro de la Fórmula **5** con una amina de la Fórmula **3** proporciona el compuesto de la Fórmula **1a** (ver, por ejemplo, Lee, Suk Ho, et al. *Journal of Medicinal Chemistry* **2008** *51*(22), páginas 7216-7233). Este método se ejemplifica en la etapa C del Ejemplo de síntesis 1.

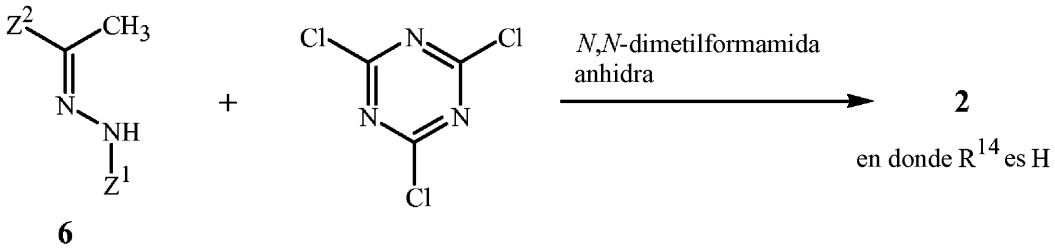
Esquema de reacción 2



2 **4a** **5**

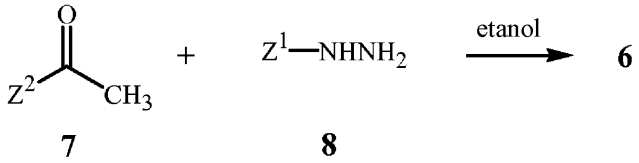
Los compuestos de la Fórmula **2**, en donde R^{14} es H, se pueden preparar al tratar la hidrazona de la Fórmula **6** adecuadamente sustituida en condiciones anhidras con cloruro cianúrico y *N*,*N*-dimetilformamida (ver, por ejemplo, De Luca, Lidia; et al. *Synlett* **2004**, *13*, páginas 2299-2302). Este método se muestra en el Esquema 3 y se ejemplifica en la etapa B del Ejemplo de síntesis 1 y en la etapa B del Ejemplo de síntesis 2.

Esquema de reacción 3



Los compuestos de la Fórmula **6** se pueden preparar mediante una gran variedad de métodos conocidos en la técnica, tales como la condensación de una acetofenona de la Fórmula **7** con una hidrazina de arilo de la Fórmula **8** en etanol de reflujo (ver, por ejemplo, Goeker, Hakan; et al. *Journal of Heterocyclic Chemistry* **2009**, *46*(5), páginas 936-948). Este método se muestra en el Esquema 4 y se ejemplifica en la etapa A del Ejemplo de síntesis 1 y en la etapa A del Ejemplo de síntesis 2.

Esquema de reacción 4

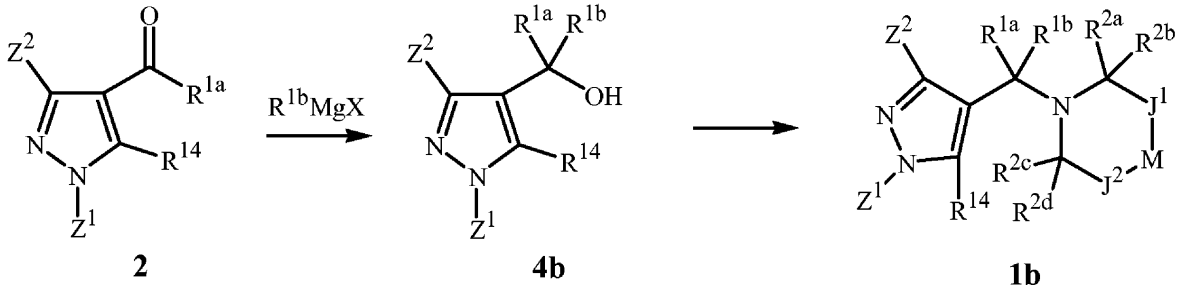


7 8

Los compuestos de las Fórmulas **3**, **7** y **8** se encuentran disponibles comercialmente o se pueden preparar mediante métodos bien establecidos conocidos en la técnica.

Los compuestos de la Fórmula **1b** (compuestos de la Fórmula **1**, en donde R^{1a} es H, alquilo, cicloalquilo o haloalquilo, y R^{1b} es alquilo) se pueden preparar a partir de los compuestos de la Fórmula **2** mediante el método que se muestra en el Esquema 5. En este método, el tratamiento de un compuesto de la Fórmula **2** con un reactivo de Grignard (por ejemplo, $R^{1b}MgX$) en condiciones de reacción conocido en la técnica proporciona el compuesto intermedio de la Fórmula **4b** (ver, por ejemplo, *Journal of Medicinal Chemistry*, **2008**, *51*(22), páginas 7216-7233). La conversión del compuesto de la Fórmula **4b** en el compuesto de la Fórmula **1b** es como se describe en el Esquema 2.

Esquema 5

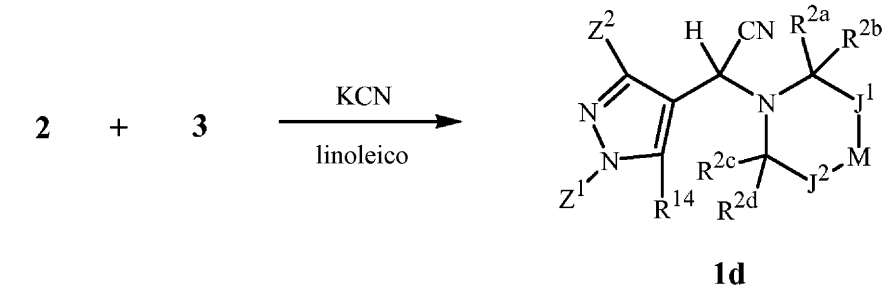


R^{1a} es H, alquilo, cicloalquilo o haloalquilo

R^{1b} es alquilo

Los compuestos de la Fórmula **1d** (compuestos de la Fórmula **1**, en donde R^{1a} es CN y R^{1b} es H) se pueden preparar a partir de los compuestos de la Fórmula **2** mediante el método que se muestra en el Esquema 6. En este método, el tratamiento de un compuesto de la Fórmula **2** con KCN en presencia de una amina de la Fórmula **3** y un ácido, tal como ácido *p*-toluensulfónico, proporciona el compuesto de la Fórmula **1d.**

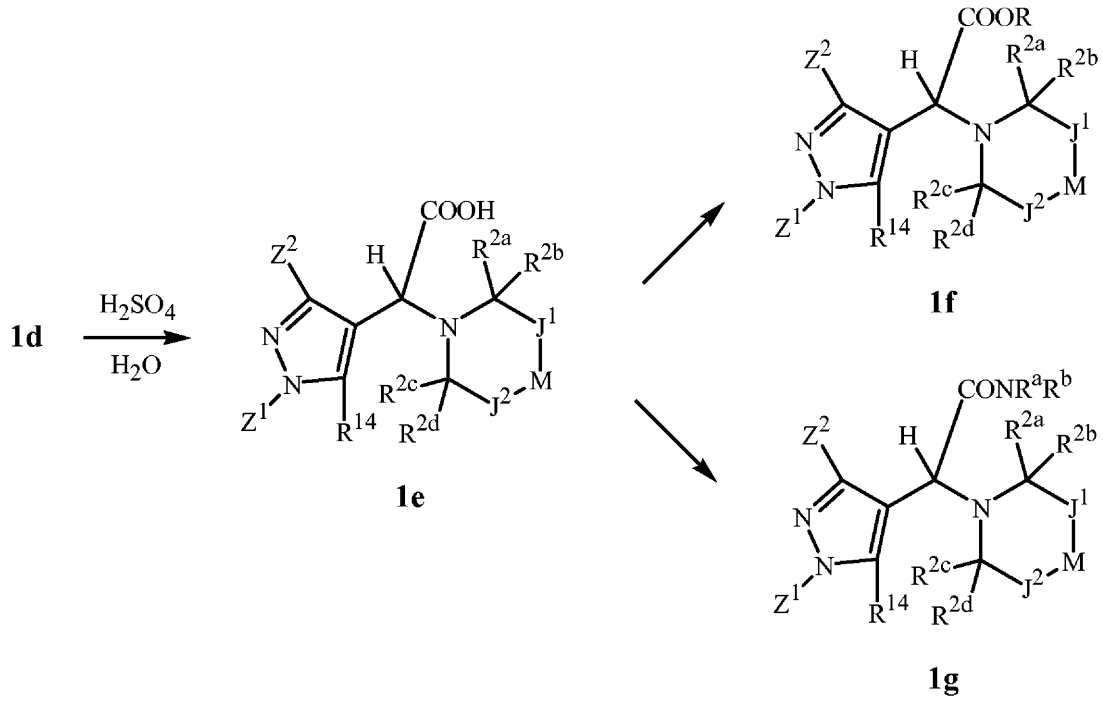
Esquema 6



1d

Los compuestos de la Fórmula **1d** son útiles en la preparación de derivados de ácido carboxílico, éster y amida (ver, por ejemplo, *Arzneimittel-Forschung*, **1981**, *31*(4), páginas 649-655). El Esquema 7 ilustra la preparación de un derivado de ácido carboxílico de la Fórmula **1e** a partir del compuesto de la Fórmula **1d** mediante el tratamiento con ácido sulfúrico acuoso; el compuesto de la Fórmula **1e** puede, a su vez, transformarse en un éster de la Fórmula **1f** o una amida de la Fórmula **1g** mediante métodos conocidos en la técnica.

Esquema 7

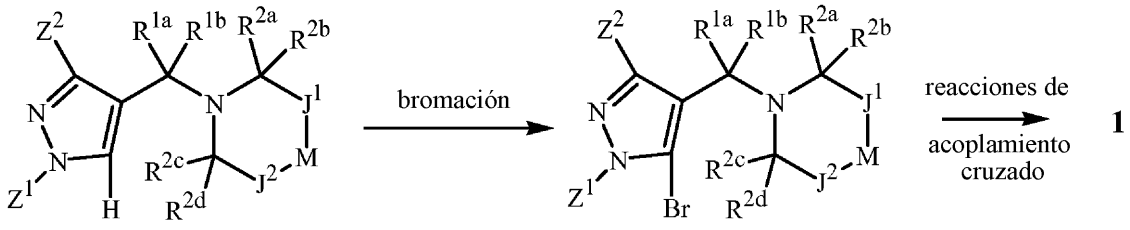


Los compuestos de la Fórmula **1**, en donde R^{1a} es un ciano, éster o grupo amida y R^{1b} es alquilo se pueden

preparar por alquilación de los compuestos correspondientes, en donde R^{1b} es H mediante el tratamiento con una base fuerte seguido por un agente alquilante (ver, por ejemplo, la patente núm. WO 2006/134459).

Los compuestos de la Fórmula **1i** (compuestos de la Fórmula **1**, en donde R^{14} es Br) se pueden preparar a partir de los compuestos de la Fórmula **1h** (compuestos de la Fórmula **1**, en donde R^{14} es H) por bromación en la posición R^{14} del pirazol, tal como se muestra en el Esquema 8. Los métodos típicos de bromación incluyen la reacción con bromo y carbonato sódico en diclorometano a temperaturas menores que 0 °C (ver, por ejemplo, *Bioorganic Medicinal Chemistry Letters* **2008**, *18*(2), páginas 509-512). El intermedio bromuro de la Fórmula **1i** puede transformarse, además, en una gran variedad de otros grupos funcionales mediante métodos conocidos en la técnica, tales como reacciones de acoplamiento cruzado (ver, por ejemplo, *Journal of Medicinal Chemistry*, **2005**, *48*(4), páginas 1132-1144).

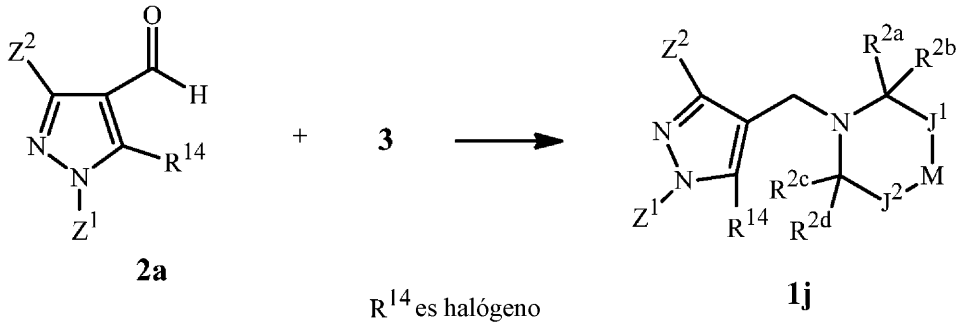
Esquema 8



1h **1i**

Los compuestos de la Fórmula **1j** (compuestos de la Fórmula **1**, en donde R^{14} es halógeno) pueden prepararse por aminación reductora de los compuestos de la Fórmula **2a** (compuestos de la Fórmula **2**, en donde R^{14} es halógeno) con aminas cíclicas de la Fórmula **3** y agentes reductores, tales como triacetoxiborohidruro sódico (ver, por ejemplo, *Bioorganic & Medicinal Chemistry Letters* **2010**, *20*(16), páginas 4932-4935). La reacción se lleva a cabo, típicamente, a temperatura ambiente en un solvente orgánico inerte, tal como diclorometano. Este método se muestra en Esquema 9.

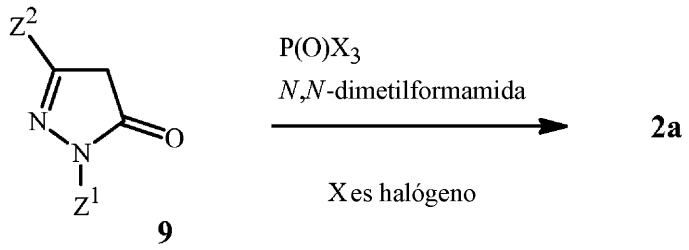
Esquema 9



Los compuestos de la Fórmula **2a** se pueden preparar a partir de los compuestos de la Fórmula **9** mediante el método que se muestra en el Esquema 10. En este método, el tratamiento de un compuesto de la Fórmula **9** con un oxihaluro de fósforo en presencia de *N*,*N*-dimetilformamida proporciona

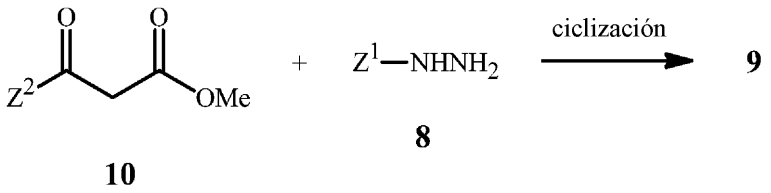
compuestos de la Fórmula **2a** (ver, por ejemplo, Bulgarian Chemical Communications **2009**, *41*(3), páginas 241-247).

Esquema 10



El Esquema 11 ilustra la preparación de compuestos de la Fórmula **9** por ciclización de los compuestos de las Fórmulas **8** y **10**. Este método consiste, típicamente, en dos etapas: la condensación inicial que se lleva a cabo, típicamente, en un solvente inerte, tal como diclorometano, y en presencia de una base, tal como trietilamina, seguido por el tratamiento con un ácido, tal como ácido acético, calentamiento y eliminación de elementos orgánicos volátiles (ver, por ejemplo, *Bioorganic & Medicinal Chemistry* **2010**, *18*(22), páginas 7849-7854). Los compuestos de las Fórmulas **8** y **10** se encuentran disponibles comercialmente o se pueden preparar mediante métodos bien establecidos conocidos en la técnica.

Esquema 11



Los compuestos de Fórmula **1** que contienen los grupos $C(X)R^5$, $C(X)R^{5a}$, $C(X)NR^7R^8$ y $C(X)NR^{7a}R^{8a}$, en donde X es S, pueden prepararse a partir de los compuestos correspondientes de la Fórmula **1**, en donde X es O, por métodos generales conocidos en la técnica que involucran el tratamiento con reactivos tionantes tales como P_4S_{10} o el reactivo de Lawessen (2,4-bis(4-metoxifenil)-1,3-ditia-2,4-difosfetano 2,4-disulfuro).

Los Esquemas 1 a 11 ilustran los métodos para preparar los compuestos de la Fórmula **1** que tienen una gran variedad de sustituyentes. Los compuestos de la Fórmula **1** que tienen sustituyentes distintos a los indicados particularmente para los Esquemas 1 a 11 se pueden preparar mediante métodos generales conocidos en la técnica de química orgánica sintética, que incluyen métodos análogos a los descritos para los Esquemas 1 a 11.

Se reconoce que algunos reactivos y condiciones de reacción descritos anteriormente para la preparación de compuestos de Fórmula **1** pueden no ser compatibles con ciertas funcionalidades presentes en los intermedios. En estos casos la incorporación de secuencias de protección/desprotección o

las interconversiones de grupos funcionales en las síntesis facilitarán la obtención de los productos deseados. El uso y la selección de los grupos protectores serán evidentes para un experto en síntesis de sustancias químicas (ver, por ejemplo, Greene, T. W.; Wuts, P. G. M. *Protective Groups in Organic Synthesis*, 2.° ed.; Wiley: Nueva York, 1991). Una persona con experiencia en la técnica reconocerá que, en algunos casos, después de la introducción de un reactivo determinado, tal como se ilustra en cualquier esquema de reacción individual, puede ser necesario realizar etapas adicionales de síntesis de rutina no descritas en detalle, para completar la síntesis de los compuestos de la Fórmula **1**. Una persona con experiencia en la técnica también reconocerá que puede ser necesario combinar las etapas ilustradas en los esquemas de reacción anteriores en un orden distinto al que implica la secuencia determinada presentada para preparar los compuestos de Fórmula **1**.

Una persona con experiencia en la técnica reconocerá además que los compuestos de la Fórmula **1** y los intermedios descritos en la presente pueden someterse a varias reacciones electrofílicas, nucleofílicas, radicales, organometálicas, oxidación y reducción para adicionar sustituyentes o modificar los sustituyentes existentes.

Sin entrar en otros detalles innecesarios se considera que, basándose en la descripción precedente, una persona con experiencia en la técnica puede utilizar al máximo la

presente invención. Por consiguiente, los siguientes ejemplos de síntesis deben interpretarse como meramente ilustrativos, sin limitar la descripción en ningún sentido. Las etapas de los siguientes ejemplos de síntesis ilustran un procedimiento para cada etapa de una transformación sintética total, y el material de partida para cada etapa puede no haberse preparado necesariamente mediante la ejecución de un preparativo específico cuyo procedimiento se describe en otros ejemplos o en otras etapas. La temperatura ambiente o local se define como de aproximadamente 20–25 °C. Los porcentajes son en peso, excepto para las mezclas de solventes para cromatografía o en donde se indique de otra manera. Las partes y los porcentajes para las mezclas de solventes para cromatografía son en volumen, a menos que se indique de otra manera. MPLC se refiere a cromatografía en líquido de mediana presión sobre gel de sílice. Los espectros de ^{1}H NMR se reportan en ppm menores campo abajo desde el tetrametilsilano; “s” significa singulete, “d” significa doblete, “dd” significa doblete de doblete, “ddd” significa doblete de doblete de doblete, “t” significa triplete, “m” significa multiplete y “br s” significa singulete amplio. Los números de los compuestos se refieren a los compuestos en las Tablas índice A-E.

Ejemplo de síntesis 1

Preparación de 1-[[3-(4-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo (Compuesto número 12)

Etapa A: Preparación de 2-[3-(trifluorometil)fenil]hidrazona de 1-(4-fluorofenil)etanona

A una solución de 4-fluoroacetofenona (5,0 g, 36 mmol) en 200 ml de etanol (200 ml) se agregó hidrazina de 3-(trifluorometil)fenilo (6,370 g, 36,20 mmol). La mezcla de reacción se agitó durante 18 horas, después de ese tiempo los materiales volátiles se eliminaron bajo presión reducida y la mezcla de reacción cruda resultante se agregó a agua (100 ml) y se extrajo con éter dietílico (3 x 200 ml). Los extractos orgánicos combinados se secaron en $MgSO_4$ y se concentraron bajo presión reducida. El residuo sólido resultante se purificó por cromatografía en gel de sílice (acetato de etilo/hexanos) para producir el compuesto base como un sólido (4,78 g). ^{1}H NMR ($CDCl_3$) δ 7,75-7,78 (dd, 2H), 7,42 (d, 2H), 7,36 (d, 1H), 7,32 (br s, NH), 7,06-7,15 (m, 3H), 2,25 (s, 3H).

Etapa B: Preparación de 3-(4-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-carboxaldehído

Se agregó cloruro cianúrico (15,0 g, 81,3 mmol) en una porción a *N*,*N*-dimetilformamida anhidra (100 ml) bajo una atmósfera de nitrógeno. La mezcla de reacción se agitó a temperatura ambiente hasta que ya no se pudo detectar el

cloruro cianúrico mediante UV. Después del consumo total del cloruro cianúrico, una solución de 2-[3-(trifluorometil)fenil]hidrazona de 1-(4-fluorofenil)etanona (4,78 g, 16,1 mmol) en *N*,*N*-dimetilformamida anhidra (25 ml) se agregó a la mezcla de reacción. Después, la mezcla de reacción se agitó durante 18 horas a temperatura ambiente; después, la mezcla de reacción se agregó a la solución acuosa de bicarbonato sódico (200 ml) y se extrajo con éter dietílico (3 x 200 ml). Los extractos orgánicos combinados se lavaron una vez con agua (100 ml), se secaron en $MgSO_4$ y se concentraron bajo presión reducida. El residuo sólido resultante se purificó por cromatografía en gel de sílice (acetato de etilo/hexanos) para producir el compuesto base como un sólido (1,74 g). ^{1}H NMR ($CDCl_3$) δ 10,06 (s, 1H), 8,59 (s, 1H), 8,11 (s, 1H), 7,95-8,00 (m, 1H), 7,86-7,89 (m, 2H), 7,66 (d, 2H), 7,21 (t, 2H).

Etapa C: Preparación de 1-[[3-(4-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo

A una suspensión de hidruro de litio y aluminio (1,0 g, 26 mmol) en tetrahidrofurano (25 ml) se agregó una solución de 3-(4-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-carboxaldehído (1,74 g, 5,21 mmol) en tetrahidrofurano (25 ml). Se dejó que la mezcla de reacción se agitara durante 18 horas, después, se agregó una solución acuosa de NaOH al 50 % (1 ml) seguido por agua (1 ml). Se dejó que la

mezcla de reacción se agitara durante 1 hora, se agregó sulfato magnésico y se filtró la mezcla de reacción. El filtrado se concentró bajo presión reducida para producir el alcohol intermedio crudo (1,58 g). Este alcohol se disolvió en éter dietílico (100 ml) y se agregó tribromuro de fósforo (1,276 g, 4,714 mmol) gota a gota. Se dejó que la mezcla de reacción se agitara durante 18 horas a temperatura ambiente en presencia de nitrógeno. Después, la mezcla de reacción se agregó a agua (100 ml) y se extrajo con éter dietílico (3 x 125 ml). Los extractos orgánicos combinados se secaron ($MgSO_4$), se concentraron bajo presión reducida y el residuo sólido resultante se purificó por cromatografía en gel de sílice (acetato de etilo/hexanos) para producir el bromuro intermedio (632 mg). Una porción del bromuro intermedio (200 mg, 0,504 mmol) y piperidina-4-carbonitrilo (300 mg, 2,73 mmol) se combinaron en acetonitrilo (20 ml) con carbonato potásico (365 mg, 2,73 mmol). La mezcla de reacción se agitó a temperatura ambiente durante 18 horas. Después, la mezcla de reacción se agregó a agua (100 ml) y se extrajo con acetato de etilo (3 x 100 ml). Los extractos orgánicos combinados se secaron ($MgSO_4$), se concentraron bajo presión reducida y el residuo sólido resultante se purificó por cromatografía en gel de sílice (acetato de etilo/hexanos) para producir el compuesto base (203 mg), un compuesto de la presente invención. ^1H NMR ($CDCl_3$) d 8,03 (s,

1H), 7,90-7,94 (m, 4H), 7,52-7,61 (m, 2H), 7,14 (t, 2H), 3,49 (s, 2H), 2,71 (m, 3H), 2,43 (m, 2H), 1,86-1,97 (m, 4H).

Ejemplo de síntesis 2

Preparación de metil 1-[[1-(2,4-difluorofenil)-3-(2-fluoro-4-metilfenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarboxilato (Compuesto número 16)

Etapa A: Preparación de 2-(2,4-difluorofenil)hidrazona de 1-(2-fluoro-4-metilfenil)etanona

A una solución de 2-fluoro-4-metilacetofenona (4,210 g, 27,70 mmol) en etanol (200 ml) se agregó sal de HCl de hidrazina de 2,4-difluorofenilo (5,0 g, 28 mmol). A esta mezcla de reacción se agregó acetato sódico (2,044, 24,93 mmol) en una porción. Esta mezcla de reacción se agitó durante 18 horas, después de ese tiempo los materiales volátiles se eliminaron bajo presión reducida y la mezcla de reacción cruda resultante se agregó a agua (100 ml) y se extrajo con éter dietílico (3 x 200 ml). Los extractos orgánicos se combinaron, se secaron ($MgSO_4$), se evaporaron bajo presión reducida y el residuo sólido se purificó por cromatografía en gel de sílice (acetato de etilo/hexanos) para producir el compuesto base como un sólido (7,417 g). ^1H NMR ($CDCl_3$) d 7,49-7,56 (m, 2H), 7,34 (br s, NH) 6,97 (d, 1H), 6,80-6,91 (m, 3H), 2,37 (s, 3H), 2,28 (s, 3H).

Etapa B: Preparación de 1-(2,4-difluorofenil)-3-(2-fluoro-4-metilfenil)-1*H*-pirazol-4-carboxaldehído

Se agregó cloruro cianúrico (15,0 g, 81,3 mmol) en una porción a *N*,*N*-dimetilformamida anhidra (75 ml) bajo una atmósfera de nitrógeno. Se dejó que la mezcla de reacción se agitara a temperatura ambiente hasta que ya no se pudo detectar el cloruro cianúrico mediante UV. Después del consumo total del cloruro cianúrico, se agregó 2-(2,4-difluorofenil)hidrazona de 1-(2-fluoro-4-metilfenil)etanona (7,417 g, 26,68 mmol) en *N*,*N*-dimetilformamida anhidra (25 ml). Se dejó que la mezcla de reacción se agitara durante 18 horas a temperatura ambiente, después, la mezcla de reacción se agregó a la solución acuosa de bicarbonato sódico (200 ml) y se extrajo con éter dietílico (3 x 200 ml). Los extractos orgánicos combinados se lavaron una vez con agua (100 ml), se secaron ($MgSO_4$), se evaporaron bajo presión reducida y el residuo sólido se purificó por cromatografía en gel de sílice (acetato de etilo/hexanos) para producir el compuesto base como un sólido (6,877 g). ^1H NMR ($CDCl_3$) d 9,85 (s, 1H), 8,49 (s, 1H), 7,89-7,96 (m, 1H), 7,49 (t, 1H), 6,99-7,06 (m, 4H), 2,39 (s, 3H).

Etapa C: Preparación de metil 1-[[1-(2,4-difluorofenil)-3-(2-fluoro-4-metilfenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarboxilato

A una solución de éster metílico del ácido piperidina-4-carboxílico (300 mg, 1,80 mmol) en diclorometano (25 ml) se agregó 1-(2,4-difluorofenil)-3-(2-fluoro-4-metilfenil)-1*H*-pirazol-4-carboxaldehído (300 mg, 0,949 mmol). Se dejó que la mezcla de reacción se agitara durante 1 hora y, después, se agregó triacetoxiborohidruro sódico (358 mg, 1,90 mmol) en una porción. La mezcla de reacción se agitó durante 18 horas y, después, se agregó a 100 ml de agua (100 ml) y se extrajo con diclorometano (3 x 100 ml). Los extractos orgánicos combinados se secaron ($MgSO_4$), se evaporaron bajo presión reducida y el residuo se purificó por cromatografía en gel de sílice (acetato de etilo/hexanos) para producir el compuesto base (144,3 mg), un compuesto de la presente invención. ^{1}H NMR ($CDCl_3$) d 7,98 (d, 1H), 7,90-7,94 (m, 1H), 7,48 (t, 1H), 6,96-7,03 (m, 4H), 3,65 (s, 3H), 3,46 (s, 2H), 2,84-2,87 (m, 2H), 2,41 (s, 3H) 2,24-2,31 (m, 1H), 1,96-2,01 (m, 2H), 1,83-1,86 (m, 2H), 1,67-1,74 (m, 2H).

Ejemplo de síntesis 3

Preparación de *N*-[(3*S*)-1-[[1-(3,4-diclorofenil)-3-(4-fluorofenil)-1*H*-pirazol-4-il]metil]-3-pirrolidinil]ciclopropanocarboxamida (número de compuesto 869)

Etapa A: Preparación de *N*-[(3*S*)-pirrolidinil]ciclopropanocarboxamida

A una solución de ácido ciclopropanocarboxílico (5,0 g, 58 mmol) en diclorometano (100 ml) se agregó cloruro de oxalilo (36,918 g, 290,70 mmol), seguido por la adición de 100 mg de *N*,*N*-dimetilformamida. Hubo producción de burbujas y se dejó que la reacción se agitara a temperatura ambiente durante 3 horas, después de eso, la mezcla de reacción se concentró bajo presión reducida para producir un sólido aceitoso blanco. Este sólido crudo se disolvió en diclorometano (100 ml), y esta solución se agregó gota a gota a una solución de (3*S*)-amino-1-(fenilmetil)pirrolidina (5,0 g, 28 mmol) en diclorometano (100 ml) a 10 °C en el transcurso de 15 minutos. Después, se agregó trietilamina (6,459 g, 63,95 mmol) a la mezcla de reacción, se eliminó el baño frío y la mezcla de reacción se agitó durante 18 horas. Después, la mezcla de reacción se agregó a una solución saturada acuosa de bicarbonato sódico y se extrajo con diclorometano (3 x 100 ml). Las capas orgánicas se combinaron y se secaron sobre sulfato de magnesio, se filtraron y se concentraron bajo presión reducida para producir un sólido color café que se recristalizó a partir de 1-clorobutano para dar 2,546 g del producto intermedio *N*-[(3*S*)-1-(fenilmetil)-3-pirrolidinil]ciclopropanocarboxamida. Este intermedio (2,546 g, 10,43 mmol) se agregó a una solución depurada con nitrógeno de etanol (100 ml) y agua (3 ml),

seguido por la adición de Pd/C al 5 % (500 mg, que contiene agua al 63,79 %). La mezcla de reacción se agitó durante 1 minuto y, después, se agregó formiato amónico (3,100 g, 50,0 mmol) en una porción. Después, la mezcla de reacción se calentó hasta reflujo durante 3 horas, se enfrió hasta temperatura ambiente y se filtró a través de Celite®. La almohadilla de Celite® se lavó con diclorometano (200 ml) y el filtrado orgánico se secó en sulfato magnésico, se filtró y se concentró bajo presión reducida para producir el compuesto base como un sólido aceitoso claro (1,521 g). ^{1}H RMN ($CDCl_3$): d 6,38 (br s, 2H), 4,40-4,45 (m, 1H), 3,10-3,14 (m, 2H), 2,95-2,99 (m, 2H), 2,86-2,95 (m, 1H) 2,12-2,18 (m, 1H), 1,67-1,70 (m, 1H), 0,93-0,96 (m, 2H), 0,70-0,73 (m, 2H).

Etapa B: Preparación de 1-(3,4-diclorofenil)-3-(4-fluorofenil)-1*H*-pirazol-4-carboxaldehído

El clorhidrato de 3,4-diclorofenilhidrazina (5,86 g, 27,4 mmol) y el acetato sódico (2,025 g, 24,70 mmol) se suspendieron en etanol (100 ml) y la mezcla de reacción se agitó a temperatura ambiente durante 5 minutos. Se agregó 4-fluoroacetofenona (3,79 g, 27,4 mmol) a la mezcla de reacción en una porción y la mezcla de reacción se agitó a temperatura ambiente durante 18 horas. Después, la mezcla de reacción se agregó a agua (100 ml) y se extrajo con diclorometano (3 x 200 ml). Los extractos orgánicos combinados se secaron en sulfato magnésico, se filtraron y se concentraron bajo

presión reducida para producir el intermedio hidrazina (7,976 g). Esta hidrazona se agregó a *N*,*N*-dimetilformamida (50 ml). Por separado, se agregó cloruro cianúrico (14,866 g, 80,574 mmol) en una porción a *N*,*N*-dimetilformamida (100 ml) y la mezcla de reacción se agitó durante 20 minutos. A esta suspensión densa blanca se agregó en una porción la solución de hidrazina de *N*,*N*-dimetilformamida preparada previamente. La mezcla de reacción se agitó con fuerza bajo una atmósfera de nitrógeno a temperatura ambiente durante 18 horas. Después, la mezcla de reacción se agregó a una suspensión acuosa de bicarbonato sódico hasta que la mezcla de reacción alcanzó un pH de 8,0. Después, la suspensión acuosa se extrajo con éter dietílico (2 x 500 ml). Los extractos de éter combinados se lavaron con agua (2 x 200 ml), se secaron en sulfato magnésico, se filtraron y se concentraron bajo presión reducida para producir un producto crudo, que se trituró con éter dietílico y se recolectó por filtración para producir el compuesto base como un sólido blanco (8,179 g). ^{1}H RMN ($CDCl_3$): d 10,04 (s, 1H), 8,51 (s, 1H), 7,98 (s, 1H), 7,84-7,87 (m, 2H), 7,58-7,65 (m, 2H), 7,20 (t, 2H).

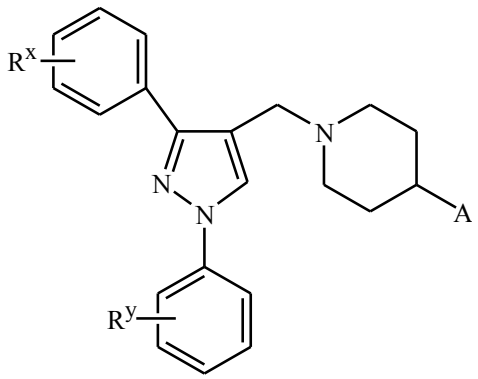
Etapa C: Preparación de *N*-[(3*S*)-1-[[1-(3,4-diclorofenil)-3-(4-fluorofenil)-1*H*-pirazol-4-il]metil]-3-pirrolidinil]ciclopropanocarboxamida

El 1-(3,4-diclorofenil)-3-(4-fluorofenil)-1*H*-pirazol-4-carboxaldehído (2,34 g, 6,99 mmol) se disolvió en

diclorometano (50 ml) y se agregó *N*-[(3*S*)-pirrolidinil]ciclopropanocarboxamida (1,18 g, 7,683 mmol). La mezcla de reacción se agitó durante 1 hora y, después, se agregó triacetoxiborohidruro sódico (4,88 g, 23,0 mmol) en una porción. Se dejó que la mezcla de reacción se agitara durante 18 horas y, después, se agregó a agua (100 ml) y se extrajo con diclorometano (3 x 100 ml). Los extractos orgánicos se combinaron, se secaron en sulfato magnésico, se concentraron bajo presión reducida y el residuo se purificó por cromatografía en gel de sílice (acetato de etilo/hexano) para producir el compuesto base (1,841 g), un compuesto de la presente invención. ^{1}H RMN ($CDCl_3$): d 7,87-7,91 (m, 4H), 7,59 (d, 1H), 7,52 (d, 1H), 7,15 (t, 2H), 5,81 (br d, 1H), 4,46-4,48 (m, 1H), 3,45 (cuadruplete ab, 2H), 2,91-2,95 (m, 1H), 2,56-2,66 (m, 2H), 2,28-2,34 (m, 2H), 1,60-1,65 (m, 1H), 1,21-1,26 (m, 1H), 0,92-0,95 (m, 2H), 0,69-0,73 (m, 2H).

Por medio de los procedimientos descritos en la presente descripción, combinados con métodos conocidos en la técnica, se pueden preparar los siguientes compuestos de las Tablas 1 a 6b. En las Tablas 1 a 6b que figuran a continuación se usan las siguientes abreviaturas: Me significa metilo y Et significa etilo. R^x y R^y representan un o una combinación de sustituyentes.

Tabla 1



A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl

2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	$3-CF_3$	2-F	$3-OCF_3$
2-Cl	3-Br	2-Cl	$3-CF_3$	2-Cl	$3-OCF_3$
2-Br	3-Br	2-Br	$3-CF_3$	2-Br	$3-OCF_3$
2-Me	3-Br	2-Me	$3-CF_3$	2-Me	$3-OCF_3$
$2-CF_3$	3-Br	$2-CF_3$	$3-CF_3$	$2-CF_3$	$3-OCF_3$
4-F	3-Br	4-F	$3-CF_3$	4-F	$3-OCF_3$
4-Cl	3-Br	4-Cl	$3-CF_3$	4-Cl	$3-OCF_3$
4-Br	3-Br	4-Br	$3-CF_3$	4-Br	$3-OCF_3$
2-F, 4-F	3-Br	2-F, 4-F	$3-CF_3$	2-F, 4-F	$3-OCF_3$
2-Cl, 4-F	3-Br	2-Cl, 4-F	$3-CF_3$	2-Cl, 4-F	$3-OCF_3$
2-Me, 4-F	3-Br	2-Me, 4-F	$3-CF_3$	2-Me, 4-F	$3-OCF_3$
2-F, 6-F	3-Br	2-F, 6-F	$3-CF_3$	2-F, 6-F	$3-OCF_3$
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	$3-CF_3$	2-Cl, 6-Cl	$3-OCF_3$
2-Me, 6-Me	3-Br	2-Me, 6-Me	$3-CF_3$	2-Me, 6-Me	$3-OCF_3$
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-OCF_3$
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
$2-CF_3$	4-F	$2-CF_3$	4-Cl	$2-CF_3$	4-Br

4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F

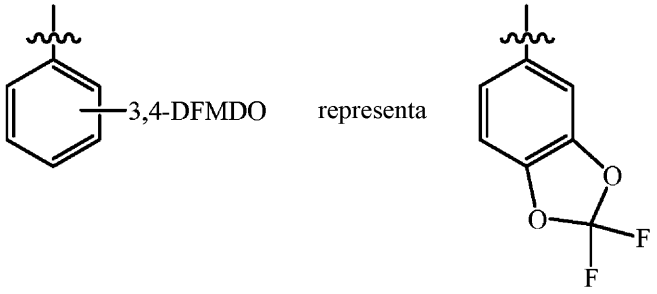
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2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl

2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl

2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F

2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

* 3,4-DFMDO es 3,4-difluorometilendioxi, tal como se muestra a continuación:



A es CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl

2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br

4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F

2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl

2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F

2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A es CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3

4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br

2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3

4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl

4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F

2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl

2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl

4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3

2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F

4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3

2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl

2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F

2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl

2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A es C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl

2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br

4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F

2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl

2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F

2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3

4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br

2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3

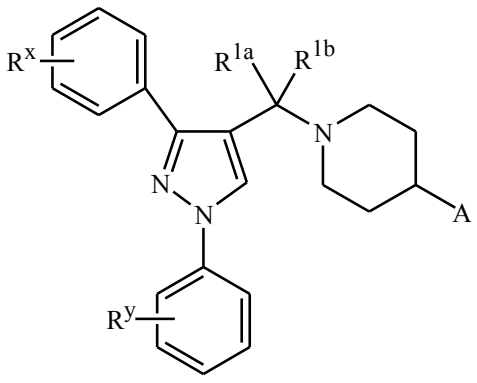
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4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl

4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F

2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl

2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

Tabla 2



R^{1a} es H, R^{1b} es ciano, A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es ciano, A es CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es ciano, A es CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es ciano, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es ciano, A es C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es ciano, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es Me, A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a}es H, R^{1b} es Me, A es CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es Me, A es CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es Me, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	$2-CF_3$	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es Me, A es C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es Me ciano, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es CO_2Me, A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es CO_2Me, A es CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es CO_2Me, A es CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es CO_2Me, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	$2-CF_3$	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es CO_2Me, A es C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es CO_2Me, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es Me, R^{1b} es Me, A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es Me, R^{1b} es Me, A es CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es Me, R^{1b} es Me, A es CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es Me, R^{1b} es Me, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	$2-CF_3$	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es Me, R^{1b} es Me, A es C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

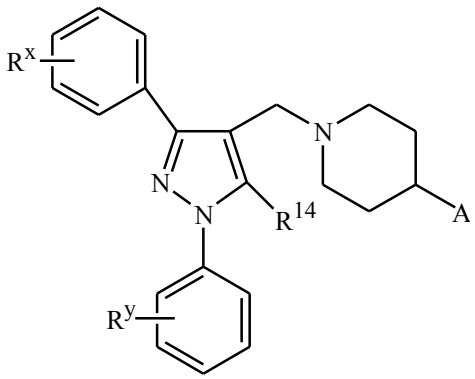
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es Me, R^{1b} es Me, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

Tabla 3



R^{14} es F, A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl

2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es F, A es CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl

2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es F, A es CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es F, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es F, A es C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es F, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	$2-CF_3$	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	$2-CF_3$	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Br, A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Br, A es CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Br, A es CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl

2-Me	4-Cl	$2\text{-}CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3\text{-}CF_3$	$2\text{-}CF_3$	$3\text{-}CF_3$	2-F, 4-F	$3\text{-}CF_3$
2-Me	$4\text{-}CF_3$	$2\text{-}CF_3$	$4\text{-}CF_3$	2-F, 4-F	$4\text{-}CF_3$
2-Me	$4\text{-}OCF_3$	$2\text{-}CF_3$	$4\text{-}OCF_3$	2-F, 4-F	$4\text{-}OCF_3$
2-Me	3-Cl, 4-Cl	$2\text{-}CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	$2\text{-}CF_3$	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	$3\text{-}CF_3$, 4-Cl	$2\text{-}CF_3$	$3\text{-}CF_3$, 4-Cl	2-F, 4-F	$3\text{-}CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2\text{-}CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3\text{-}CF_3$	2-F, 4-F, 6-F	$3\text{-}CF_3$	4-F	$3\text{-}CF_3$
2-F, 6-F	$4\text{-}CF_3$	2-F, 4-F, 6-F	$4\text{-}CF_3$	4-F	$4\text{-}CF_3$
2-F, 6-F	$4\text{-}OCF_3$	2-F, 4-F, 6-F	$4\text{-}OCF_3$	4-F	$4\text{-}OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Br, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl

2-Me	3-Cl, 4-CF_3	$2-CF_3$	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	$2-CF_3$	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Br, A es C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Br, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Me, A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Me, A es CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	$2-CF_3$	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Me, A es CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Me, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Me, A es C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Me, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es NH_2, A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es NH_2, A es CO_2Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, $4-CF_3$	$2-CF_3$	3-Cl, $4-CF_3$	2-F, 4-F	3-Cl, $4-CF_3$
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es NH_2, A es CO_2Et

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es NH_2, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es NH_2, A es C(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

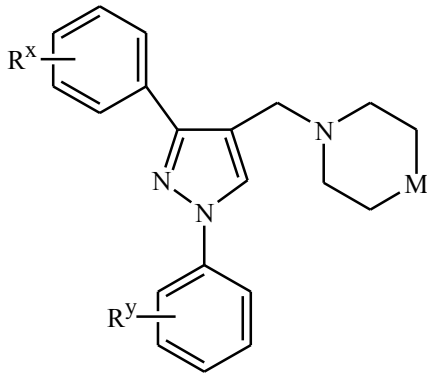
R^{14} es NH_2, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

Tabla 4



M es O

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F,	4-Cl	4-F	4-Cl

		4-F, 6-F			
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es S

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3

6-F	6-F	
2-F, 4-CF_3	2-F, 4-F, 4-CF_3	4-F 4-CF_3
6-F	6-F	
2-F, 4-OCF_3	2-F, 4-F, 4-OCF_3	4-F 4-OCF_3
6-F	6-F	
2-F, 3-Cl, 4-Cl	2-F, 4-F, 3-Cl, 4-Cl	4-F 3-Cl, 4-Cl
6-F	6-F	
2-F, 3-Cl, 4-CF_3	2-F, 4-F, 3-Cl, 4-CF_3	4-F 3-Cl, 4-CF_3
6-F	6-F	
2-F, 3-CF_3, 4-Cl	2-F, 4-F, 3-CF_3, 4-Cl	4-F 3-CF_3, 4-Cl
6-F	6-F	
2-F, 3-Cl, 4-F	2-F, 4-F, 3-Cl, 4-F	4-F 3-Cl, 4-F
6-F	6-F	

M es S(O)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3

2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F,	4-Cl	4-F	4-Cl

			6-F		
2-F, 6-F		$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F		$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F		$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl		2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl,	$4-CF_3$	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	$3-CF_3$,	4-Cl	2-F, 4-F, 6-F	$3-CF_3$, 4-Cl	4-F	$3-CF_3$, 4-Cl
2-F, 6-F	3-Cl,	4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es $S(O)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	$3-CF_3$	2-Cl	$3-CF_3$	2-Br	$3-CF_3$
2-F	$4-CF_3$	2-Cl	$4-CF_3$	2-Br	$4-CF_3$
2-F	$4-OCF_3$	2-Cl	$4-OCF_3$	2-Br	$4-OCF_3$
2-F	3-Cl,	2-Cl	3-Cl,	2-Br	3-Cl,

	4-Cl		4-Cl		4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es NMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl,	2-Br	3-Cl, 4-CF_3

			$4-CF_3$		
2-F	$3-CF_3$, 4-Cl	2-Cl	$3-CF_3$, 4-Cl	2-Br	$3-CF_3$, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, $4-CF_3$	$2-CF_3$	3-Cl, $4-CF_3$	2-F, 4-F	3-Cl, $4-CF_3$
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F,	$3-CF_3$	4-F	$3-CF_3$

		6-F			
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(fenilo)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl

2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(Me)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F,	3-Cl	4-F	3-Cl

		6-F			
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es $CH(CF_3)$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3

2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl

2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(OC(O)Me)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3

2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-	4-Cl	4-F	4-Cl

		F, 6-F			
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(SMe)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-	2-Cl	3-Cl, 4-	2-Br	3-Cl, 4-

	Cl		Cl		Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(S(O)Me)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-	3-CF_3	4-F	3-CF_3

		F, 6-F			
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es $CH(S(O)_2Me)$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-	2-Cl	3-Cl, 4-	2-Br	3-Cl, 4-

	CF_3		CF_3		CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3

2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es $CH(OS(O)_2Me)$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3

2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-	4-CF_3	4-F	4-CF_3

		F, 6-F			
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es $CH(C^1CH)$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-	2-Cl	3-CF_3,	2-Br	3-CF_3,

	Cl		4-Cl		4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es $CH(CH=CH_2)$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-	4-OCF_3	4-F	4-OCF_3

		F, 6-F			
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(2-piridinilo)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-	2-Cl	3-Cl, 4-	2-Br	3-Cl, 4-

	F		F		F
2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, $4-CF_3$	$2-CF_3$	3-Cl, $4-CF_3$	2-F, 4-F	3-Cl, $4-CF_3$
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$

2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(3-piridinilo)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	$2\text{-}CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2\text{-}CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3\text{-}CF_3$	$2\text{-}CF_3$	$3\text{-}CF_3$	2-F, 4-F	$3\text{-}CF_3$
2-Me	$4\text{-}CF_3$	$2\text{-}CF_3$	$4\text{-}CF_3$	2-F, 4-F	$4\text{-}CF_3$
2-Me	$4\text{-}OCF_3$	$2\text{-}CF_3$	$4\text{-}OCF_3$	2-F, 4-F	$4\text{-}OCF_3$
2-Me	3-Cl, 4-Cl	$2\text{-}CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, $4\text{-}CF_3$	$2\text{-}CF_3$	3-Cl, $4\text{-}CF_3$	2-F, 4-F	3-Cl, $4\text{-}CF_3$
2-Me	$3\text{-}CF_3$, 4-Cl	$2\text{-}CF_3$	$3\text{-}CF_3$, 4-Cl	2-F, 4-F	$3\text{-}CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2\text{-}CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3\text{-}CF_3$	2-F, 4-F, 6-F	$3\text{-}CF_3$	4-F	$3\text{-}CF_3$
2-F, 6-F	$4\text{-}CF_3$	2-F, 4-F, 6-F	$4\text{-}CF_3$	4-F	$4\text{-}CF_3$
2-F, 6-F	$4\text{-}OCF_3$	2-F, 4-F, 6-F	$4\text{-}OCF_3$	4-F	$4\text{-}OCF_3$
2-F, 6-F	3-Cl, 4-	2-F, 4-	3-Cl, 4-	4-F	3-Cl, 4-

	Cl	F, 6-F	Cl		Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(5-pirimidinilo)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl

2-Me	4-Cl	$2\text{-}CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3\text{-}CF_3$	$2\text{-}CF_3$	$3\text{-}CF_3$	2-F, 4-F	$3\text{-}CF_3$
2-Me	$4\text{-}CF_3$	$2\text{-}CF_3$	$4\text{-}CF_3$	2-F, 4-F	$4\text{-}CF_3$
2-Me	$4\text{-}OCF_3$	$2\text{-}CF_3$	$4\text{-}OCF_3$	2-F, 4-F	$4\text{-}OCF_3$
2-Me	3-Cl, 4-Cl	$2\text{-}CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, $4\text{-}CF_3$	$2\text{-}CF_3$	3-Cl, $4\text{-}CF_3$	2-F, 4-F	3-Cl, $4\text{-}CF_3$
2-Me	$3\text{-}CF_3$, 4-Cl	$2\text{-}CF_3$	$3\text{-}CF_3$, 4-Cl	2-F, 4-F	$3\text{-}CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2\text{-}CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3\text{-}CF_3$	2-F, 4-F, 6-F	$3\text{-}CF_3$	4-F	$3\text{-}CF_3$
2-F, 6-F	$4\text{-}CF_3$	2-F, 4-F, 6-F	$4\text{-}CF_3$	4-F	$4\text{-}CF_3$
2-F, 6-F	$4\text{-}OCF_3$	2-F, 4-F, 6-F	$4\text{-}OCF_3$	4-F	$4\text{-}OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(2-imidazolilo)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl

2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-	2-F, 4-	3-Cl, 4-	4-F	3-Cl, 4-

	CF_3	F, 6-F	CF_3		CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(1-(1,2,4-triazolilo))

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3

2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

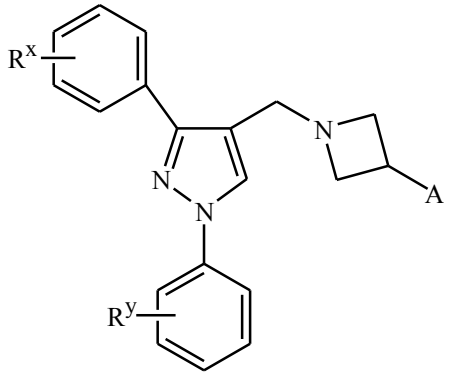
M es CH(2-(1,3,4-oxadiazolilo))

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3

2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-	2-F, 4-	3-CF_3,	4-F	3-CF_3,

	Cl	F, 6-F	4-Cl		4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

Tabla 5a



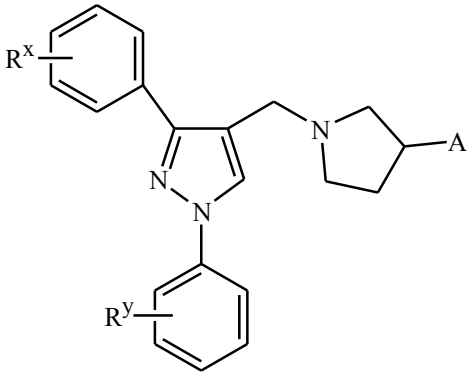
A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-

					Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, $4-CF_3$	$2-CF_3$	3-Cl, $4-CF_3$	2-F, 4-F	3-Cl, 4-CF_3
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

		F, 6-F			
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

Tabla 5b-1



A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl

4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3

2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br

2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-	3-F, 4-F

Me				Me	
2-F, 4-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, $4-CF_3$
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, $4-CF_3$
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, $4-CF_3$
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, $4-CF_3$
$2-CF_3$	3-F, 4-Cl	$2-CF_3$	3-F, 4-Br	$2-CF_3$	3-F, $4-CF_3$
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, $4-CF_3$
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, $4-CF_3$
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, $4-CF_3$
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, $4-CF_3$
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, $4-CF_3$
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, $4-CF_3$
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, $4-CF_3$
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, $4-CF_3$
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, $4-CF_3$
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, $4-CF_3$
2-F	3-F, 4-	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl

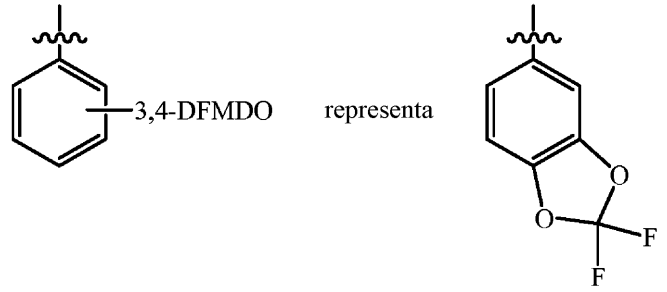
	OCF_3				
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-	3-F, 4-	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-	3-Cl, 4-Cl

Cl	OCF_3			Cl	
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F

F	CF_3			F	
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-	4-Cl	3,4-	2-F, 6-F	3,4-DFMDO*

	DFMDO*		DFMDO*		
2-Br	3,4-	4-Br	3,4-	2-Cl, 6-	3,4-DFMDO*
	DFMDO*		DFMDO*	Cl	
2-Me	3,4-	2-F, 4-F	3,4-	2-Me, 6-	3,4-DFMDO*
	DFMDO*		DFMDO*	Me	
2-CF_3	3,4-	2-Cl, 4-F	3,4-	2-F, 4-	3,4-DFMDO*
	DFMDO*		DFMDO*	F, 6-F	

* 3,4-DFMDO es 3,4-difluorometilendioxi, tal como se muestra a continuación:



A es $NHC(O)CH(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl

4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3

2-Me, 4-F	3-Br	2-Me, 4-F	$3-CF_3$	2-Me, 4-F	$3-OCF_3$
2-F, 6-F	3-Br	2-F, 6-F	$3-CF_3$	2-F, 6-F	$3-OCF_3$
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	$3-CF_3$	2-Cl, 6-Cl	$3-OCF_3$
2-Me, 6-Me	3-Br	2-Me, 6-Me	$3-CF_3$	2-Me, 6-Me	$3-OCF_3$
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-OCF_3$
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
$2-CF_3$	4-F	$2-CF_3$	4-Cl	$2-CF_3$	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br

2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F

2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl

2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl

2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F

2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*

2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A es $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl

Me				Me	
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br

2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F

2-Cl, 4-F	$4-CF_3$		2-Cl, 4-F	$4-OCF_3$		2-Cl, 4-F	3-F, 4-F	
2-Me, 4-F	$4-CF_3$		2-Me, 4-F	$4-OCF_3$		2-Me, 4-F	3-F, 4-F	
2-F, 6-F	$4-CF_3$		2-F, 6-F	$4-OCF_3$		2-F, 6-F	3-F, 4-F	
2-Cl, 6-Cl	$4-CF_3$		2-Cl, 6-Cl	$4-OCF_3$		2-Cl, 6-Cl	3-F, 4-F	
2-Me, 6-Me	$4-CF_3$		2-Me, 6-Me	$4-OCF_3$		2-Me, 6-Me	3-F, 4-F	
2-F, 4-F, 6-F	$4-CF_3$		2-F, 4-F, 6-F	$4-OCF_3$		2-F, 4-F, 6-F	3-F, 4-F	
2-F	3-F, 4-Cl		2-F	3-F, 4-Br		2-F	3-F,	$4-CF_3$
2-Cl	3-F, 4-Cl		2-Cl	3-F, 4-Br		2-Cl	3-F,	$4-CF_3$
2-Br	3-F, 4-Cl		2-Br	3-F, 4-Br		2-Br	3-F,	$4-CF_3$
2-Me	3-F, 4-Cl		2-Me	3-F, 4-Br		2-Me	3-F,	$4-CF_3$
$2-CF_3$	3-F, 4-Cl		$2-CF_3$	3-F, 4-Br		$2-CF_3$	3-F,	$4-CF_3$
4-F	3-F, 4-Cl		4-F	3-F, 4-Br		4-F	3-F,	$4-CF_3$
4-Cl	3-F, 4-Cl		4-Cl	3-F, 4-Br		4-Cl	3-F,	$4-CF_3$
4-Br	3-F, 4-Cl		4-Br	3-F, 4-Br		4-Br	3-F,	$4-CF_3$
2-F, 4-F	3-F, 4-Cl		2-F, 4-F	3-F, 4-Br		2-F, 4-F	3-F,	$4-CF_3$
2-Cl, 4-F	3-F, 4-Cl		2-Cl, 4-F	3-F, 4-Br		2-Cl, 4-F	3-F,	$4-CF_3$
2-Me, 4-F	3-F, 4-Cl		2-Me, 4-F	3-F, 4-Br		2-Me, 4-F	3-F,	$4-CF_3$
2-F, 6-F	3-F, 4-Cl		2-F, 6-F	3-F, 4-Br		2-F, 6-F	3-F,	$4-CF_3$
2-Cl, 6-Cl	3-F, 4-Cl		2-Cl, 6-Cl	3-F, 4-Br		2-Cl, 6-Cl	3-F,	$4-CF_3$
2-Me, 6-Me	3-F, 4-Cl		2-Me, 6-Me	3-F, 4-Br		2-Me, 6-Me	3-F,	$4-CF_3$

Me				Me	
2-F, 4-F,	3-F, 4-Cl	2-F, 4-F,	3-F, 4-Br	2-F, 4-F,	3-F, 4-CF_3
6-F		6-F		6-F	
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-

	OCF_3				Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F

	CF_3						
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F		
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F		
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F		
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F		
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F		
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F		
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F		
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl		
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl		
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl		
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl		
2-CF_3	3-CF_3, 4-	2-Cl, 4-F	3-CF_3, 4-	2-F, 4-F,	3-CF_3, 4-		

	Cl		Cl	6-F	Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A es $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl

2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3

2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F

2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3

2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl	2-Cl, 6-Cl	3-F, 4-Br	2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl

2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F

4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl

2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

A es NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl

4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl
2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3

2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br
2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br

2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F
2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-	3-F, 4-F

Me						Me	
2-F, 4-F, 6-F	4-CF_3		2-F, 4-F, 6-F	4-OCF_3		2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl		2-F	3-F, 4-Br		2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl		2-Cl	3-F, 4-Br		2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl		2-Br	3-F, 4-Br		2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl		2-Me	3-F, 4-Br		2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl		2-CF_3	3-F, 4-Br		2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl		4-F	3-F, 4-Br		4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl		4-Cl	3-F, 4-Br		4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl		4-Br	3-F, 4-Br		4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl		2-F, 4-F	3-F, 4-Br		2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl		2-Cl, 4-F	3-F, 4-Br		2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl		2-Me, 4-F	3-F, 4-Br		2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl		2-F, 6-F	3-F, 4-Br		2-F, 6-F	3-F, 4-CF_3
2-Cl, 6-Cl	3-F, 4-Cl		2-Cl, 6-Cl	3-F, 4-Br		2-Cl, 6-Cl	3-F, 4-CF_3
2-Me, 6-Me	3-F, 4-Cl		2-Me, 6-Me	3-F, 4-Br		2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl		2-F, 4-F, 6-F	3-F, 4-Br		2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-		2-F	3-Cl, 4-F		2-F	3-Cl, 4-

	OCF_3				Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl
2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-	3-F, 4-	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-	3-Cl, 4-

Cl	OCF_3			Cl	Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F
4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-	3-CF_3, 4-F

	CF_3			F	
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl
2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-	4-Cl	3,4-	2-F, 6-F	3,4-

	DFMDO*		DFMDO*		DFMDO*
2-Br	3,4-	4-Br	3,4-	2-Cl, 6-	3,4-
	DFMDO*		DFMDO*	Cl	DFMDO*
2-Me	3,4-	2-F, 4-F	3,4-	2-Me, 6-	3,4-
	DFMDO*		DFMDO*	Me	DFMDO*
2-CF_3	3,4-	2-Cl, 4-F	3,4-	2-F, 4-	3,4-
	DFMDO*		DFMDO*	F, 6-F	DFMDO*

A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	2-F	2-F	3-F	2-F	3-Cl
2-Cl	2-F	2-Cl	3-F	2-Cl	3-Cl
2-Br	2-F	2-Br	3-F	2-Br	3-Cl
2-Me	2-F	2-Me	3-F	2-Me	3-Cl
2-CF_3	2-F	2-CF_3	3-F	2-CF_3	3-Cl
4-F	2-F	4-F	3-F	4-F	3-Cl
4-Cl	2-F	4-Cl	3-F	4-Cl	3-Cl
4-Br	2-F	4-Br	3-F	4-Br	3-Cl
2-F, 4-F	2-F	2-F, 4-F	3-F	2-F, 4-F	3-Cl
2-Cl, 4-F	2-F	2-Cl, 4-F	3-F	2-Cl, 4-F	3-Cl
2-Me, 4-F	2-F	2-Me, 4-F	3-F	2-Me, 4-F	3-Cl
2-F, 6-F	2-F	2-F, 6-F	3-F	2-F, 6-F	3-Cl
2-Cl, 6-Cl	2-F	2-Cl, 6-Cl	3-F	2-Cl, 6-Cl	3-Cl

2-Me, 6-Me	2-F	2-Me, 6-Me	3-F	2-Me, 6-Me	3-Cl
2-F, 4-F, 6-F	2-F	2-F, 4-F, 6-F	3-F	2-F, 4-F, 6-F	3-Cl
2-F	3-Br	2-F	3-CF_3	2-F	3-OCF_3
2-Cl	3-Br	2-Cl	3-CF_3	2-Cl	3-OCF_3
2-Br	3-Br	2-Br	3-CF_3	2-Br	3-OCF_3
2-Me	3-Br	2-Me	3-CF_3	2-Me	3-OCF_3
2-CF_3	3-Br	2-CF_3	3-CF_3	2-CF_3	3-OCF_3
4-F	3-Br	4-F	3-CF_3	4-F	3-OCF_3
4-Cl	3-Br	4-Cl	3-CF_3	4-Cl	3-OCF_3
4-Br	3-Br	4-Br	3-CF_3	4-Br	3-OCF_3
2-F, 4-F	3-Br	2-F, 4-F	3-CF_3	2-F, 4-F	3-OCF_3
2-Cl, 4-F	3-Br	2-Cl, 4-F	3-CF_3	2-Cl, 4-F	3-OCF_3
2-Me, 4-F	3-Br	2-Me, 4-F	3-CF_3	2-Me, 4-F	3-OCF_3
2-F, 6-F	3-Br	2-F, 6-F	3-CF_3	2-F, 6-F	3-OCF_3
2-Cl, 6-Cl	3-Br	2-Cl, 6-Cl	3-CF_3	2-Cl, 6-Cl	3-OCF_3
2-Me, 6-Me	3-Br	2-Me, 6-Me	3-CF_3	2-Me, 6-Me	3-OCF_3
2-F, 4-F, 6-F	3-Br	2-F, 4-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-OCF_3
2-F	4-F	2-F	4-Cl	2-F	4-Br
2-Cl	4-F	2-Cl	4-Cl	2-Cl	4-Br

2-Br	4-F	2-Br	4-Cl	2-Br	4-Br
2-Me	4-F	2-Me	4-Cl	2-Me	4-Br
2-CF_3	4-F	2-CF_3	4-Cl	2-CF_3	4-Br
4-F	4-F	4-F	4-Cl	4-F	4-Br
4-Cl	4-F	4-Cl	4-Cl	4-Cl	4-Br
4-Br	4-F	4-Br	4-Cl	4-Br	4-Br
2-F, 4-F	4-F	2-F, 4-F	4-Cl	2-F, 4-F	4-Br
2-Cl, 4-F	4-F	2-Cl, 4-F	4-Cl	2-Cl, 4-F	4-Br
2-Me, 4-F	4-F	2-Me, 4-F	4-Cl	2-Me, 4-F	4-Br
2-F, 6-F	4-F	2-F, 6-F	4-Cl	2-F, 6-F	4-Br
2-Cl, 6-Cl	4-F	2-Cl, 6-Cl	4-Cl	2-Cl, 6-Cl	4-Br
2-Me, 6-Me	4-F	2-Me, 6-Me	4-Cl	2-Me, 6-Me	4-Br
2-F, 4-F, 6-F	4-F	2-F, 4-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Br
2-F	4-CF_3	2-F	4-OCF_3	2-F	3-F, 4-F
2-Cl	4-CF_3	2-Cl	4-OCF_3	2-Cl	3-F, 4-F
2-Br	4-CF_3	2-Br	4-OCF_3	2-Br	3-F, 4-F
2-Me	4-CF_3	2-Me	4-OCF_3	2-Me	3-F, 4-F
2-CF_3	4-CF_3	2-CF_3	4-OCF_3	2-CF_3	3-F, 4-F
4-F	4-CF_3	4-F	4-OCF_3	4-F	3-F, 4-F
4-Cl	4-CF_3	4-Cl	4-OCF_3	4-Cl	3-F, 4-F
4-Br	4-CF_3	4-Br	4-OCF_3	4-Br	3-F, 4-F

2-F, 4-F	4-CF_3	2-F, 4-F	4-OCF_3	2-F, 4-F	3-F, 4-F
2-Cl, 4-F	4-CF_3	2-Cl, 4-F	4-OCF_3	2-Cl, 4-F	3-F, 4-F
2-Me, 4-F	4-CF_3	2-Me, 4-F	4-OCF_3	2-Me, 4-F	3-F, 4-F
2-F, 6-F	4-CF_3	2-F, 6-F	4-OCF_3	2-F, 6-F	3-F, 4-F
2-Cl, 6-Cl	4-CF_3	2-Cl, 6-Cl	4-OCF_3	2-Cl, 6-Cl	3-F, 4-F
2-Me, 6-Me	4-CF_3	2-Me, 6-Me	4-OCF_3	2-Me, 6-Me	3-F, 4-F
2-F, 4-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	3-F, 4-F
2-F	3-F, 4-Cl	2-F	3-F, 4-Br	2-F	3-F, 4-CF_3
2-Cl	3-F, 4-Cl	2-Cl	3-F, 4-Br	2-Cl	3-F, 4-CF_3
2-Br	3-F, 4-Cl	2-Br	3-F, 4-Br	2-Br	3-F, 4-CF_3
2-Me	3-F, 4-Cl	2-Me	3-F, 4-Br	2-Me	3-F, 4-CF_3
2-CF_3	3-F, 4-Cl	2-CF_3	3-F, 4-Br	2-CF_3	3-F, 4-CF_3
4-F	3-F, 4-Cl	4-F	3-F, 4-Br	4-F	3-F, 4-CF_3
4-Cl	3-F, 4-Cl	4-Cl	3-F, 4-Br	4-Cl	3-F, 4-CF_3
4-Br	3-F, 4-Cl	4-Br	3-F, 4-Br	4-Br	3-F, 4-CF_3
2-F, 4-F	3-F, 4-Cl	2-F, 4-F	3-F, 4-Br	2-F, 4-F	3-F, 4-CF_3
2-Cl, 4-F	3-F, 4-Cl	2-Cl, 4-F	3-F, 4-Br	2-Cl, 4-F	3-F, 4-CF_3
2-Me, 4-F	3-F, 4-Cl	2-Me, 4-F	3-F, 4-Br	2-Me, 4-F	3-F, 4-CF_3
2-F, 6-F	3-F, 4-Cl	2-F, 6-F	3-F, 4-Br	2-F, 6-F	3-F, 4-CF_3
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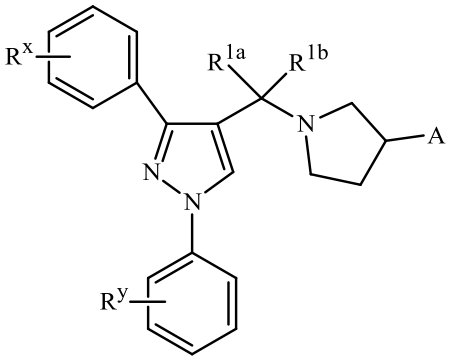
2-Me, 6-Me	3-F, 4-Cl	2-Me, 6-Me	3-F, 4-Br	2-Me, 6-Me	3-F, 4-CF_3
2-F, 4-F, 6-F	3-F, 4-Cl	2-F, 4-F, 6-F	3-F, 4-Br	2-F, 4-F, 6-F	3-F, 4-CF_3
2-F	3-F, 4-OCF_3	2-F	3-Cl, 4-F	2-F	3-Cl, 4-Cl
2-Cl	3-F, 4-OCF_3	2-Cl	3-Cl, 4-F	2-Cl	3-Cl, 4-Cl
2-Br	3-F, 4-OCF_3	2-Br	3-Cl, 4-F	2-Br	3-Cl, 4-Cl
2-Me	3-F, 4-OCF_3	2-Me	3-Cl, 4-F	2-Me	3-Cl, 4-Cl
2-CF_3	3-F, 4-OCF_3	2-CF_3	3-Cl, 4-F	2-CF_3	3-Cl, 4-Cl
4-F	3-F, 4-OCF_3	4-F	3-Cl, 4-F	4-F	3-Cl, 4-Cl
4-Cl	3-F, 4-OCF_3	4-Cl	3-Cl, 4-F	4-Cl	3-Cl, 4-Cl
4-Br	3-F, 4-OCF_3	4-Br	3-Cl, 4-F	4-Br	3-Cl, 4-Cl
2-F, 4-F	3-F, 4-OCF_3	2-F, 4-F	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-Cl
2-Cl, 4-F	3-F, 4-OCF_3	2-Cl, 4-F	3-Cl, 4-F	2-Cl, 4-F	3-Cl, 4-Cl

2-Me, 4-F	3-F, 4-OCF_3	2-Me, 4-F	3-Cl, 4-F	2-Me, 4-F	3-Cl, 4-Cl
2-F, 6-F	3-F, 4-OCF_3	2-F, 6-F	3-Cl, 4-F	2-F, 6-F	3-Cl, 4-Cl
2-Cl, 6-Cl	3-F, 4-OCF_3	2-Cl, 6-Cl	3-Cl, 4-F	2-Cl, 6-Cl	3-Cl, 4-Cl
2-Me, 6-Me	3-F, 4-OCF_3	2-Me, 6-Me	3-Cl, 4-F	2-Me, 6-Me	3-Cl, 4-Cl
2-F, 4-F, 6-F	3-F, 4-OCF_3	2-F, 4-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-F	3-Br, 4-F	2-F	3-CF_3, 4-F
2-Cl	3-Cl, 4-CF_3	2-Cl	3-Br, 4-F	2-Cl	3-CF_3, 4-F
2-Br	3-Cl, 4-CF_3	2-Br	3-Br, 4-F	2-Br	3-CF_3, 4-F
2-Me	3-Cl, 4-CF_3	2-Me	3-Br, 4-F	2-Me	3-CF_3, 4-F
2-CF_3	3-Cl, 4-CF_3	2-CF_3	3-Br, 4-F	2-CF_3	3-CF_3, 4-F
4-F	3-Cl, 4-CF_3	4-F	3-Br, 4-F	4-F	3-CF_3, 4-F
4-Cl	3-Cl, 4-CF_3	4-Cl	3-Br, 4-F	4-Cl	3-CF_3, 4-F

4-Br	3-Cl, 4-CF_3	4-Br	3-Br, 4-F	4-Br	3-CF_3, 4-F
2-F, 4-F	3-Cl, 4-CF_3	2-F, 4-F	3-Br, 4-F	2-F, 4-F	3-CF_3, 4-F
2-Cl, 4-F	3-Cl, 4-CF_3	2-Cl, 4-F	3-Br, 4-F	2-Cl, 4-F	3-CF_3, 4-F
2-Me, 4-F	3-Cl, 4-CF_3	2-Me, 4-F	3-Br, 4-F	2-Me, 4-F	3-CF_3, 4-F
2-F, 6-F	3-Cl, 4-CF_3	2-F, 6-F	3-Br, 4-F	2-F, 6-F	3-CF_3, 4-F
2-Cl, 6-Cl	3-Cl, 4-CF_3	2-Cl, 6-Cl	3-Br, 4-F	2-Cl, 6-Cl	3-CF_3, 4-F
2-Me, 6-Me	3-Cl, 4-CF_3	2-Me, 6-Me	3-Br, 4-F	2-Me, 6-Me	3-CF_3, 4-F
2-F, 4-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Br, 4-F	2-F, 4-F, 6-F	3-CF_3, 4-F
2-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl	2-Me, 4-F	3-CF_3, 4-Cl
2-Cl	3-CF_3, 4-Cl	4-Cl	3-CF_3, 4-Cl	2-F, 6-F	3-CF_3, 4-Cl
2-Br	3-CF_3, 4-Cl	4-Br	3-CF_3, 4-Cl	2-Cl, 6-Cl	3-CF_3, 4-Cl
2-Me	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl	2-Me, 6-Me	3-CF_3, 4-Cl

2-CF_3	3-CF_3, 4-Cl	2-Cl, 4-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl
2-F	3,4-DFMDO*	4-F	3,4-DFMDO*	2-Me, 4-F	3,4-DFMDO*
2-Cl	3,4-DFMDO*	4-Cl	3,4-DFMDO*	2-F, 6-F	3,4-DFMDO*
2-Br	3,4-DFMDO*	4-Br	3,4-DFMDO*	2-Cl, 6-Cl	3,4-DFMDO*
2-Me	3,4-DFMDO*	2-F, 4-F	3,4-DFMDO*	2-Me, 6-Me	3,4-DFMDO*
2-CF_3	3,4-DFMDO*	2-Cl, 4-F	3,4-DFMDO*	2-F, 4-F, 6-F	3,4-DFMDO*

Tabla 5b-2



R^{1a} es H, R^{1b} es ciano, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl

2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

		F, 6-F			
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es ciano, A es $NHC(O)CH(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl

2-Me	4-Cl	$2\text{-}CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3\text{-}CF_3$	$2\text{-}CF_3$	$3\text{-}CF_3$	2-F, 4-F	$3\text{-}CF_3$
2-Me	$4\text{-}CF_3$	$2\text{-}CF_3$	$4\text{-}CF_3$	2-F, 4-F	$4\text{-}CF_3$
2-Me	$4\text{-}OCF_3$	$2\text{-}CF_3$	$4\text{-}OCF_3$	2-F, 4-F	$4\text{-}OCF_3$
2-Me	3-Cl, 4-Cl	$2\text{-}CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	$3\text{-Cl, }4\text{-}CF_3$	$2\text{-}CF_3$	$3\text{-Cl, }4\text{-}CF_3$	2-F, 4-F	$3\text{-Cl, }4\text{-}CF_3$
2-Me	$3\text{-}CF_3$, 4-Cl	$2\text{-}CF_3$	$3\text{-}CF_3$, 4-Cl	2-F, 4-F	$3\text{-}CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2\text{-}CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3\text{-}CF_3$	2-F, 4-F, 6-F	$3\text{-}CF_3$	4-F	$3\text{-}CF_3$
2-F, 6-F	$4\text{-}CF_3$	2-F, 4-F, 6-F	$4\text{-}CF_3$	4-F	$4\text{-}CF_3$
2-F, 6-F	$4\text{-}OCF_3$	2-F, 4-F, 6-F	$4\text{-}OCF_3$	4-F	$4\text{-}OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	$3\text{-Cl, }4\text{-}CF_3$	2-F, 4-F, 6-F	$3\text{-Cl, }4\text{-}CF_3$	4-F	$3\text{-Cl, }4\text{-}CF_3$
2-F, 6-F	$3\text{-}CF_3$, 4-Cl	2-F, 4-F, 6-F	$3\text{-}CF_3$, 4-Cl	4-F	$3\text{-}CF_3$, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es ciano, A es $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es ciano, A es $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y

2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3

2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es ciano, A es NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-

					Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, $4-CF_3$	$2-CF_3$	3-Cl, $4-CF_3$	2-F, 4-F	3-Cl, 4-CF_3
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

		F, 6-F			
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es ciano, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl

2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

2-F, 6-F 3-CF_3, 4-Cl	2-F, 4-F, 3-CF_3, 4-Cl 6-F	4-F 3-CF_3, 4-Cl
2-F, 6-F 3-Cl, 4-F	2-F, 4-F, 3-Cl, 4-F 6-F	4-F 3-Cl, 4-F

R^{1a} es H, R^{1b} es Me, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl

2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es Me, A es $NHC(O)CH(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl

2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3

2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es Me, A es $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	$2-CF_3$	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	$2-CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3-CF_3$	$2-CF_3$	$3-CF_3$	2-F, 4-F	$3-CF_3$
2-Me	$4-CF_3$	$2-CF_3$	$4-CF_3$	2-F, 4-F	$4-CF_3$
2-Me	$4-OCF_3$	$2-CF_3$	$4-OCF_3$	2-F, 4-F	$4-OCF_3$
2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, $4-CF_3$	$2-CF_3$	3-Cl, $4-CF_3$	2-F, 4-F	3-Cl, 4-CF_3
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, $4-CF_3$	2-F, 4-F, 6-F	3-Cl, $4-CF_3$	4-F	3-Cl, 4-

		F, 6-F			CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es Me, A es $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3

2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, $4-CF_3$	$2-CF_3$	3-Cl, $4-CF_3$	2-F, 4-F	3-Cl, 4-CF_3
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, $4-CF_3$	2-F, 4-F, 6-F	3-Cl, $4-CF_3$	4-F	3-Cl, 4-CF_3
2-F, 6-F	$3-CF_3$, 4-Cl	2-F, 4-F, 6-F	$3-CF_3$, 4-Cl	4-F	$3-CF_3$, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es Me, A es NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es H, R^{1b} es Me, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3

2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

		F, 6-F			
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es Me, R^{1b} es Me, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es Me, R^{1b} es Me, A es NHC(O)CH(CH_2)$_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl

2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-	4-CF_3	4-F	4-CF_3

		F, 6-F			
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es Me, R^{1b} es Me, A es $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es Me, R^{1b} es Me, A es $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl

2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{1a} es Me, R^{1b} es Me, A es NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y

2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl

2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

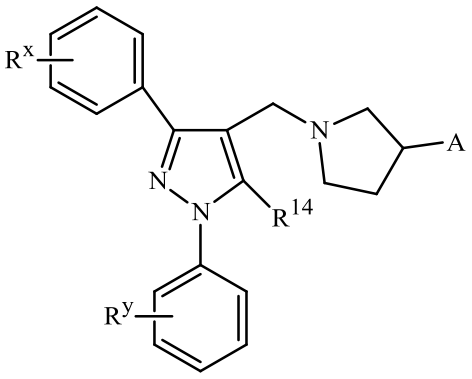
R^{1a} es Me, R^{1b} es Me, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3

2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

		F, 6-F			
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

Tabla 5b-3



R^{14} es F, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3

2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

		F, 6-F			
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es F, A es NHC(O)CH(CH_2)$_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3

2-Me	3-Cl, 4-Cl	$2-CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, $4-CF_3$	$2-CF_3$	3-Cl, $4-CF_3$	2-F, 4-F	3-Cl, $4-CF_3$
2-Me	$3-CF_3$, 4-Cl	$2-CF_3$	$3-CF_3$, 4-Cl	2-F, 4-F	$3-CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2-CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3-CF_3$	2-F, 4-F, 6-F	$3-CF_3$	4-F	$3-CF_3$
2-F, 6-F	$4-CF_3$	2-F, 4-F, 6-F	$4-CF_3$	4-F	$4-CF_3$
2-F, 6-F	$4-OCF_3$	2-F, 4-F, 6-F	$4-OCF_3$	4-F	$4-OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, $4-CF_3$	2-F, 4-F, 6-F	3-Cl, $4-CF_3$	4-F	3-Cl, $4-CF_3$
2-F, 6-F	$3-CF_3$, 4-Cl	2-F, 4-F, 6-F	$3-CF_3$, 4-Cl	4-F	$3-CF_3$, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

$\underline{R^{14}}$ es F, A es $\underline{NHC(O)N(Me)_2}$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-	3-CF_3	4-F	3-CF_3

		F, 6-F			
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es F, A es $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es F, A es NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl

2-Me	3-Cl, 4-F	$2\text{-}CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3\text{-}CF_3$	2-F, 4-F, 6-F	$3\text{-}CF_3$	4-F	$3\text{-}CF_3$
2-F, 6-F	$4\text{-}CF_3$	2-F, 4-F, 6-F	$4\text{-}CF_3$	4-F	$4\text{-}CF_3$
2-F, 6-F	$4\text{-}OCF_3$	2-F, 4-F, 6-F	$4\text{-}OCF_3$	4-F	$4\text{-}OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	$3\text{-Cl, }4\text{-}CF_3$	2-F, 4-F, 6-F	$3\text{-Cl, }4\text{-}CF_3$	4-F	$3\text{-Cl, }4\text{-}CF_3$
2-F, 6-F	$3\text{-}CF_3$, 4-Cl	2-F, 4-F, 6-F	$3\text{-}CF_3$, 4-Cl	4-F	$3\text{-}CF_3$, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es F, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl

2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl

2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-	4-CF_3	4-F	4-CF_3

		F, 6-F			
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es $NHC(O)CH(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl

2-Me	4-Cl	$2\text{-}CF_3$	4-Cl	2-F, 4-F	4-Cl
2-Me	$3\text{-}CF_3$	$2\text{-}CF_3$	$3\text{-}CF_3$	2-F, 4-F	$3\text{-}CF_3$
2-Me	$4\text{-}CF_3$	$2\text{-}CF_3$	$4\text{-}CF_3$	2-F, 4-F	$4\text{-}CF_3$
2-Me	$4\text{-}OCF_3$	$2\text{-}CF_3$	$4\text{-}OCF_3$	2-F, 4-F	$4\text{-}OCF_3$
2-Me	3-Cl, 4-Cl	$2\text{-}CF_3$	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, $4\text{-}CF_3$	$2\text{-}CF_3$	3-Cl, $4\text{-}CF_3$	2-F, 4-F	3-Cl, $4\text{-}CF_3$
2-Me	$3\text{-}CF_3$, 4-Cl	$2\text{-}CF_3$	$3\text{-}CF_3$, 4-Cl	2-F, 4-F	$3\text{-}CF_3$, 4-Cl
2-Me	3-Cl, 4-F	$2\text{-}CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3\text{-}CF_3$	2-F, 4-F, 6-F	$3\text{-}CF_3$	4-F	$3\text{-}CF_3$
2-F, 6-F	$4\text{-}CF_3$	2-F, 4-F, 6-F	$4\text{-}CF_3$	4-F	$4\text{-}CF_3$
2-F, 6-F	$4\text{-}OCF_3$	2-F, 4-F, 6-F	$4\text{-}OCF_3$	4-F	$4\text{-}OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, $4\text{-}CF_3$	2-F, 4-F, 6-F	3-Cl, $4\text{-}CF_3$	4-F	3-Cl, $4\text{-}CF_3$
2-F, 6-F	$3\text{-}CF_3$, 4-Cl	2-F, 4-F, 6-F	$3\text{-}CF_3$, 4-Cl	4-F	$3\text{-}CF_3$, 4-Cl

2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-	3-Cl	4-F	3-Cl

		F, 6-F			
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3

2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3

2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl

2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-	3-CF_3, 4-	4-F	3-CF_3, 4-Cl

		F, 6-F	Cl		
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Cl, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-

					CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

<u>R^{14} es Me, A es NHC(O)Me</u>

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-	3-Cl	4-F	3-Cl

		F, 6-F			
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Me, A es NHC(O)CH$(CH_2)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3

2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3

2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Me, A es $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F

2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl

		F, 6-F			
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Me, A es $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F

2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es Me, A es NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3

2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-	3-CF_3	4-F	3-CF_3

		F, 6-F			
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

<u>R^{14} es Me, A es NHC(O)OMe</u>

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es NH_2, A es NHC(O)Me

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl

2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

<u>R^{14} es NH_2, A es $NHC(O)CH(CH_2)_2$</u>

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-	3-CF_3	4-F	3-CF_3

		F, 6-F			
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es NH_2, A es $NHC(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es NH_2, A es $CH_2C(O)N(Me)_2$

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl

2-Me	3-Cl, 4-F	$2\text{-}CF_3$	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	$3\text{-}CF_3$	2-F, 4-F, 6-F	$3\text{-}CF_3$	4-F	$3\text{-}CF_3$
2-F, 6-F	$4\text{-}CF_3$	2-F, 4-F, 6-F	$4\text{-}CF_3$	4-F	$4\text{-}CF_3$
2-F, 6-F	$4\text{-}OCF_3$	2-F, 4-F, 6-F	$4\text{-}OCF_3$	4-F	$4\text{-}OCF_3$
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	$3\text{-Cl, }4\text{-}CF_3$	2-F, 4-F, 6-F	$3\text{-Cl, }4\text{-}CF_3$	4-F	$3\text{-Cl, }4\text{-}CF_3$
2-F, 6-F	$3\text{-}CF_3$, 4-Cl	2-F, 4-F, 6-F	$3\text{-}CF_3$, 4-Cl	4-F	$3\text{-}CF_3$, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

R^{14} es NH_2, A es NHC(O)CH(Me)(Et)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl

2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl

2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

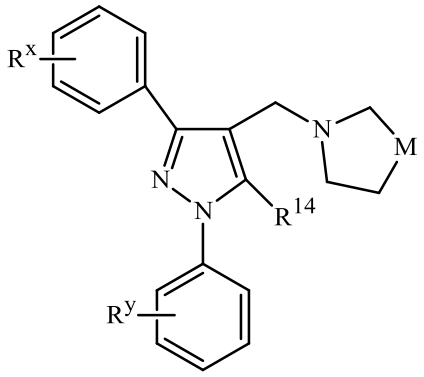
R^{14} es NH_2, A es NHC(O)OMe

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3

2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

		F, 6-F			
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

Tabla 5b-4



M es CH(fenilo)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3

2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3

		F, 6-F			
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(2-piridinilo)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3

2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(3-piridinilo)

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl

2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-	4-CF_3	4-F	4-CF_3

		F, 6-F			
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(2-(1,3,4-oxadiazolilo))

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl

2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl
2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl

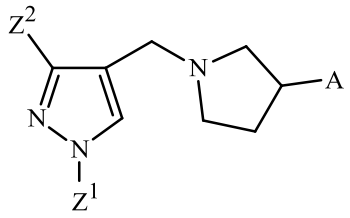
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

M es CH(1-(1,2,4-triazolilo))

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl

2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

Tabla 5b-5



A es NHC(O)Me

Z^1	Z^2	Z^1	Z^2
4,5-dicloro-2-piridinilo	2-(OCF_3)-3-piridinilo	4,5-dicloro-2-piridinilo	2-(CF_3)-3-piridinilo
5,6-dicloro-2-piridinilo	2-(OCF_3)-3-piridinilo	5,6-dicloro-2-piridinilo	2-(CF_3)-3-piridinilo
4,5-dicloro-2-pirimidinilo	2-(OCF_3)-3-piridinilo	4,5-dicloro-2-pirimidinilo	2-(CF_3)-3-piridinilo
4-cloro-5-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	4-cloro-5-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	5-cloro-6-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	2-(OCF_3)-3-piridinilo	4-cloro-5-(CF_3)-2-pirimidinilo	2-(CF_3)-3-piridinilo
4-cloro-5-(OCF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
5-cloro-6-(OCF_3)-2-	2-(OCF_3)-3-piridinilo	5-cloro-6-(OCF_3)-2-	2-(CF_3)-3-piridinilo

piridinilo	
4-cloro-5-(OCF_3)-2-pirimidinilo	2-(OCF_3)-3-piridinilo
4-(CF_3)-5-cloro-2-piridinilo	2-(OCF_3)-3-piridinilo
5-(CF_3)-6-cloro-2-piridinilo	2-(OCF_3)-3-piridinilo
4-(CF_3)-5-cloro-2-pirimidinilo	2-(OCF_3)-3-piridinilo
4,5-bis(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo
5,6-bis(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo
4,5-bis(CF_3)-2-pirimidinilo	2-(OCF_3)-3-piridinilo
4-(OCF_3)-5-cloro-2-piridinilo	2-(OCF_3)-3-piridinilo
5-(OCF_3)-6-cloro-2-piridinilo	2-(OCF_3)-3-piridinilo
4-(OCF_3)-5-cloro-2-	2-(OCF_3)-3-piridinilo

piridinilo	
4-cloro-5-(OCF_3)-2-pirimidinilo	2-(CF_3)-3-piridinilo
4-(CF_3)-5-cloro-2-piridinilo	2-(CF_3)-3-piridinilo
5-(CF_3)-6-cloro-2-piridinilo	2-(CF_3)-3-piridinilo
4-(CF_3)-5-cloro-2-pirimidinilo	2-(CF_3)-3-piridinilo
4,5-bis(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
5,6-bis(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
4,5-bis(CF_3)-2-pirimidinilo	2-(CF_3)-3-piridinilo
4-(OCF_3)-5-cloro-2-piridinilo	2-(CF_3)-3-piridinilo
5-(OCF_3)-6-cloro-2-piridinilo	2-(CF_3)-3-piridinilo
4-(OCF_3)-5-cloro-2-	2-(CF_3)-3-piridinilo

pirimidinilo	
4-cloro-5-fluoro-2-piridinilo	2-(OCF_3)-3-piridinilo
5-cloro-2-piridinilo	2-(OCF_3)-3-piridinilo
5-bromo-2-piridinilo	2-(OCF_3)-3-piridinilo
5-fluoro-2-piridinilo	2-(OCF_3)-3-piridinilo
5-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo
5-(OCF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo
4-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo
4,5-dicloro-2-piridinilo	2-cloro-3-piridinilo
5,6-dicloro-2-piridinilo	2-cloro-3-piridinilo
4,5-dicloro-2-pirimidinilo	2-cloro-3-piridinilo
4-cloro-5-(CF_3)-2-piridinilo	2-cloro-3-piridinilo
pirimidinilo	
4-cloro-5-fluoro-2-piridinilo	2-(CF_3)-3-piridinilo
5-cloro-2-piridinilo	2-(CF_3)-3-piridinilo
5-bromo-2-piridinilo	2-(CF_3)-3-piridinilo
5-fluoro-2-piridinilo	2-(CF_3)-3-piridinilo
5-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
5-(OCF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
4-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
4-(CF_3)-5-cloro-2-piridinilo	2-cloro-3-piridinilo
5-(CF_3)-6-cloro-2-piridinilo	2-cloro-3-piridinilo
4-(CF_3)-5-cloro-2-pirimidinilo	2-cloro-3-piridinilo
4,5-bis(CF_3)-2-piridinilo	2-cloro-3-piridinilo

5-cloro-6-(CF_3)-2-piridinilo	2-cloro-3-piridinilo	5,6-bis(CF_3)-2-piridinilo	2-cloro-3-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	2-cloro-3-piridinilo	4,5-bis(CF_3)-2-pirimidinilo	2-cloro-3-piridinilo
4-cloro-5-(OCF_3)-2-piridinilo	2-cloro-3-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo	2-cloro-3-piridinilo
5-cloro-6-(OCF_3)-2-piridinilo	2-cloro-3-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo	2-cloro-3-piridinilo
4-cloro-5-(OCF_3)-2-pirimidinilo	2-cloro-3-piridinilo	4-(OCF_3)-5-cloro-2-pirimidinilo	2-cloro-3-piridinilo
5-cloro-2-piridinilo	2-cloro-3-piridinilo	5-(CF_3)-2-piridinilo	2-cloro-3-piridinilo
5-bromo-2-piridinilo	2-cloro-3-piridinilo	5-(OCF_3)-2-piridinilo	2-cloro-3-piridinilo
5-fluoro-2-piridinilo	2-cloro-3-piridinilo	4-(CF_3)-2-piridinilo	2-cloro-3-piridinilo
4-cloro-5-fluoro-2-piridinilo	2-cloro-3-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	3-fluoro-4-piridinilo
4,5-dicloro-2-piridinilo	3-fluoro-4-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	3-fluoro-4-piridinilo

5,6-dicloro-2-piridinilo	3-fluoro-4-piridinilo	4-(CF_3)-5-cloro-2-pirimidinilo	3-fluoro-4-piridinilo
4,5-dicloro-2-pirimidinilo	3-fluoro-4-piridinilo	4,5-bis(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
4-cloro-5-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo	5,6-bis(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo	4,5-bis(CF_3)-2-pirimidinilo	3-fluoro-4-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	3-fluoro-4-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo	3-fluoro-4-piridinilo
4-cloro-5-(OCF_3)-2-piridinilo	3-fluoro-4-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo	3-fluoro-4-piridinilo
5-cloro-6-(OCF_3)-2-piridinilo	3-fluoro-4-piridinilo	4-(OCF_3)-5-cloro-2-pirimidinilo	3-fluoro-4-piridinilo
4-cloro-5-(OCF_3)-2-pirimidinilo	3-fluoro-4-piridinilo	5-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
5-cloro-2-piridinilo	3-fluoro-4-piridinilo	5-(OCF_3)-2-piridinilo	3-fluoro-4-piridinilo
5-bromo-2-piridinilo	3-fluoro-4-piridinilo	4-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo

5-fluoro-2-piridinilo	3-fluoro-4-piridinilo	4-cloro-5-fluoro-2-piridinilo	3-fluoro-4-piridinilo

A es $NHC(O)CH(CH_2)_2$

Z^1	Z^2	Z^1	Z^2
4,5-dicloro-2-piridinilo	2-(OCF_3)-3-piridinilo	4,5-dicloro-2-piridinilo	2-(CF_3)-3-piridinilo
5,6-dicloro-2-piridinilo	2-(OCF_3)-3-piridinilo	5,6-dicloro-2-piridinilo	2-(CF_3)-3-piridinilo
4,5-dicloro-2-pirimidinilo	2-(OCF_3)-3-piridinilo	4,5-dicloro-2-pirimidinilo	2-(CF_3)-3-piridinilo
4-cloro-5-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	4-cloro-5-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	5-cloro-6-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	2-(OCF_3)-3-piridinilo	4-cloro-5-(CF_3)-2-pirimidinilo	2-(CF_3)-3-piridinilo
4-cloro-5-(OCF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
5-cloro-6-(OCF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	2-(CF_3)-3-piridinilo

4-cloro-5-(OCF$_3$)-2-pirimidinilo	2-(OCF$_3$)-3-piridinilo
4-(CF$_3$)-5-cloro-2-piridinilo	2-(OCF$_3$)-3-piridinilo
5-(CF$_3$)-6-cloro-2-piridinilo	2-(OCF$_3$)-3-piridinilo
4-(CF$_3$)-5-cloro-2-pirimidinilo	2-(OCF$_3$)-3-piridinilo
4,5-bis(CF$_3$)-2-piridinilo	2-(OCF$_3$)-3-piridinilo
5,6-bis(CF$_3$)-2-piridinilo	2-(OCF$_3$)-3-piridinilo
4,5-bis(CF$_3$)-2-pirimidinilo	2-(OCF$_3$)-3-piridinilo
4-(OCF$_3$)-5-cloro-2-piridinilo	2-(OCF$_3$)-3-piridinilo
5-(OCF$_3$)-6-cloro-2-piridinilo	2-(OCF$_3$)-3-piridinilo
4-(OCF$_3$)-5-cloro-2-pirimidinilo	2-(OCF$_3$)-3-piridinilo
4-cloro-5-(OCF$_3$)-2-pirimidinilo	2-(CF$_3$)-3-piridinilo
4-(CF$_3$)-5-cloro-2-piridinilo	2-(CF$_3$)-3-piridinilo
5-(CF$_3$)-6-cloro-2-piridinilo	2-(CF$_3$)-3-piridinilo
4-(CF$_3$)-5-cloro-2-pirimidinilo	2-(CF$_3$)-3-piridinilo
4,5-bis(CF$_3$)-2-piridinilo	2-(CF$_3$)-3-piridinilo
5,6-bis(CF$_3$)-2-piridinilo	2-(CF$_3$)-3-piridinilo
4,5-bis(CF$_3$)-2-pirimidinilo	2-(CF$_3$)-3-piridinilo
4-(OCF$_3$)-5-cloro-2-piridinilo	2-(CF$_3$)-3-piridinilo
5-(OCF$_3$)-6-cloro-2-piridinilo	2-(CF$_3$)-3-piridinilo
4-(OCF$_3$)-5-cloro-2-pirimidinilo	2-(CF$_3$)-3-piridinilo

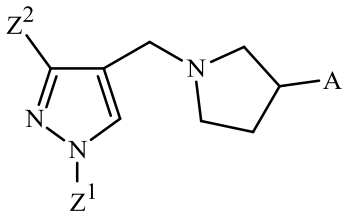
4-cloro-5-fluoro-2-piridinilo	2-(OCF_3)-3-piridinilo	4-cloro-5-fluoro-2-piridinilo	2-(CF_3)-3-piridinilo
5-cloro-2-piridinilo	2-(OCF_3)-3-piridinilo	5-cloro-2-piridinilo	2-(CF_3)-3-piridinilo
5-bromo-2-piridinilo	2-(OCF_3)-3-piridinilo	5-bromo-2-piridinilo	2-(CF_3)-3-piridinilo
5-fluoro-2-piridinilo	2-(OCF_3)-3-piridinilo	5-fluoro-2-piridinilo	2-(CF_3)-3-piridinilo
5-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	5-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
5-(OCF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	5-(OCF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
4-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	4-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
4,5-dicloro-2-piridinilo	2-cloro-3-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	2-cloro-3-piridinilo
5,6-dicloro-2-piridinilo	2-cloro-3-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	2-cloro-3-piridinilo
4,5-dicloro-2-pirimidinilo	2-cloro-3-piridinilo	4-(CF_3)-5-cloro-2-pirimidinilo	2-cloro-3-piridinilo
4-cloro-5-(CF_3)-2-piridinilo	2-cloro-3-piridinilo	4,5-bis(CF_3)-2-piridinilo	2-cloro-3-piridinilo
5-cloro-6-(CF_3)-	2-cloro-3-	5,6-bis(CF_3)-2-	2-cloro-3-

2-piridinilo	piridinilo	piridinilo	piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	2-cloro-3-piridinilo	4,5-bis(CF_3)-2-pirimidinilo	2-cloro-3-piridinilo
4-cloro-5-(OCF_3)-2-piridinilo	2-cloro-3-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo	2-cloro-3-piridinilo
5-cloro-6-(OCF_3)-2-piridinilo	2-cloro-3-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo	2-cloro-3-piridinilo
4-cloro-5-(OCF_3)-2-pirimidinilo	2-cloro-3-piridinilo	4-(OCF_3)-5-cloro-2-pirimidinilo	2-cloro-3-piridinilo
5-cloro-2-piridinilo	2-cloro-3-piridinilo	5-(CF_3)-2-piridinilo	2-cloro-3-piridinilo
5-bromo-2-piridinilo	2-cloro-3-piridinilo	5-(OCF_3)-2-piridinilo	2-cloro-3-piridinilo
5-fluoro-2-piridinilo	2-cloro-3-piridinilo	4-(CF_3)-2-piridinilo	2-cloro-3-piridinilo
4-cloro-5-fluoro-2-piridinilo	2-cloro-3-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	3-fluoro-4-piridinilo
4,5-dicloro-2-piridinilo	3-fluoro-4-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	3-fluoro-4-piridinilo
5,6-dicloro-2-	3-fluoro-4-	4-(CF_3)-5-cloro-	3-fluoro-4-

piridinilo	piridinilo
4,5-dicloro-2-pirimidinilo	3-fluoro-4-piridinilo
4-cloro-5-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	3-fluoro-4-piridinilo
4-cloro-5-(OCF_3)-2-piridinilo	3-fluoro-4-piridinilo
5-cloro-6-(OCF_3)-2-piridinilo	3-fluoro-4-piridinilo
4-cloro-5-(OCF_3)-2-pirimidinilo	3-fluoro-4-piridinilo
5-cloro-2-piridinilo	3-fluoro-4-piridinilo
5-bromo-2-piridinilo	3-fluoro-4-piridinilo
5-fluoro-2-piridinilo	3-fluoro-4-piridinilo
2-pirimidinilo	piridinilo
4,5-bis(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
5,6-bis(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
4,5-bis(CF_3)-2-pirimidinilo	3-fluoro-4-piridinilo
4-(OCF_3)-5-cloro-2-piridinilo	3-fluoro-4-piridinilo
5-(OCF_3)-6-cloro-2-piridinilo	3-fluoro-4-piridinilo
4-(OCF_3)-5-cloro-2-pirimidinilo	3-fluoro-4-piridinilo
5-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
5-(OCF_3)-2-piridinilo	3-fluoro-4-piridinilo
4-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
4-cloro-5-	3-fluoro-4-

piridinilo	piridinilo	fluoro-2-piridinilo	piridinilo

Tabla 5b-6



Z^2 es 2-fluorofenilo, A es NHC(O)Me

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo

5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 2-fluorofenilo, A es $NHC(O)CH(CH_2)_2$

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo

5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 4-fluorofenilo, A es NHC(O)Me

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo

5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 4-fluorofenilo, A es $NHC(O)CH(CH_2)_2$

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo

5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 4-fluoro-2-metilfenilo, A es NHC(O)Me

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-	4-(CF_3)-5-cloro-2-	4-(OCF_3)-5-cloro-2-

pirimidinilo	pirimidinilo	pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 4-fluoro-2-metilfenilo, A es $NHC(O)CH(CH_2)_2$

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo

4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 2-(trifluorometil)fenilo, A es NHC(O)Me

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-	5-(CF_3)-6-cloro-2-	5-(OCF_3)-6-cloro-2-

piridinilo	piridinilo	piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 2-(trifluorometil)fenilo, A es $NHC(O)CH(CH_2)_2$

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo

5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 2,4-difluorofenilo, A es NHC(O)Me

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-	4-(CF_3)-5-cloro-2-	4-(OCF_3)-5-cloro-2-

piridinilo	piridinilo	piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 2,4-difluorofenilo, A es $NHC(O)CH(CH_2)_2$

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo

4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

<u>Z^2 es 2,6-difluorofenilo, A es NHC(O)Me</u>

<u>Z^1</u>	<u>Z^1</u>	<u>Z^1</u>
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-	4-cloro-5-(OCF_3)-2-	4,5-bis(CF_3)-2-

pirimidinilo	pirimidinilo	pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 2,6-difluorofenilo, A es $NHC(O)CH(CH_2)_2$

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo

4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 2,4,6-trifluorofenilo, A es NHC(O)Me

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-	5-cloro-6-(OCF_3)-2-	5,6-bis(CF_3)-2-

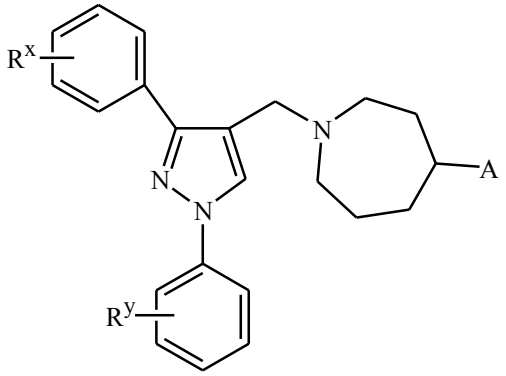
piridinilo	piridinilo	piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Z^2 es 2,4,6-trifluorofenilo, A es $NHC(O)CH(CH_2)_2$

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo

5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo	4-coro-5-fluoro-2-piridinilo	

Tabla 5c

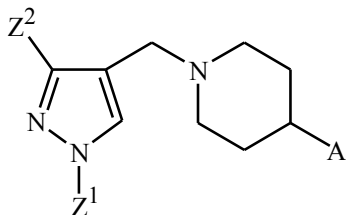


A es ciano

R^x	R^y	R^x	R^y	R^x	R^y
2-F	3-Cl	2-Cl	3-Cl	2-Br	3-Cl
2-F	4-Cl	2-Cl	4-Cl	2-Br	4-Cl
2-F	3-CF_3	2-Cl	3-CF_3	2-Br	3-CF_3
2-F	4-CF_3	2-Cl	4-CF_3	2-Br	4-CF_3
2-F	4-OCF_3	2-Cl	4-OCF_3	2-Br	4-OCF_3
2-F	3-Cl, 4-Cl	2-Cl	3-Cl, 4-Cl	2-Br	3-Cl, 4-Cl
2-F	3-Cl, 4-CF_3	2-Cl	3-Cl, 4-CF_3	2-Br	3-Cl, 4-CF_3
2-F	3-CF_3, 4-Cl	2-Cl	3-CF_3, 4-Cl	2-Br	3-CF_3, 4-Cl
2-F	3-Cl, 4-F	2-Cl	3-Cl, 4-F	2-Br	3-Cl, 4-F
2-Me	3-Cl	2-CF_3	3-Cl	2-F, 4-F	3-Cl
2-Me	4-Cl	2-CF_3	4-Cl	2-F, 4-F	4-Cl
2-Me	3-CF_3	2-CF_3	3-CF_3	2-F, 4-F	3-CF_3
2-Me	4-CF_3	2-CF_3	4-CF_3	2-F, 4-F	4-CF_3
2-Me	4-OCF_3	2-CF_3	4-OCF_3	2-F, 4-F	4-OCF_3
2-Me	3-Cl, 4-Cl	2-CF_3	3-Cl, 4-Cl	2-F, 4-F	3-Cl, 4-Cl

2-Me	3-Cl, 4-CF_3	2-CF_3	3-Cl, 4-CF_3	2-F, 4-F	3-Cl, 4-CF_3
2-Me	3-CF_3, 4-Cl	2-CF_3	3-CF_3, 4-Cl	2-F, 4-F	3-CF_3, 4-Cl
2-Me	3-Cl, 4-F	2-CF_3	3-Cl, 4-F	2-F, 4-F	3-Cl, 4-F
2-F, 6-F	3-Cl	2-F, 4-F, 6-F	3-Cl	4-F	3-Cl
2-F, 6-F	4-Cl	2-F, 4-F, 6-F	4-Cl	4-F	4-Cl
2-F, 6-F	3-CF_3	2-F, 4-F, 6-F	3-CF_3	4-F	3-CF_3
2-F, 6-F	4-CF_3	2-F, 4-F, 6-F	4-CF_3	4-F	4-CF_3
2-F, 6-F	4-OCF_3	2-F, 4-F, 6-F	4-OCF_3	4-F	4-OCF_3
2-F, 6-F	3-Cl, 4-Cl	2-F, 4-F, 6-F	3-Cl, 4-Cl	4-F	3-Cl, 4-Cl
2-F, 6-F	3-Cl, 4-CF_3	2-F, 4-F, 6-F	3-Cl, 4-CF_3	4-F	3-Cl, 4-CF_3
2-F, 6-F	3-CF_3, 4-Cl	2-F, 4-F, 6-F	3-CF_3, 4-Cl	4-F	3-CF_3, 4-Cl
2-F, 6-F	3-Cl, 4-F	2-F, 4-F, 6-F	3-Cl, 4-F	4-F	3-Cl, 4-F

Tabla 6a



A es ciano

Z^1	Z^2	Z^1	Z^2
4,5-dicloro-2-piridinilo	2-(OCF_3)-3-piridinilo	4,5-dicloro-2-piridinilo	2-(CF_3)-3-piridinilo
5,6-dicloro-2-piridinilo	2-(OCF_3)-3-piridinilo	5,6-dicloro-2-piridinilo	2-(CF_3)-3-piridinilo
4,5-dicloro-2-pirimidinilo	2-(OCF_3)-3-piridinilo	4,5-dicloro-2-pirimidinilo	2-(CF_3)-3-piridinilo
4-cloro-5-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	4-cloro-5-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	5-cloro-6-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	2-(OCF_3)-3-piridinilo	4-cloro-5-(CF_3)-2-pirimidinilo	2-(CF_3)-3-piridinilo
4-cloro-5-(OCF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	2-(CF_3)-3-piridinilo

5-cloro-6-(OCF$_3$)-2-piridinilo	2-(OCF$_3$)-3-piridinilo	5-cloro-6-(OCF$_3$)-2-piridinilo	2-(CF$_3$)-3-piridinilo
4-cloro-5-(OCF$_3$)-2-pirimidinilo	2-(OCF$_3$)-3-piridinilo	4-cloro-5-(OCF$_3$)-2-pirimidinilo	2-(CF$_3$)-3-piridinilo
4-(CF$_3$)-5-cloro-2-piridinilo	2-(OCF$_3$)-3-piridinilo	4-(CF$_3$)-5-cloro-2-piridinilo	2-(CF$_3$)-3-piridinilo
5-(CF$_3$)-6-cloro-2-piridinilo	2-(OCF$_3$)-3-piridinilo	5-(CF$_3$)-6-cloro-2-piridinilo	2-(CF$_3$)-3-piridinilo
4-(CF$_3$)-5-cloro-2-pirimidinilo	2-(OCF$_3$)-3-piridinilo	4-(CF$_3$)-5-cloro-2-pirimidinilo	2-(CF$_3$)-3-piridinilo
4,5-bis(CF$_3$)-2-piridinilo	2-(OCF$_3$)-3-piridinilo	4,5-bis(CF$_3$)-2-piridinilo	2-(CF$_3$)-3-piridinilo
5,6-bis(CF$_3$)-2-piridinilo	2-(OCF$_3$)-3-piridinilo	5,6-bis(CF$_3$)-2-piridinilo	2-(CF$_3$)-3-piridinilo
4,5-bis(CF$_3$)-2-pirimidinilo	2-(OCF$_3$)-3-piridinilo	4,5-bis(CF$_3$)-2-pirimidinilo	2-(CF$_3$)-3-piridinilo
4-(OCF$_3$)-5-cloro-2-piridinilo	2-(OCF$_3$)-3-piridinilo	4-(OCF$_3$)-5-cloro-2-piridinilo	2-(CF$_3$)-3-piridinilo

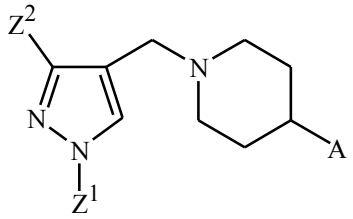
5-(OCF_3)-6-cloro-2-piridinilo	2-(OCF_3)-3-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo	2-(CF_3)-3-piridinilo
4-(OCF_3)-5-cloro-2-pirimidinilo	2-(OCF_3)-3-piridinilo	4-(OCF_3)-5-cloro-2-pirimidinilo	2-(CF_3)-3-piridinilo
2-naftalenilo	2-(OCF_3)-3-piridinilo	2-naftalenilo	2-(CF_3)-3-piridinilo
2-quinolinilo	2-(OCF_3)-3-piridinilo	2-quinolinilo	2-(CF_3)-3-piridinilo
5-cloro-2-piridinilo	2-(OCF_3)-3-piridinilo	5-cloro-2-piridinilo	2-(CF_3)-3-piridinilo
5-bromo-2-piridinilo	2-(OCF_3)-3-piridinilo	5-bromo-2-piridinilo	2-(CF_3)-3-piridinilo
5-fluoro-2-piridinilo	2-(OCF_3)-3-piridinilo	5-fluoro-2-piridinilo	2-(CF_3)-3-piridinilo
5-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	5-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
5-(OCF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	5-(OCF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
4-(CF_3)-2-piridinilo	2-(OCF_3)-3-piridinilo	4-(CF_3)-2-piridinilo	2-(CF_3)-3-piridinilo
4,5-dicloro-2-piridinilo	2-cloro-3-piridinilo	4,5-dicloro-2-piridinilo	3-fluoro-4-piridinilo

5,6-dicloro-2-piridinilo	2-cloro-3-piridinilo	5,6-dicloro-2-piridinilo	3-fluoro-4-piridinilo
4,5-dicloro-2-pirimidinilo	2-cloro-3-piridinilo	4,5-dicloro-2-pirimidinilo	3-fluoro-4-piridinilo
4-cloro-5-(CF_3)-2-piridinilo	2-cloro-3-piridinilo	4-cloro-5-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	2-cloro-3-piridinilo	5-cloro-6-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	2-cloro-3-piridinilo	4-cloro-5-(CF_3)-2-pirimidinilo	3-fluoro-4-piridinilo
4-cloro-5-(OCF_3)-2-piridinilo	2-cloro-3-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	3-fluoro-4-piridinilo
5-cloro-6-(OCF_3)-2-piridinilo	2-cloro-3-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	3-fluoro-4-piridinilo
4-cloro-5-(OCF_3)-2-pirimidinilo	2-cloro-3-piridinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	3-fluoro-4-piridinilo
4-(CF_3)-5-cloro-2-piridinilo	2-cloro-3-piridinilo	4-(CF_3)-5-cloro-2-	3-fluoro-4-piridinilo

		piridinilo	
5-(CF_3)-6-cloro-2-piridinilo	2-cloro-3-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	3-fluoro-4-piridinilo
4-(CF_3)-5-cloro-2-pirimidinilo	2-cloro-3-piridinilo	4-(CF_3)-5-cloro-2-pirimidinilo	3-fluoro-4-piridinilo
4,5-bis(CF_3)-2-piridinilo	2-cloro-3-piridinilo	4,5-bis(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
5,6-bis(CF_3)-2-piridinilo	2-cloro-3-piridinilo	5,6-bis(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
4,5-bis(CF_3)-2-pirimidinilo	2-cloro-3-piridinilo	4,5-bis(CF_3)-2-pirimidinilo	3-fluoro-4-piridinilo
4-(OCF_3)-5-cloro-2-piridinilo	2-cloro-3-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo	3-fluoro-4-piridinilo
5-(OCF_3)-6-cloro-2-piridinilo	2-cloro-3-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo	3-fluoro-4-piridinilo
4-(OCF_3)-5-cloro-2-pirimidinilo	2-cloro-3-piridinilo	4-(OCF_3)-5-cloro-2-pirimidinilo	3-fluoro-4-piridinilo
2-naftalenilo	2-cloro-3-piridinilo	2-naftalenilo	3-fluoro-4-piridinilo

2-quinolinilo	2-cloro-3-piridinilo	2-quinolinilo	3-fluoro-4-piridinilo
5-cloro-2-piridinilo	2-cloro-3-piridinilo	5-cloro-2-piridinilo	3-fluoro-4-piridinilo
5-bromo-2-piridinilo	2-cloro-3-piridinilo	5-bromo-2-piridinilo	3-fluoro-4-piridinilo
5-fluoro-2-piridinilo	2-cloro-3-piridinilo	5-fluoro-2-piridinilo	3-fluoro-4-piridinilo
5-(CF_3)-2-piridinilo	2-cloro-3-piridinilo	5-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo
5-(OCF_3)-2-piridinilo	2-cloro-3-piridinilo	5-(OCF_3)-2-piridinilo	3-fluoro-4-piridinilo
4-(CF_3)-2-piridinilo	2-cloro-3-piridinilo	4-(CF_3)-2-piridinilo	3-fluoro-4-piridinilo

Tabla 6b



Z^2 es 2-fluorofenilo, A es ciano

Z^1	Z^1	Z^1
4,5-dicloro-2-	4-cloro-5-(OCF_3)-2-	4,5-bis(CF_3)-2-

piridinilo	piridinilo	piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo		

Z^2 es 4-fluorofenilo, A es ciano

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo

5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo		

Z^2 es 2-clorofenilo, A es ciano

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo

5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo		

Z^2 es 2-bromofenilo, A es ciano

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo

5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo		

Z^2 es 2-metilfenilo, A es ciano

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo

5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo		

Z^2 es 2-(trifluorometil)fenilo, A es ciano

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo

5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo		

Z^2 es 2,4-difluorofenilo, A es ciano

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-	5-cloro-6-(OCF_3)-2-	5,6-bis(CF_3)-2-

piridinilo	piridinilo	piridinilo
4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo		

Z^2 es 2,6-difluorofenilo, A es ciano

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo

4,5-dicloro-2-pirimidinilo	4-cloro-5-(OCF_3)-2-pirimidinilo	4,5-bis(CF_3)-2-pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo		

Z^2 es 2,4,6-trifluorofenilo, A es ciano

Z^1	Z^1	Z^1
4,5-dicloro-2-piridinilo	4-cloro-5-(OCF_3)-2-piridinilo	4,5-bis(CF_3)-2-piridinilo
5,6-dicloro-2-piridinilo	5-cloro-6-(OCF_3)-2-piridinilo	5,6-bis(CF_3)-2-piridinilo
4,5-dicloro-2-	4-cloro-5-(OCF_3)-2-	4,5-bis(CF_3)-2-

pirimidinilo	pirimidinilo	pirimidinilo
4-cloro-5-(CF_3)-2-piridinilo	4-(CF_3)-5-cloro-2-piridinilo	4-(OCF_3)-5-cloro-2-piridinilo
5-cloro-6-(CF_3)-2-piridinilo	5-(CF_3)-6-cloro-2-piridinilo	5-(OCF_3)-6-cloro-2-piridinilo
4-cloro-5-(CF_3)-2-pirimidinilo	4-(CF_3)-5-cloro-2-pirimidinilo	4-(OCF_3)-5-cloro-2-pirimidinilo
5,6-dicloro-3-piridinilo	6-cloro-3-piridinilo	2-cloro-4-piridinilo
4,5-dicloro-2-furanilo	4,5-dicloro-2-tienilo	2-naftalenilo
2-quinolinilo	5-cloro-2-piridinilo	5-bromo-2-piridinilo
5-fluoro-2-piridinilo	5-(CF_3)-2-piridinilo	5-(OCF_3)-2-piridinilo
4-(CF_3)-2-piridinilo		

Z^2 es 2-cloro-3-piridinilo, A es ciano

Z^1	Z^1	Z^1
2-fluorofenilo	2-clorofenilo	2-bromofenilo
2-metilfenilo	2-(trifluorometil)fenilo	2,4-difluorofenilo
2,6-difluorofenilo		

Z^2 es 2-(trifluorometil)-3-piridinilo, A es ciano

Z^1	Z^1	Z^1
2-fluorofenilo	2-clorofenilo	2-bromofenilo
2-metilfenilo	2-(trifluorometil)fenilo	2,4-difluorofenilo
2,6-difluorofenilo		

Z^2 es 2-(trifluorometoxi)-3-piridinilo, A es ciano

Z^1	Z^1	Z^1
2-fluorofenilo	2-clorofenilo	2-bromofenilo
2-metilfenilo	2-(trifluorometil)fenilo	2,4-difluorofenilo
2,6-difluorofenilo		

En general, un compuesto de esta invención se usará como ingrediente activo en una composición para controlar una plaga de invertebrados, es decir, formulación, con por lo menos un componente adicional seleccionado del grupo que consiste en surfactantes, diluyentes sólidos y diluyentes líquidos, que sirven como portador. Los ingredientes de la formulación o composición se seleccionan de acuerdo con las propiedades físicas del ingrediente activo, el modo de aplicación y factores ambientales, tales como tipo de suelo, humedad y temperatura.

Las formulaciones útiles incluyen composiciones líquidas y sólidas. Las composiciones líquidas incluyen soluciones (que incluyen concentrados emulsificables), suspensiones, emulsiones (que incluyen microemulsiones y/o suspoemulsiones) y similares, que, opcionalmente, pueden espesarse para formar geles. Los tipos comunes de composiciones líquidas acuosas son concentrados solubles, concentrados de suspensión, suspensión en cápsulas, emulsión, microemulsión y suspoemulsión. Los tipos comunes de composiciones líquidas no acuosas son concentrado emulsionable, concentrado microemulsionable, concentrado dispersable y dispersión oleosa.

Los tipos comunes de composiciones sólidas son polvos, gránulos, microesferas, glóbulos, pastillas, tabletas, películas con carga (que incluyen recubrimientos para semillas) y similares, que pueden ser dispersables en agua (“humectables”) o solubles en agua. Las películas y recubrimientos que se forman a partir de las soluciones formadoras de películas o suspensiones autodispersables son particularmente útiles para el tratamiento de semillas. El ingrediente activo se puede (micro)encapsular y después convertir en una suspensión o formulación sólida; Alternativamente, se puede encapsular (o “recubrir”) la formulación completa del ingrediente activo. La encapsulación puede controlar o retardar la liberación del

ingrediente activo. Los gránulos emulsificables combinan las ventajas de las formulaciones concentradas emulsionables y de las formulaciones de gránulos secos. Las composiciones de resistencia alta se usan, principalmente, como intermedios para más formulaciones.

Típicamente, las formulaciones rociables se extienden en un medio apropiado antes de rociar. Estas formulaciones líquidas y sólidas se formulan para diluirse fácilmente en el medio de rociado, usualmente, agua. Los volúmenes de atomización pueden variar de aproximadamente uno a varios miles de litros por hectárea, pero, más generalmente, están en el intervalo de aproximadamente diez a varios cientos de litros por hectárea. Las formulaciones rociables pueden mezclarse en un tanque con agua u otro medio adecuado para tratamiento foliar mediante aplicación aérea o terrestre, o para aplicación al medio de cultivo de la planta. Las formulaciones líquidas y secas se pueden dosificar directamente en los sistemas de irrigación por goteo o en los surcos durante la siembra. Las formulaciones líquidas y sólidas pueden aplicarse sobre semillas de cultivos y otra vegetación que se desee como tratamientos de semillas antes de la siembra para proteger las raíces en desarrollo y otras partes subterráneas de la planta y/o follaje por absorción sistémica.

Típicamente, las formulaciones contienen cantidades eficaces de un ingrediente activo, diluyente y surfactante

dentro de los siguientes intervalos aproximados que equivalen al 100 por ciento en peso.

	Porcentaje en Peso		
	Ingrediente		
	Ingrediente	Diluyente	Surfactante
Gránulos, Tabletas y Polvos Dispersables y Solubles en Agua	0,001–90	0–99,999	0–15
Soluciones, Emulsiones, Suspensiones y Dispersiones Oleosas (que incluyen Concentrados Emulsificables)	1–50	40–99	0–50
Polvos	1–25	70–99	0–5
Gránulos y Bolitas	0,001–95	5–99,999	0–15
Composiciones de Alta Resistencia	90–99	0–10	0–2

Los diluyentes sólidos incluyen, por ejemplo, arcillas, tales como bentonita, montmorillonita, atapulguita y caolín, yeso, celulosa, dióxido de titanio, óxido de zinc, almidón, dextrina, azúcares (por ejemplo, lactosa, sacarosa), sílice, talco, mica, tierra de diatomeas, urea, carbonato cálcico, carbonato sódico y bicarbonato, y sulfato de sodio. Los diluyentes sólidos típicos se describen en Watkins et al.,

Handbook of Insecticide Dust Diluents and Carriers, 2.° Ed., Dorland Books, Caldwell, New Jersey.

Los diluyentes líquidos incluyen, por ejemplo, agua, *N*,*N*-dimetilalcanamidas (por ejemplo, *N*,*N*-dimetilformamida), limoneno, sulfóxido de dimetilo, *N*-alquilpirrolidonas (por ejemplo, *N*-metilpirrolidona), etilenglicol, trietilenglicol, propilenglicol, dipropilenglicol, polipropilenglicol, carbonato de propileno, carbonato de butileno, parafinas (por ejemplo, aceites minerales blancos, parafinas comunes, isoparafinas), alquilbencenos, alquilnaftalenos, glicerina, triacetato de glicerol, sorbitol, triacetina, hidrocarburos aromáticos, alifáticos desaromatizados, alquilbencenos, alquilnaftalenos, cetonas, tales como ciclohexanona, 2-heptanona, isoforona y 4-hidroxi-4-metil-2-pentanona, acetatos, tales como acetato de isoamilo, acetato de hexilo, acetato de heptilo, acetato de octilo, acetato de nonilo, acetato de tridecilo y acetato de isobornilo, otros ésteres, tales como ésteres lactato alquilatados, ésteres dibásicos y γ-butirolactona, y alcoholes, que pueden ser lineales, ramificados, saturados o insaturados, tales como metanol, etanol, *n*-propanol, alcohol isopropílico, *n*-butanol, alcohol isobutílico, *n*-hexanol, 2-etilhexanol, *n*-octanol, decanol, alcohol isodecílico, isooctadecanol, alcohol cetílico, alcohol laurílico, alcohol tridecílico, alcohol oleílico, ciclohexanol, alcohol tetrahidrofurfurílico, alcohol de diacetona y alcohol bencílico. Los diluyentes líquidos

incluyen, además, ésteres de glicerol de ácidos grasos saturados e insaturados (típicamente, de C_6 a C_{22}), tales como aceites de semillas de plantas y frutos (por ejemplo, aceites de oliva, ricino, linaza, ajonjolí, maíz, cacahuate, girasol, semilla de uva, cártamo, semilla de algodón, soja, semilla de colza, coco y palmiste), grasas de origen animal (por ejemplo, sebo de res, sebo de cerdo, manteca de cerdo, aceite de hígado de bacalao, aceite de pescado) y mezclas de estos. Los diluyentes líquidos también incluyen ácidos grasos alquilatados (por ejemplo, metilados, etilados, butilados), en donde los ácidos grasos pueden obtenerse por hidrólisis de ésteres de glicerol de origen animal y vegetal, y pueden purificarse por destilación. Los diluyentes líquidos típicos se describen en Marsden, *Solvents Guide*, 2ª Ed., Interscience, New York, 1950.

Las composiciones líquidas y sólidas de la presente invención incluyen, frecuentemente, uno o más surfactantes. En general, cuando se adicionan a un líquido, los surfactantes (también conocidos como “agentes superficiales activos”) modifican y, con mayor frecuencia, reducen, la tensión superficial del líquido. Dependiendo de la naturaleza de los grupos hidrófilo y lipófilo en una molécula surfactante, los surfactantes pueden ser útiles como agentes humectantes, dispersantes, emulsionantes o agentes desespumantes.

Los surfactantes pueden clasificarse como no iónicos, aniónicos o catiónicos. Los surfactantes no iónicos útiles para

las presentes composiciones incluyen, pero no se limitan a: alcoxilatos de alcohol, tales como alcoxilatos de alcohol a base de alcoholes naturales y sintéticos (que son ramificados o lineales) y preparados a partir de los alcoholes y óxido de etileno, óxido de propileno, óxido de butileno o mezclas de estos; etoxilatos de amina, alcanolamidas y alcanolamidas etoxiladas; triglicéridos alcoxilados tales como frijol de soya, castor y aceite de semilla de colza etoxilados; alcoxilatos de alquilfenol tales como etoxilatos de octilfenol, etoxilatos de nonilfenol, etoxilatos de dinonilfenol y etoxilatos de dodecilfenol (preparados a partir de los fenoles y el óxido de etileno, óxido de propileno, óxido de butileno o mezclas de éstos); polímeros de bloques preparados a partir de óxido de etileno u óxido de propileno y polímeros de bloques inversos donde los bloques terminales se preparan a partir de óxido de propileno; ácidos grasos etoxilados; ésteres grasos y aceites etoxilados; ésteres de metilo etoxilados; tristirilfenol etoxilado (incluso los preparados a partir de óxido de etileno, óxido de propileno, óxido de butileno o mezclas de éstos); ésteres de ácido graso, ésteres de glicerina, derivados a base de lanolina, ésteres de polietoxilato tales como ésteres de ácido graso de sorbitán polietoxilados, ésteres de ácido graso de sorbitol polietoxilados y ésteres de ácido graso de glicerina polietoxilados; otros derivados de sorbitán tales como ésteres

de sorbitán; surfactantes poliméricos tales como copolímeros aleatorios, copolímeros de bloques, resinas de peg (polietilenglicol) de alquido, polímeros de injerto o tipo peine y polímeros principales; polietilenglicoles (peg); ésteres de ácido graso de polietilenglicol; surfactantes a base de silicona; y derivados del azúcar tales como ésteres de sacarosa, poliglicósidos de alquilo y polisacáridos de alquilo.

Los surfactantes aniónicos incluyen, pero no se limitan a: ácidos sulfónicos de alquilarilo y sus sales; alcohol carboxilado o etoxilatos de alquilfenol; derivados del sulfonato de difenilo; lignina y derivados de lignina tales como lignosulfonatos; ácido maleico o succínico o sus anhídridos; sulfonatos de olefina; ésteres de fosfato tales como ésteres de fosfato de alcoxilatos de alcohol, ésteres de fosfato de alcoxilatos de alquilfenol y ésteres de fosfato de etoxilatos de estirilfenol; surfactantes a base de proteínas; derivados de sarcosina; éter sulfato de estirilfenol; sulfatos y sulfonatos de aceites y ácidos grasos; sulfatos y sulfonatos de alquilfenoles etoxilados; sulfatos de alcoholes; sulfatos de alcoholes etoxilados; sulfonatos de aminas y amidas, tales como *N*,*N*-alquiltauratos; sulfonatos de benceno, cumeno, tolueno, xileno y dodecil y tridecilbenceno; sulfonatos de naftalenos condensados; sulfonatos de naftaleno y alquilnaftaleno; sulfonatos de petróleo fraccionado;

sulfosuccinamatos; y sulfosuccinatos y sus derivados, tales como sales de sulfosuccinato de dialquilo.

Los surfactantes catiónicos incluyen, pero no se limitan a: amidas y amidas etoxiladas; aminas tales como propanodiaminas de *N*-alquilo, tripropilentriaminas y dipropilentetraminas, y aminas etoxiladas, diaminas etoxiladas y aminas propoxiladas (preparadas a partir de las aminas y óxido de etileno, óxido de propileno, óxido de butileno o mezclas de éstos); sales de aminas tales como acetatos de aminas y sales de diaminas; sales de amonio cuaternario tales como sales cuaternarias, sales cuaternarias etoxiladas y sales dicuaternarias; y óxidos de amina tales como óxidos de alquildimetilamina y óxidos de bis-(2-hidroxietil)-alquilamina.

Además, son útiles para las presentes composiciones las mezclas de surfactantes no iónicos y aniónicos o mezclas de surfactantes no iónicos y catiónicos. Los surfactantes no iónicos, aniónicos y catiónicos y sus usos recomendados se describen en una variedad de referencias publicadas que incluyen *McCutcheon's Emulsifiers and Detergents*, ediciones estadounidenses e internacionales anuales publicadas por McCutcheon's Division, The Manufacturing Confectioner Publishing Co.; Sisely y Wood, *Encyclopedia of Surface Active Agents*, Chemical Publ. Co., Inc., Nueva York, 1964; y A. S. Davidson y B. Milwidsky, *Synthetic Detergents*, séptima edición, John Wiley and Sons, Nueva York, 1987.

Las composiciones de esta invención también pueden contener auxiliares y aditivos para formulaciones, conocidos por aquellos con experiencia en la materia como auxiliares para formulaciones (algunos de los cuales se considera que también pueden funcionar como diluyentes sólidos, diluyentes líquidos o surfactantes). Tales auxiliares y aditivos de formulación pueden controlar: el pH (reguladores), la producción de espuma durante el procesamiento (antiespumantes, tales como poliorganosiloxanos), la sedimentación de los ingredientes activos (agentes de suspensión), la viscosidad (aglomerantes tixotrópicos), el crecimiento microbiano en el envase (antimicrobianos), la congelación de los productos (anticongelantes), el color (dispersiones de tintes/pigmentos), los lavados (formadores o adhesivos de películas), la evaporación (retardantes de evaporación) y otros atributos de las formulaciones. Los formadores de película incluyen, por ejemplo, acetatos de polivinilo, copolímeros de acetato de polivinilo, copolímero de polivinilpirrolidona-acetato de vinilo, alcoholes polivinílicos, copolímeros y ceras de alcohol polivinílico. Los ejemplos de aditivos y auxiliares de formulación incluyen los enumerados en el *Volumen 2 de McCutcheon*: *Functional Materials*, ediciones anuales norteamericanas e internacionales publicadas por McCutcheon's Division, The Manufacturing Confectioner Publishing Co.; y la publicación PCT núm. WO 03/024222.

Por lo general, el compuesto de Fórmula **1** y cualquier otro ingrediente activo se incorporan en las presentes composiciones al disolver el ingrediente activo en un solvente o al molerlo en un diluyente líquido o seco. Las soluciones, que incluyen concentrados emulsificables, pueden prepararse, simplemente, mezclando los ingredientes. Si el solvente de una composición líquida destinada para usarse como concentrado emulsificable es inmiscible en agua, se añade, típicamente, un emulsionante para emulsificar el solvente que contiene el activo después de diluirlo con agua. Las suspensiones de ingredientes activos con diámetros de partícula de hasta 2000 µm se pueden moler en húmedo mediante el uso de molinos de medios para obtener partículas con diámetros promedio menores que 3 µm. Las suspensiones acuosas se pueden convertir en concentrados en suspensión terminados (véase, por ejemplo, la patente de los Estados Unidos núm. 3.060.084.) o se pueden procesar adicionalmente con secado por aspersión para formar gránulos dispersables en agua. Usualmente, las formulaciones secas requieren procesos de molienda en seco, que producen diámetros promedio de partícula en el intervalo de 2 a 10 µm. Los polvos pueden prepararse por mezclado y, usualmente, por trituración (tal como con un molino de martillo o un molino con energía fluida). Los gránulos y microesferas pueden prepararse por medio del rociado del material activo sobre portadores granulares preformados o mediante técnicas de aglomeración. Ver

Browning, “Agglomeration”, *Chemical Engineering*, 4 de diciembre de 1967, págs. 14748, *Perry’s Chemical Engineer’s Handbook*, 4.° ed., McGraw-Hill, Nueva York, –1963, págs. 857 y subsiguientes, y la patente núm. WO 91/13546. Las bolillas pueden prepararse como se describe en la patente de los Estados Unidos núm. 4.172.714. Los gránulos dispersables y solubles en agua pueden prepararse tal como se instruye en las patentes de los Estados Unidos núms. 4.144.050; 3.920.442 y la patente alemana núm. DE 3.246.493. Las tabletas pueden prepararse tal como se instruye en las patentes de los Estados Unidos núms. 5.180.587; 5.232.701 y 5.208.030. Las películas pueden prepararse tal como se instruye en la patente británica núm. GB 2.095.558 y en la patente de los Estados Unidos núm. 3.299.566.

Para más información con respecto a la técnica de formulación, ver T. S. Woods, “The Formulator’s Toolbox – Product Forms for Modern Agriculture” en *Pesticide Chemistry and Bioscience*, *The Food-Environment Challenge*, T. Brooks y T. R. Roberts, editores, Proceedings of the 9th International Congress on Pesticide Chemistry, The Royal Society of Chemistry, Cambridge, 1999, páginas 120–133. Ver además la patente de los Estados Unidos núm. 3.235.361, col. 6, línea 16 a col. 7, línea 19 y los Ejemplos 10–41; la patente de los Estados Unidos núm. 3.309.192, col. 5, línea 43 a col. 7, línea 62 y Ejemplos 8, 12, 15, 39, 41, 52, 53, 58, 132, 138–

140, 162–164, 166, 167 y 169–182; la patente de los Estados Unidos núm. 2.891.855, col. 3, línea 66 a col. 5, línea 17 y Ejemplos 1–4; Klingman, *Weed Control as a Science*, John Wiley and Sons, Inc., Nueva York, 1961, págs. 81-96; Hance et al., *Weed Control Handbook*, 8.° Ed., Blackwell Scientific Publications, Oxford, 1989; y *Developments in formulation technology*, PJB Publications, Richmond, Reino Unido, 2000.

En los siguientes ejemplos, todas las formulaciones se preparan de manera convencional. Los números de los compuestos se refieren a los compuestos en las Tablas índice A–D. Sin entrar en otros detalles innecesarios, se cree que una persona con experiencia en la técnica, con el uso de la descripción anterior, puede usar al máximo la presente invención. Por lo tanto, los siguientes ejemplos se interpretarán de manera simplemente ilustrativa, sin limitar la descripción en ningún sentido. Los porcentajes son en peso, excepto donde se indique de otra manera.

Ejemplo A

Concentrado de Resistencia Alta

Compuesto 41	98,5 %
Aerogel de sílice	0,5 %
Sílice sintético fino y amorfo	1,0 %

Ejemplo B

Polvo Humectable

Compuesto 77	65,0 %
Dodecilfenol polietilenglicol éter	2,0 %
Sulfonato sódico de lignina	4,0 %
Aluminosilicato de sodio	6,0 %
Montmorillonita (calcinada)	23,0 %

Ejemplo C

Gránulo

Compuesto 546	10,0 %
Gránulos de attapulguita (materia con baja volatilidad, 0,71/0,30 mm; tamices estándar de los Estados Unidos núm. 25-50)	90,0 %

Ejemplo D

Bolilla Extrudida

compuesto 613	25,0 %
sulfato sódico anhidro	10,0 %
sulfonato de lignina de calcio crudo	5,0 %
alquilnaftalenosulfonato sódico	1,0 %
bentonita de calcio/magnesio	59,0 %

Ejemplo E

Concentrado Emulsificable

Compuesto 869	10,0 %
hexaoleato de sorbitol polioxietilenado	20,0 %
éster metílico de ácido graso de C_6–C_{10}	70,0 %

Ejemplo F

Microemulsión

compuesto 805	5,0 %
copolímero de polivinilpirrolidona-acetato de vinilo	30,0 %
alquilpoliglicósido	30,0 %
monooleato de glicerilo	15,0 %
agua	20,0 %

Ejemplo G

Tratamiento de la Semilla

compuesto 800	20,00 %
copolímero de polivinilpirrolidona-acetato de vinilo	5,00 %
ácido de cera de montana	5,00 %
sulfonato de lignina de calcio	1,00 %
copolímeros de bloque de polioxietileno/polioxipropileno	1,00 %
alcohol estearílico (POE 20)	2,00 %
poliorganosilano	0,20 %

colorante rojo/tintura	0,05 %
agua	65,75 %

Ejemplo H

Barra Fertilizante

compuesto 720	2,50 %
copolímero de pirrolidona-estireno	4,80 %
tristirilfenil con 16 moles de etoxilato	2,30 %
talco	0,80 %
almidón de maíz	5,00 %
fertilizante de liberación lenta	36,00 %
caolín	38,00 %
agua	10,60 %

Ejemplo I

Concentrado de la Suspensión

compuesto 802	35 %
copolímero de bloque butil polioxietileno/polipropileno	4,0 %
copolímero de ácido esteárico/polietilenglicol	1,0 %
polímero estireno acrílico	1,0 %
goma xantana	0,1 %
propilenglicol	5,0 %

desespumante a base de silicona	0,1 %
1,2-bencisotiazolin-3-ona	0,1 %
agua	53,7 %

Ejemplo J

Emulsión en Agua

compuesto 801	10,0 %
copolímero de bloque butil polioxietileno/polipropileno	4,0 %
copolímero de ácido esteárico/polietilenglicol	1,0 %
polímero estireno acrílico	1,0 %
goma xantana	0,1 %
propilenglicol	5,0 %
desespumante a base de silicona	0,1 %
1,2-bencisotiazolin-3-ona	0,1 %
hidrocarburo aromático a base de petróleo	20,0
agua	58,7 %

Ejemplo K

Dispersión Oleosa

compuesto 807	25 %
hexaoleato de sorbitol polioxietileno	15 %
arcilla de bentonita orgánicamente	2,5 %

modificada	
metil éster de ácidos grasos	57,5 %

Ejemplo L

Suspoemulsión

compuesto 806	10,0 %
imidacloprida	5,0 %
copolímero de bloque butil polioxietileno/polipropileno	4,0 %
copolímero de ácido esteárico/polietilenglicol	1,0 %
polímero estireno acrílico	1,0 %
goma xantana	0,1 %
propilenglicol	5,0 %
desespumante a base de silicona	0,1 %
1,2-bencisotiazolin-3-ona	0,1 %
hidrocarburo aromático a base de petróleo	20,0 %
agua	53,7 %

Los compuestos de esta invención exhiben actividad contra un amplio espectro de plagas de invertebrados. Estas plagas incluyen invertebrados que se encuentran en una variedad de hábitats, tales como, por ejemplo, el follaje de las plantas, raíces, suelo, cosechas u otros elementos comestibles, estructuras de construcción o tegumentos animales. Estas

plagas incluyen, por ejemplo, invertebrados que se alimentan de follaje (que incluye hojas, tallos, flores y frutos), semillas, madera, fibras textiles o sangre o tejido animal, y que de este modo causan daño o perjuicios a, por ejemplo, cultivos agronómicos en crecimiento o almacenados, bosques, cultivos de invernaderos, viveros u ornamentales, comestibles o productos de fibra almacenados, o casas u otras estructuras o su contenido, o que son nocivas para la salud pública o la salud animal. Los experimentados en la técnica comprenderán que no todos los compuestos son igualmente eficaces contra todos los estadios de crecimiento de todo tipo de plagas.

Los compuestos y composiciones de la presente son, por consiguiente, agronómicamente útiles para proteger cultivos de campo contra plagas de invertebrados fitófagos y también, desde un punto de vista no agronómico, para proteger otros cultivos hortícolas y plantas contra plagas de invertebrados fitófagos. Esta utilidad incluye proteger cultivos y otras plantas (es decir, tanto agronómicas como no agronómicas) que contienen material genético introducido por ingeniería genética (es decir, transgénica) o modificado por mutagénesis para proporcionar características ventajosas. Los ejemplos de estas características incluyen tolerancia a herbicidas, resistencia a plagas fitófagas (por ejemplo, insectos, ácaros, áfidos, arañas, nemátodos, caracoles terrestres, hongos, bacterias y virus patogénicos de las

plantas), crecimiento mejorado de la planta, aumento de la tolerancia ante condiciones adversas de crecimiento, tales como temperaturas altas y bajas, humedad del suelo alta o baja, y alta salinidad, aumento en la floración o los frutos, mayor rendimiento de la cosecha, aceleración de la maduración, calidad o y/o valor nutricional más alto del producto cosechado, o propiedades mejoradas de almacenamiento o proceso de los productos cosechados. Las plantas transgénicas se pueden modificar para expresar múltiples características. Los ejemplos de plantas que contienen características proporcionadas por ingeniería genética o mutagénesis incluyen variedades de maíz, algodón, frijol de soja y papa que expresan una toxina insecticida de *Bacillus thuringiensis*, tal como YIELD GARD®, KNOCKOUT®, STARLINK®, BOLLGARD®, NuCOTN®y NEWLEAF®, y variedades tolerantes a los herbicidas de maíz, algodón, frijol de soja y semilla de colza, tales como ROUNDUP READY®, LIBERTY LINK®, IMI®, STS® y CLEARFIELD®, así como también cultivos que expresan *N*-acetiltransferasa (GAT) para proporcionar resistencia a herbicidas de glifosato, o cultivos que contienen el gen HRA que proporciona resistencia a herbicidas que inhiben la producción de la enzima acetolacto-sintetasa (ALS). Los compuestos y composiciones de la presente pueden interactuar sinérgicamente con

características introducidas por ingeniería genética o modificadas por mutagénesis y así mejorar la expresión o efectividad fenotípica de las características o aumentar la eficacia de los compuestos y composiciones de la presente para controlar plagas de invertebrados. En particular, los compuestos y composiciones de la presente pueden interactuar sinérgicamente con la expresión fenotípica de proteínas u otros tóxicos de productos naturales para plagas de invertebrados y proporcionar un mayor control por efectos que se combinan de manera aditiva para estas plagas.

Las composiciones de esta invención también pueden comprender, opcionalmente, nutrientes vegetales, por ejemplo, una composición fertilizante que comprende al menos un nutriente vegetal seleccionado de nitrógeno, fósforo, potasio, azufre, calcio, magnesio, hierro, cobre, boro, manganeso, zinc y molibdeno. Son de interés las composiciones que comprenden por lo menos una composición fertilizante que comprende al menos un nutriente vegetal seleccionado de nitrógeno, fósforo, potasio, azufre, calcio y magnesio. Las composiciones de la presente invención que también comprenden al menos un nutriente vegetal pueden estar en la forma de líquidos o sólidos. Son de interés las formulaciones sólidas en la forma de gránulos, barras o tabletas pequeñas. Las formulaciones sólidas que comprenden una composición fertilizante se pueden preparar al mezclar

el compuesto o la composición de la presente invención con la composición fertilizante junto con los ingredientes de formulación para luego preparar la formulación usando métodos tales como granulación o extrusión. Alternativamente, las formulaciones sólidas se pueden preparar al atomizar una solución o suspensión de un compuesto o una composición de la presente invención en un solvente volátil sobre una composición fertilizante preparada previamente en la forma de mezclas dimensionalmente estables, por ejemplo, gránulos, pequeñas tabletas o barras, y luego evaporar el solvente.

Los ejemplos de plagas agronómicas o no agronómicas de invertebrados incluyen huevos, larvas y adultos del orden Lepidoptera, tales como orugas militares, gusanos cortadores, orugas medidoras y heliotinas en la familia Noctuidae (por ejemplo, barrenador rosado del tallo (*Sesamia inferens* Walker), barrenador del maíz (*Sesamia nonagrioides* Lefebvre), gusano soldado sureño (*Spodoptera eridania* Cramer), gusano cogollero (*Spodoptera fugiperda* J. E. Smith), gusano soldado del betabel (*Spodoptera exigua* Hübner), oruga de la hoja del algodonero (*Spodoptera littoralis* Boisduval), gusano soldado de manchas amarillas (*Spodoptera ornithogalli* Guenée), gusano trozador (*Agrotis ipsilon* Hufnagel), oruga de las leguminosas (*Anticarsia gemmatalis* Hübner), gusano verde del fruto (*Lithophane antennata* Walker), gusano de la col (*Barathra*

brassicae Linnaeus), falso medidor de la soja (*Pseudoplusia includens* Walker), gusano falso medidor de la col (*Trichoplusia ni* Hübner), gusano bellotero del algodonero (*Heliothis virescens* Fabricius)); barrenadores, taladrillos, gusanos tejedores, gusanos de las bellotas del pino, orugas del col y gusanos esqueletizadores de la familia Pyralidae (por ejemplo, taladro europeo del maíz (*Ostrinia nubilalis* Hübner), gusano de la naranja de California (*Amyelois transitella* Walker), oruga tejedora de la raíz del maíz (*Crambus caliginosellus* Clemens), gusanos del césped (Pirálidos: *Crambinae*) tales como gusano blanco (*Herpetogramma licarsisalis* Walker), barrenador del tallo de la caña de azúcar (*Chilo infuscatellus* Snellen), barrenador del fruto del tomate (*Neoleucinodes elegantalis* Guenée), gusano verde enrollador de la hoja (*Cnaphalocerus medinalis*), gusano enrollador de la uva (*Desmia funeralis* Hübner), gusano del melón (*Diaphania nitidalis* Stoll), larva del corazón de la col (*Helluala hydralis* Guenée), barrenador amarillo del tallo (*Scirpophaga incertulas* Walker), taladrador de primeros brotes (*Scirpophaga infuscatellus* Snellen), taladrador blanco de tallo (*Scirpophaga innotata* Walker), taladrador de brotes superiores (*Scirpophaga nivella* Fabricius), barrenador de cabeza negra del tallo del arroz (*Chilo polychrysus* Meyrick), gusano de la cabeza de la col (*Crocidolomia binotalis* English)); enrolladores de hojas, gusanos del capullo,

gusanos de semilla y gusanos de frutos de la familia Tortricidae (por ejemplo, gusano de la pera y la manzana (*Cydia pomonella* Linnaeus), palomilla de la vid (*Endopiza viteana* Clemens), palomilla oriental de la fruta (*Grapholita molesta* Busck), polilla falsa de los cítricos (*Cryptophlebia leucotreta* Meyrick), taladrador de cítricos (*Ecdytolopha aurantiana* Lima), enrollador de hojas de bandas rojas (*Argyrotaenia velutinana* Walker), enrollador de hojas de bandas oblicuas (*Choristoneura rosaceana* Harris), polilla de la manzana (*Epiphyas postvittana* Walker), polilla de bayas de la uva europea (*Eupoecilia ambiguella* Hübner), polilla de brotes de la manzana (*Pandemis pyrusana* Kearfott), enrollador de hojas omnívoro (*Platynota stultana* Walsingham), tortrícido de la corteza de los frutales (*Pandemis cerasana* Hübner), tortrícido marrón de la manzana (*Pandemis heparana* Denis & Schiffermüller)); y muchos otros lepidópteros económicamente importantes (por ejemplo, polilla de dorso de diamante (*Plutella xylostella* Linnaeus), oruga rosada (*Pectinophora gossypiella* Saunders), polilla gitana (*Lymantria dispar* Linnaeus), barrenador del fruto del melocotonero (*Carposina niponensis* Walsingham), minadora del melocotonero (*Anarsia lineatella* Zeller), palomilla de la papa (*Phthorimaea operculella* Zeller), minador moteado teniforme (*Lithocolletis blancardella* Fabricius), minador asiático de las hojas del manzano (*Lithocolletis ringoniella* Matsumura), enrollador de

hojas del arroz (*Lerodea eufala* Edwards), minador de hojas del manzano (*Leucoptera scitella* Zeller)); huevos, ninfas y adultos del orden Blattodea, que incluye cucarachas de las familias Blattellidae y Blattidae (por ejemplo, cucaracha común o negra (*Blatta orientalis* Linnaeus), cucaracha asiática (*Blatella asahinai* Mizukubo), cucaracha alemana (*Blattella germanica* Linnaeus), cucaracha de banda café (*Supella longipalpa* Fabricius), cucaracha americana o voladora (*Periplaneta americana* Linnaeus), cucaracha café (*Periplaneta brunnea* Burmeister), cucaracha de Madeira (*Leucophaea maderae* Fabricius)), cucaracha marrón-ahumada (*Periplaneta fuliginosa* Service), cucaracha australiana (*Periplaneta australasiae* Fabr.), cucaracha langosta (*Nauphoeta cinerea* Olivier) y cucaracha adaptada a la vida subterránea (*Symploce pallens* Stephens)); huevos, larvas y adultos que se alimentan de las hojas, de las frutas, de las raíces, de las semillas y del tejido vesicular del orden Coleoptera, que incluyen gorgojos de las familias Anthribidae, Bruchidae, y Curculionidae (por ejemplo, picudo del algodón (*Anthonomus grandis* Boheman), gorgojo acuático del arroz (*Lissorhoptrus oryzophilus* Kuschel), gorgojo del trigo (*Sitophilus granarius* Linnaeus), gorgojo del arroz (*Sitophilus oryzae* Linnaeus)), mala hierba de pasto azul anual (*Listronotus maculicollis* Dietz), picudo de pasto azul (*Sphenophorus parvulus* Gyllenhal), picudo de los céspedes

(*Sphenophorus venatus vestitus*), picudo de Denver (*Sphenophorus cicatristriatus* Fahraeus)); pulguillas americanas, escarabajos del pepino, gusanos de la raíz, escarabajos de las hojas, escarabajos de la patata y minadores de hojas de la familia Chrysomelidae (por ejemplo, escarabajo de patata de Colorado (*Leptinotarsa decemlineata* Say), crisomela del maíz (WCR) (*Diabrotica virgifera virgifera* LeConte)); escarabajos y otros escarabajos de la familia Scarabaeidae (por ejemplo, escarabajo japonés (*Popillia japonica* Newman), escarabajo oriental (*Anomala orientalis* Waterhouse, *Exomala orientalis* (Waterhouse) Baraud), gusano blanco del norte (*Cyclocephala borealis* Arrow), gusano blanco del sur (*Cyclocephala immaculata* Olivier o *C. lurida* Bland), escarabajo coprófago y escarabedidos (Aphodius spp.), escarabajo negro del césped del género Ataenius (*Ataenius spretulus* Haldeman), mayate o escarabajo de mayo (*Cotinis nitida* Linnaeus), escarabajo asiático de jardín (*Maladera castanea* Arrow), escarabajos de mayo y junio (*Phyllophaga* spp.) y escarabajos europeos (*Rhizotrogus majalis* Razoumowsky)); escarabajos de las alfombras de la familia Dermestidae; gusanos alambre de la familia Elateridae; escarabajos o escolítidos de la corteza de la familia Scolytidae y escarabajos de la harina de la familia Tenebrionidae.

Adicionalmente, las plagas agronómicas y no agronómicas incluyen: huevos, adultos y larvas del orden Dermaptera, que incluyen tijerillas de la familia Forficulidae (por ejemplo, tijerilla europea (*Forficula auricularia* Linnaeus), tijerilla negra (*Chelisoches morio* Fabricius)); huevos, inmaduros, adultos y ninfas de los órdenes Hemiptera and Homoptera, tales como chinches de las plantas de la familia Miridae, cigarras o chicharras de la familia Cicadidae, insectos saltadores (por ejemplo, *Empoasca* spp.) de la familia Cicadellidae, chinches de cama (por ejemplo, *Cimex lectularius* Linnaeus) de la familia Cimicidae, saltadores de plantas de las familias Fulgoroidae y Delphacidae, saltadores de árboles de la familia Membracidae, psílidos de la familia Psyllidae, moscas blancas de la familia Aleyrodidae, áfidos de la familia Aphididae, filoxeras de la familia Phylloxeridae, chinches harinosas de la familia Pseudococcidae, escamas de las familias Coccidae, Diaspididae y Margarodidae, insectos de encaje de la familia Tingidae, chinches apestosas de la familia Pentatomidae, chinches (por ejemplo, chinche de las raíces (*Blissus leucopterus hirtus* Montandon) y chinche del pasto (*Blissus insularis* Barber)) y otras chinches de semillas de la familia Lygaeidae, moscas pintas de la familia Cercopidae, chinches de la calabaza de la familia Coreidae, chinches rojas y manchadores de la fibra del algodón de la familia Pyrrhocoridae.

Las plagas agronómicas y no agronómicas incluyen, además,: huevos, larvas, ninfas y adultos del orden Acari (ácaros), tales como ácaros araña y ácaros rojos de la familia Tetranychidae (por ejemplo, ácaros rojos europeos (*Panonychus ulmi* Koch), ácaro araña manchado (*Tetranychus urticae* Koch), ácaro McDaniel (*Tetranychus mcdanieli* McGregor)); ácaros planos de la familia Tenuipalpidae (por ejemplo, ácaro plano de los cítricos (*Brevipalpus lewisi* McGregor)); ácaros de las yemas y de la erinosis de la familia Eriophyidae y otros ácaros folífagos y ácaros importantes para la salud de ser humano y de los animales, es decir, ácaros del polvo de la familia Epidermoptidae, ácaros foliculares de la familia Demodicidae, ácaros de los grano de la familia Glycyphagidae; garrapatas de la familia Ixodidae, comúnmente llamadas garrapatas duras (por ejemplo, garrapata de pata negra o de los ciervos (*Ixodes scapularis* Say), garrapata de Australia que produce parálisis (*Ixodes holocyclus* Neumann), garrapata americana del perro (*Dermacentor variabilis* Say), garrapata estrella solitaria (*Amblyomma americanum* Linnaeus)) y garrapatas de la familia Argasidae, comúnmente llamadas garrapatas suaves (por ejemplo, garrapata que produce fiebre recurrente (*Ornithodoros turicata*), garrapata común de las aves de corral (*Argas radiatus*)); ácaros de la sarna de las familias Psoroptidae, Pyemotidae, y Sarcoptidae; huevos, adultos e

inmaduros del orden Orthoptera que incluyen saltamontes, langostas y grillos (por ejemplo, saltamontes migratorios (por ejemplo, *Melanoplus sanguinipes* Fabricius, *M. differentialis* Thomas), saltamontes americanos (por ejemplo, *Schistocerca americana* Drury), langosta del desierto (*Schistocerca gregaria* Forskal), langosta migratoria (*Locusta migratoria* Linnaeus), langosta de arbusto (*Zonocerus* spp.), grillo doméstico (*Acheta domesticus* Linnaeus), grillos topo (por ejemplo, grillo topo leonado (*Scapteriscus vicinus* Scudder) y grillo topo del sur (*Scapteriscus borellii* Giglio-Tos)); huevos, adultos e inmaduros del orden Diptera que incluyen minadores de hojas (por ejemplo, *Liriomyza* spp., tales como minador serpentina de la hoja (*Liriomyza sativae* Blanchard)), mosquitos, moscas de la fruta (Tephritidae), moscas “frit” (por ejemplo, *Oscinella frit* Linnaeus), moscas del suelo o del sustrato, moscas domésticas (por ejemplo, *Musca domestica* Linnaeus), moscas domésticas menores (por ejemplo, *Fannia canicularis* Linnaeus, *F. femoralis* Stein), mosca estable (por ejemplo, *Stomoxys calcitrans* Linnaeus), moscas faciales, moscas de *los* cuernos, moscas de la muerte (por ejemplo, Chrysomya spp., Phormia spp.*)* y otras plagas de moscas muscoides, mosca del caballo (por ejemplo, *Tabanus* spp.), colmoyotes (por ejemplo, *Gastrophilus* spp., *Oestrus* spp.), tórsalos o gusanos blancos del ganado (por ejemplo, *Hypoderma spp.)*,

mosca del ciervo (por ejemplo, Chrysops spp.), mosca o piojo de la oveja (por ejemplo, *Melophagus ovinus* Linnaeus) y otros braquíceros, mosquitos (por ejemplo, *Aedes* spp., *Anopheles* spp., *Culex* spp.), mosca negra (por ejemplo, *Prosimulium* spp., *Simulium* spp.), jejenes, mosquitos simúlidos, ciáridos y otros nematóceros; huevos, adultos e inmaduros del orden Thysanoptera, que incluyen trips de la cebolla (*Thrips tabaci* Lindeman), trips de las flores (*Frankliniella* spp.) y otros trips que se alimentan de las hojas; plagas de insectos del orden Hymenoptera, que incluyen hormigas de la familia Formicidae, que incluyen la hormiga carpintero de Florida (*Camponotus floridanus* Buckley), hormiga carpintera roja (*Camponotus ferrugineus* Fabricius), hormiga carpintera negra (*Camponotus pennsylvanicus* De Geer), hormiga de pie blanco (*Technomyrmex albipes* fr. Smith), hormigas cabezonas (*Pheidole* sp.), hormigas fantasma (*Tapinoma melanocephalum* Fabricius); hormiga faraona (*Monomorium pharaonis* Linnaeus), hormiga de fuego pequeña u hormiga colorada (*Wasmannia auropunctata* Roger), hormiga de fuego (*Solenopsis geminata* Fabricius), hormiga de fuego roja importada (*Solenopsis invicta* Buren), hormiga argentina (*Iridomyrmex humilis* Mayr), hormiga loca (*Paratrechina longicornis* Latreille), hormiga del pavimento (*Tetramorium caespitum* Linnaeus), hormiga del maizal (*Lasius alienus* Förster) y hormiga olorosa doméstica (*Tapinoma*

sessile Say). Otros himenópteros que incluyen abejas (que incluyen abejas carpintero), avispones, avispas de chaqueta amarilla, avispas y moscas de sierra (*Neodiprion* spp.; *Cephus* spp.); plagas de insectos del orden Isoptera que incluyen termitas en las familias de los Termítidos (por ejemplo, *Macrotermes* sp., *Odontotermes obesus* Rambur), Kalotermítidos (por ejemplo, *Cryptotermes* sp.) y *Rinotermítidos* (por ejemplo, *Reticulitermes* sp., *Coptotermes* sp., *Heterotermes tenuis* Hagen), la termita subterránea oriental (*Reticulitermes flavipes* Kollar), termita subterránea occidental (*Reticulitermes hesperus* Banks), termita subterránea de Formosa (*Coptotermes formosanus* Shiraki), termita de la *madera* seca de las Indias Occidentales (*Incisitermes immigrans* Snyder), termita de los muebles *(Cryptotermes brevis* Walker), termita de la madera seca (*Incisitermes snyderi* Light), termita subterránea sudoriental (*Reticulitermes virginicus* Banks), termita de la madera seca occidental (*Incisitermes minor* Hagen), termitas arbóreas, tales como *Nasutitermes* sp. y otras termitas de importancia económica; plagas de insectos del orden Thysanura, tales como pececillo de plata (*Lepisma saccharina* Linnaeus) e insecto de fuego (*Thermobia domestica* Packard); plagas de insectos del orden Mallophaga e incluyen el piojo de la cabeza (*Pediculus humanus capitis* De Geer), piojo del cuerpo (*Pediculus humanus* Linnaeus), piojo del cuerpo de la

gallina (*Menacanthus stramineus* Nitszch), piojo mordedor del perro (*Trichodectes canis* De Geer), piojo del plumón (*Goniocotes gallinae* De Geer), piojo del cuerpo de la oveja (*Bovicola ovis* Schrank), piojo de nariz corta del ganado (*Haematopinus eurysternus* Nitzsch), piojo de nariz larga del ganado (*Linognathus vituli* Linnaeus) y otros piojos parasitarios succionadores y masticadores que atacan hombres y animales; plagas de insectos del orden Siphonoptera, que incluyen la pulga de rata (*Xenopsylla cheopis* Rothschild), pulga de gato (*Ctenocephalides felis* Bouche), pulga de perro (*Ctenocephalides canis* Curtis), pulga de gallina (*Ceratophyllus gallinae* Schrank), pulga pegajosa de las aves (*Echidnophaga gallinacea* Westwood), pulga del ser humano (*Pulex irritans* Linnaeus) y otras pulgas que afectan mamíferos y aves. Las plagas adicionales de artrópodos cubiertos incluyen: arañas en el orden Araneae, tales como la araña café o violinista (*Loxosceles reclusa* Gertsch & Mulaik) y la araña viuda negra (*Latrodectus mactans* Fabricius) y centípedos en el orden Scutigeromorpha, tales como el ciempiés doméstico (*Scutigera coleoptrata* Linnaeus).

Los ejemplos de plagas de invertebrados de los granos almacenados incluyen el barrenador mayor de los granos (*Prostephanus truncatus*), el barrenador menor de los granos (*Rhyzopertha dominica*), el gorgojo del arroz (*Stiophilus oryzae*), el gorgojo del maíz (*Stiophilus zeamais*), el

gorgojo del garbanzo (*Callosobruchus maculatus*), el escarabajo rojo de la harina (*Tribolium castaneum*), el gorgojo del trigo (*Stiophilus granarius*), la polilla India de la harina (*Plodia interpunctella*), el escarabajo de la harina del Mediterráneo (*Ephestia kuhniella*) y el escarabajo chato ferruginoso de los granos (*Cryptolestis ferrugineus*).

Los compuestos de la invención muestran una actividad particularmente alta contra plagas del orden Lepidoptera (por ejemplo, *Alabama argillacea* Hübner (gusano de hoja de algodón), *Archips argyrospila* Walker (enrollador de hojas de los frutos), *A. rosana* Linnaeus (enrollador de hojas europeo) y otras especies *Archips*, *Chilo suppressalis* Walker (barrenador del tallo del arroz), *Cnaphalocrosis medinalis* Guenée (enrollador de hojas de arroz), *Crambus caliginosellus* Clemens (oruga tejedora de la raíz del maíz), *Crambus teterrellus* Zincken (gusanos tejedores del pasto azul), *Cydia pomonella* Linnaeus (carpocapsa), *Earias insulana* Boisduval (oruga espinosa del algodonero), *Earias vittella* Fabricius (gusano moteado), *Helicoverpa armigera* Hübner (gusano americano), *Helicoverpa zea* Boddie (gusano de la mazorca), *Heliothis virescens* Fabricius (gusano bellotero del algodonero), *Herpetogramma licarsisalis* Walker (gusanos del césped), *Lobesia botrana* Denis & Schiffermüller (palomilla de la vid), *Pectinophora gossypiella* Saunders (oruga rosada), *Phyllocnistis citrella* Stainton (minador de cítricos), *Pieris*

brassicae Linnaeus (mariposa blanca grande de la col), *Pieris rapae* Linnaeus (mariposa blanca pequeña de la col), *Plutella xylostella* Linnaeus (polilla de dorso de diamante), *Spodoptera exigua* Hübner (gusano soldado del betabel), *Spodoptera litura* Fabricius (gusano gris del tabaco, gusano medidor del algodonero), *Spodoptera frugiperda* J. E. Smith (gusano cogollero), *Trichoplusia ni* Hübner (gusano falso medidor de la col) y *Tuta absoluta* Meyrick (polilla minadora del tomate)).

Los compuestos de la invención tienen, además, una actividad sobre miembros del orden Homópteros que incluyen: *Acyrthosiphon pisum* Harris (pulgón del chícharo), *Aphis craccivora* Koch (pulgón negro de las leguminosas), *Aphis fabae* Scopoli (pulgón negro del frijol), *Aphis gossypii* Glover (pulgón del algodón, pulgón del melón), *Aphis pomi* De Geer (pulgón del manzano), *Aphis spiraecola* Patch (pulgón verde de los cítricos), *Aulacorthum solani* Kaltenbach (pulgón de la patata), *Chaetosiphon fragaefolii* Cockerell (pulgón de la frutilla), *Diuraphis noxia* Kurdjumov/Mordvilko (pulgón ruso del trigo), *Dysaphis plantaginea* Paaserini (pulgón ceniciento del manzano), *Eriosoma lanigerum* Hausmann (pulgón lanígero del manzano), *Hyalopterus pruni* Geoffroy (pulgón harinoso de la ciruela), *Lipaphis erysimi* Kaltenbach (pulgón verde de la col), *Metopolophium dirrhodum* Walker (pulgón de los cereales), *Macrosiphum euphorbiae* Thomas (pulgón de la papa), *Myzus persicae* Sulzer (pulgón del

melocotón-patata, pulgón verde del melocotonero), *Nasonovia ribisnigri* Mosley (pulgón de la lechuga), *Pemphigus* spp. (pulgones rizófagos y áfidos formadores de agallas), *Rhopalosiphum maidis* Fitch (pulgón del maíz), *Rhopalosiphum padi* Linnaeus (pulgón del tallo o negrilla), *Schizaphis graminum* Rondani (pulgón verde de los cereales), *Sitobion avenae* Fabricius (pulgón verde oscuro de la espiga), *Therioaphis maculata* Buckton (pulgón manchado de la alfalfa), *Toxoptera aurantii* Boyer de Fonscolombe (pulgón negro de los cítricos) y *Toxoptera citricida* Kirkaldy (pulgón café de los cítricos); *Adelges* spp. (adelgids); *Philloxera devastatrix* Pergande (filoxera del nogal americano); *Bemisia tabaci* Gennadius (mosca blanca del tabaco, mosca blanca del camote), *Bemisia argentifolii* Bellows & Perring (mosca blanca de la hoja plateada), *Dialeurodes citri* Ashmead (mosca blanca de los cítricos) y *Trialeurodes vaporariorum* Westwood (mosca blanca de los invernaderos); *Empoasca fabae* Harris (saltador de la patata), *Laodelphax striatellus* Fallen (saltador de plantas marrón), *Macrolestes quadrilineatus* Forbes (saltador del áster), *Nephotettix cinticeps* Uhler (saltador verde), *Nephotettix nigropictus* Stål (saltador del arroz), *Nilaparvata lugens* Stål (saltador de plantas marrón), *Peregrinus maidis* Ashmead (saltador de la planta del maíz), *Sogatella furcifera* Horvath (saltador de lomo blanco),

Sogatodes orizicola Muir (delfácidos del arroz), *Typhlocyba pomaria* McAtee chicharrita blanca del manzano, *Erythroneoura* spp. (chicharritas de la vid); *Magicidada septendecim* Linnaeus (cigarra periódica); *Icerya purchasi* Maskell (escama algodonosa), *Quadraspidiotus perniciosus* Comstock (escama de San Jose); *Planococcus citri* Risso (piojo harinoso de los cítricos); *Pseudococcus* spp. (otros complejos de bichos); *Cacopsylla piricola* Foerster (psílido del peral), *Trioza diospiri* Ashmead (psílido del caqui).

Los compuestos de la presente invención pueden tener, además, actividad sobre los miembros del orden Hemiptera que incluyen: *Acrosternum hilare* Say (chinche apestosa verde), *Anasa tristis* De Geer (chinche de la calabaza), *Blissus leucopterus leucopterus* Say (chinche de las raíces), *Cimex lectularius* Linnaeus (chinche) *Corythuca gossypii* Fabricius (chinche de encaje del algodonero), *Cyrtopeltis modesta* Distant (chinche del tomate), *Dysdercus suturellus* Herrich-Schäffer (manchadores de la fibra del algodón), *Euchistus servus* Say (chinche apestosa café), *Euchistus variolarius* Palisot de Beauvois (chinche apestosa manchada), *Graptosthetus* spp. (complejo de chinches de semillas), *Leptoglossus corculus* Say (insecto de la semilla del pie de la hoja del pino), *Lygus lineolaris* Palisot de Beauvois (chinche manchadora), *Nezara viridula* Linnaeus (chinche verde), *Oebalus pugnax* Fabricius (chinche apestosa del arroz), *Oncopeltus fasciatus* Dallas

(chinche grande del algodón de seda), *Pseudatomoscelis seriatus* Reuter (pulga saltona del algodonero). Otros órdenes de insectos controlados por los compuestos de la invención incluyen los Thysanoptera (por ejemplo, *Frankliniella occidentalis* Pergande (trips occidental de las flores), *Scirthothrips citri* Moulton (trips de los cítricos), *Sericothrips variabilis* Beach (trips del frijol de soya) y *Thrips tabaci* Lindeman (trips de la cebolla); y el orden Coleoptera (por ejemplo, *Leptinotarsa decemlineata* Say (escarabajo de patata de Colorado), *Epilachna varivestis* Mulsant (escarabajo mexicano del frijol) y gusanos alambre de los géneros *Agriotes*, *Athous* o *Limonius*).

Obsérvese que algunos sistemas de clasificación contemporáneos sitúan a los homópteros como un suborden dentro del orden de los hemípteros.

Es de interés el uso de compuestos de esta invención para controlar la polilla de dorso de diamante (*Plutella xylostella*). Es de interés el uso de compuestos de esta invención para controlar el gusano cogollero (*Spodoptera frugiperda*).

Los compuestos de esta invención también pueden mezclarse con uno o más compuestos o agentes biológicamente activos que incluyen insecticidas, fungicidas, nematocidas, bactericidas, acaricidas, herbicidas, protectores de herbicidas, reguladores del crecimiento, tales como inhibidores de muda de los

insectos y estimulantes radiculares, quimioesterilizantes, semioquímicos, repelentes, atrayentes, feromonas, estimulantes de la alimentación, bacterias, virus u hongos entomopatogénicos u otros compuestos biológicamente activos para formar un pesticida multicomponente que ofrece un espectro aún más amplio de utilidad agronómica y no agronómica. Por lo tanto, la presente invención se refiere, además, a una composición que comprende una cantidad con eficacia biológica de un compuesto de la Fórmula **1**, un *N*-óxido o sal de este, por lo menos un componente adicional seleccionado del grupo que consiste de surfactantes, diluyentes sólidos y diluyentes líquidos y por lo menos un compuesto o agente adicional biológicamente activo. Para mezclas de la presente invención, el otro compuesto o agente biológicamente activo puede formularse junto con los compuestos de la presente, que incluyen los compuestos de Fórmula **1**, para formar una premezcla, o el otro compuesto o agente biológicamente activo puede formularse separadamente de los compuestos de la presente, que incluyen los compuestos de Fórmula **1**, y las dos formulaciones pueden combinarse entre sí antes de la aplicación (por ejemplo, en un tanque atomizador) o, alternativamente, aplicarse secuencialmente.

Los ejemplos de tales compuestos o agentes biológicamente activos con los cuales se pueden formular los compuestos de la presente invención son insecticidas, tales como abamectina,

acefato, acequinocilo, acetamiprida, acrinatrina, amidoflumet, amitraz, avermectina, azadiractina, azinfos-metilo, benfuracarb, bensultap, bifentrina, bifenazato, bistriflurona, borato, buprofezina, cadusafos, carbarilo, carbofurano, cartap, carzol, clorantraniliprol, clorfenapir, clorfluazurona, clorpirifos, clorpirifos-metilo, cromafenozida, clofentezina, clotianidina, ciantraniliprol, cycloprothrin, cyflumetofen, cyfluthrin, beta-cyfluthrin, cyhalothrin, gamma-cyhalothrin, lambda-cyhalothrin, cypermethrin, alfa-cipermetrina, zeta-cipermetrina, ciromacina, deltametrina, diafentiurona, diazinona, dieldrina, diflubenzurona, dimeflutrina, dimehipo, dimetoato, dinotefurano, diofenolano, emamectina, endosulfano, esfenvalerato, etiprol, etofenprox, etoxazol, óxido de fenbutatina, fenitrotiona, fenotiocarb, fenoxicarb, fenpropatrina, fenvaleriato, fipronil, flonicamida, flubendiamida, flucitrinato, flufenerim, flufenoxurona, fluvalinato, tau-fluvalinato, fonofós, formetanato, fostiazato, halofenozida, hexaflumurona, hexitiazox, hidrametilnona, imidacloprida, indoxacarb, jabones insecticidas, isofenfós, lufenurona, malatión, meperflutrina, metaflumizona, metaldehído, metamidofos, metidationa, metiodicarb, metomilo, metopreno, metoxicloro, metoflutrina, monocrotofós, metoxifenozida, nitenpiram, nitiacina, novalurona, noviflumurona, oxamil, paration, paration-

metilo, permetrina, forato, fosalona, fosmet, fosfamidona, pirimicarb, profenofós, proflutrina, propargita, protrifenbuto, pimetrozina, pirafluprol, piretrina, piridabeno, piridalil, pirifluquinazona, piriprol, piriproxifeno, rotenona, rianodina, silafluofeno, espinetoram, espinosad, espirodiclofeno, espiromesifeno, espirotetramato, sulprofós, sulfoxaflor, tebufenocida, tebufenpirad, teflubenzurona, teflutrina, terbufós, tetraclorvinfós, tetrametrina, tetrametilflutrina, tiacloprid, tiametoxam, tiodicarb, tiosultap-sodio, tolfenpirad, tralometrina, triazamato, triclorfona, triflumurona, *Bacillus thuringiensis* delta-endotoxinas, bacteria entomopatogénica, virus entomopatogénicos y hongos entomopatogénicos.

Deben destacarse los insecticidas tales como abamectina, acetamiprida, acrinatrina, amitraz, avermectina, azadiractina, bensultap, bifentrina, buprofezina, cadusafos, carbarilo, cartap, clorantraniliprol, clorfenapir, clorpirifos, clotianidina, ciantraniliprol, ciflutrina, beta-ciflutrina, cihalotrina, gamma-cihalotrina, lambda-cihalotrina, cipermetrina, alfa-cipermetrina, zeta-cipermetrina, ciromacina, deltametrina, dieldrina, dinotefurano, diofenolano, emamectina, endosulfano, esfenvalerato, etiprol, etofenprox, etoxazol, fenotiocarb, fenoxicarb, fenvaleriato, fipronil, flonicamida, flubendiamida, flufenoxurona, fluvalinato, formetanato,

fostiazato, hexaflumurona, hidrametilnona, imidacloprida, indoxacarb, lufenurona, metaflumizona, metiodicarb, metomilo, metopreno, metoxifenozida, nitenpiram, nitiacina, novalurona, oxamil, pimetrozina, piretrina, piridabeno, piridalil, piriproxifeno, rianodina, espinetoram, espinosad, espirodiclofeno, espiromesifeno, espirotetramato, sulfoxaflor, tebufenocida, tetrametrina, tiacloprid, tiametoxam, tiodicarb, tiosultap-sodio, tralometrina, triazamato, triflumurona, *Bacillus thuringiensis* delta-endotoxinas, todas las cepas del virus *Bacillus thuringiensis* y todas las cepas del virus *Nucleo polyhydrosis*.

Una modalidad de agentes biológicos para mezclar con los compuestos de la presente invención incluyen bacterias entomopatogénicas, tales como *Bacillus thuringiensis*, y las delta-endotoxinas encapsulas de *Bacillus thuringiensis*, tales como los bioinsecticidas MVP® y MVPII® preparados mediante el proceso CellCap® (CellCap®, MVP® y MVPII® son marcas registradas de Mycogen Corporation, Indianapolis, Indiana, Estados Unidos); hongos entomopatogénicos, tales como el hongo de la muscardina verde; y virus entomopatogénicos (tanto de origen natural como modificados genéticamente), que incluyen baculovirus, virus nucleopolihedros (NPV), tales como nucleopolihedrovirus de *Helicoverpa zea* (HzNPV), nucleopolihedrovirus de *Anagrapha*

falcifera (AfNPV); y virus de la granulosis (GV), tales como el virus de la granulosis *Cydia pomonella* (CpGV).

Es de particular interés una combinación en donde el otro ingrediente activo para controlar plagas de invertebrados pertenece a una clase química diferente o tiene un sitio de acción diferente al del compuesto de Fórmula **1**. En algunos casos, una combinación con por lo menos otro ingrediente activo para controlar plagas de invertebrados que tenga un espectro similar de control, pero un sitio distinto de acción, será especialmente ventajoso para el manejo de la resistencia. Por lo tanto, una composición de la presente invención puede comprender, además, una cantidad con eficacia biológica de al menos un ingrediente activo adicional para el control de plagas de invertebrados que tiene un espectro similar de control, pero que pertenece a una clase química diferente o que tiene un sitio de acción diferente. Estos compuestos o agentes adicionales biológicamente activos incluyen, pero no se limitan a, moduladores del canal de sodio, tales como bifentrina, cipermetrina, cihalotrina, lambda-cihalotrina, ciflutrina, beta-ciflutrina, deltametrina, dimeflutrina, esfenvalerato, fenvaleriato, indoxacarb, metoflutrina, proflutrina, piretrina y tralometrina; inhibidores de colinesterasa, tales como clorpirifos, metomil, oxamil, tiodicarb y triazamato; neonicotinoides, tales como acetamiprida, clotianidina,

dinotefurano, imidacloprida, nitenpiram, nitiacina, tiacloprid y tiametoxam; lactonas macrocíclicas insecticidas, tales como espinetoram, espinosad, abamectina, avermectina y emamectina; antagonistas de los canales de cloruro mediados por GABA (ácido γ-aminobutírico), tales como avermectina o bloqueadores, tales como etiprol y fipronil; inhibidores de la síntesis de quitina, tales como buprofezina, ciromacina, flufenoxurona, hexaflumurona, lufenurona, novalurona, noviflumurona y triflumurona; imitadores de la hormona juvenil, tales como diofenolano, fenoxicarb, metopreno y piriproxifeno; ligandos de los receptores de octopamina, tales como amitraz; inhibidores de muda y agonistas de ecdisona, tales como azadiractina, metoxifenozida y tebufenocida; ligandos de los receptores de rianodina, tales como rianodina, diamidas antranílicas, tales como clorantraniliprol, ciantraniliprol y flubendiamida; análogos de nereistoxina, tales como cartap; inhibidores del transporte de electrones en la mitocondria, tales como clorfenapir, hidrametilnona y piridabeno; inhibidores de la síntesis de lípidos, tales como espirodiclofeno y espiromesifeno; insecticidas de ciclodieno, tales como dieldrina o endosulfano; piretroides; carbamatos; ureas insecticidas; y agentes biológicos, que incluyen virus de nucleopolihedro (NPV), miembros de *Bacillus thuringiensis*, delta-endotoxinas encapsuladas de *Bacillus thuringiensis*, y

otros virus insecticidas de origen natural o modificados genéticamente.

Los ejemplos adicionales de compuestos o agentes biológicamente activos con los que se pueden formular los compuestos de la presente invención son: los fungicidas tales como 1-[4-[4-[5-(2,6-difluorofenil)-4,5-dihidro-3-isoxazolil]-2-tiazolil]-1-piperidinil]-2-[5-metil-3-(trifluorometil)-1*H*-pirazol-1-il]etanona, acibenzolar, aldimorf, amisulbrom, azaconazol, azoxistrobina, benalaxil, benomil, bentiavalicarb, bentiavalicarb-isopropilo, binomial, bifenilo, bitertanol, blasticidina S, caldo bordelés (sulfato tribásico de cobre), boscalid/nicobifeno, bromuconazol, bupirimato, butiobato, carboxina, carpropamid, captafol, captán, carbendazim, cloroneb, clorotalonil, clozolinato, clotrimazol, oxicloruro de cobre, sales de cobre, tales como sulfato de cobre e hidróxido de cobre, ciazofamida, ciflunamida, cimoxanil, ciproconazol, ciprodinil, diclofluanida, diclocimet, diclomezina, diclorano, dietofencarb, difenoconazol, dimetomorf, dimoxistrobina, diniconazol, diniconazol-M, dinocap, discostrobina, ditianona, dodemorf, dodina, econazol, etaconazol, edifenfos, epoxiconazol, etaboxam, etirimol, etridiazol, famoxadona, fenamidona, fenarimol, fenbuconazol, fencaramida, fenfuram, fenhexamida, fenoxanil, fenpiclonil, fenpropidina, fenpropimorf, acetato de fentina, hidróxido de

fentina, ferbam, ferfurazoato, ferimzona, fluazinam, fludioxonil, flumetover, fluopicolida, fluoxastrobina, fluquinconazol, flusilazol, flusulfamida, flutolanil, flutriafol, fluxapiroxad, folpet, fosetil-aluminio, ftalida, fuberidazol, furalaxilo, furametpir, hexaconazol, himexazol, guazatina, imazalil, imibenconazol, iminoctadina, iodicarb, ipconazol, iprobenfos, iprodiona, iprovalicarb, isoconazol, isoprotiolano, isotianil, kasugamicina, kresoxim-metil, mancozeb, mandipropamid, maneb, mapanipirina, mefenoxam, mepronil, metalaxil, metconazol, metasulfocarb, metiram, metominostrobina/fenominostrobina, mepanipirim, metrafenona, miconazol, miclobutanil, neo-asozin (metanoarsonato férrico), nuarimol, octilinona, ofurace, orisastrobina, oxadixil, ácido oxolínico, oxpoconazol, oxicarboxina, paclobutrazol, penconazol, pencicurona, penflufen, pentiopirad, perfurazoato, ácido fosfónico, ftalida, picobenzamida, picoxistrobina, polioxina, probenazol, procloraz, procimidona, propamocarb, propamocarb-clorhidrato, propiconazol, propineb, proquinazid, protioconazol, piraclostrobina, pirametostrobina, piraoxistrobina, priazofos, pirifenox, pirimetanilo, pirifenox, piriofenona, pirolnitrina, piroquilona, quinconazol, quinoxifeno, quintoceno, siltiofam, simeconazol, espiroxamina, estreptomicina, azufre, tebuconazol, tebufloquina, tecraceno, tecloftalam,

tecnaceno, tetraconazol, tiabendazol, tifluzamida, tiofanato, tiofanato-metilo, tiram, tiadinil, tolclofos-metil, tolifluanida, triadimefona, triadimenol, triarimol, triazoxida, tridemorf, trimorfamida, triciclazol, trifloxistrobina, triflumizol, triforina, triticonazol, uniconazol, validamicina, valifenalato, vinclozolina, zineb, ziram y zoxamida; nematocidas tales como aldicarb, imiciafos, oxamil y fenamifos; bactericidas tales como estreptomicina; acaricidas, tales como amitraz, quinometionat, clorobenzilato, cihexatina, dicofol, dienoclor, etoxazol, fenazaquina, óxido de fenbutatina, fenpropatrina, fenpiroximato, hexitiazox, propargita, piridabeno y tebufenpirad.

Se destaca los fungicidas y las composiciones que comprenden fungicidas tales como 1-[4-[4-[5-(2,6-difluorofenil)-4,5-dihidro-3-isoxazolil]-2-tiazolil]-1-piperidinil]-2-[5-metil-3-(trifluorometil)-1*H*pirazol-1-il]etanona, azoxiestrobina, hidróxido de cobre, cimoxanil, ciproconazol, difenoconazol, famoxadona, fenoxanil, ferimzona, flusilazol, flutolanil, ftalida, furametpir, hexaconazol, isoprotiolan, isotianil, kasugamicina, mancozeb, metominoestrobina, orisastrobina, pencicuron, pentiopirad, picoxistrobina, probenazol, propiconazol, proquinazid, piroquilon, simeconazol, tiadinil, triticonazol, trifloxiestrobina y validamicina.

En algunos casos, las combinaciones de un compuesto de esta invención con otros compuestos o agentes (específicamente para el control de plagas de invertebrados) biológicamente activos (es decir, ingredientes activos) pueden producir un efecto mayor que el efecto aditivo (es decir, sinérgico). Siempre es deseable reducir la cantidad de ingredientes activos liberados en el ambiente y, al mismo tiempo, asegurar un control eficaz de las plagas. Cuando se produce una sinergia de los ingredientes activos para controlar la plaga de invertebrados con índices de aplicación que dan niveles agronómicamente satisfactorios de control de la plaga de invertebrados, estas combinaciones pueden ser ventajosas para reducir el costo de producción del cultivo y disminuir la carga ambiental.

Los compuestos, y las composiciones que los contienen, de esta invención pueden aplicarse a plantas modificadas genéticamente para expresar proteínas que son tóxicas para las plagas de invertebrados (tales como las delta endotoxinas de *Bacillus thuringiensis*). Una aplicación de este tipo puede proporcionar un espectro más amplio de protección de la planta y ser ventajosa para el manejo de la resistencia. El efecto de los compuestos de esta invención aplicados exógenamente para el control de plagas de invertebrados puede ser sinérgico con las proteínas tóxicas expresadas.

Las referencias generales para estos protectores agrícolas (es decir, insecticidas, fungicidas, nematocidas, acaricidas, herbicidas y agentes biológicos) incluyen *The Pesticide Manual*, *13.° edición*, C. D. Tomlin, ed., British Crop Protection Council, Farnham, Surrey, Reino Unido, 2003 y *The BioPesticide Manual*, *2.° edición*, L. G. Copping, ed., British Crop Protection Council, Farnham, Surrey, Reino Unido, 2001.

Para modalidades en donde se usan uno o más de estos diversos socios para las mezclas, la relación en peso de estos socios (en total) con respecto al compuesto de la Fórmula **1**, un *N*-óxido, o sal de estos es, típicamente, de aproximadamente 1:3000 y aproximadamente 3000:1. Se destacan las relaciones en peso de entre aproximadamente 1:300 y aproximadamente 300:1 (por ejemplo, relaciones de entre aproximadamente 1:30 y aproximadamente 30:1). Una persona con experiencia en la técnica podrá determinar fácilmente mediante experimentación simple las cantidades biológicamente eficaces de ingredientes activos que se requieren para el espectro deseado de actividad biológica. Es evidente que incluir estos componentes adicionales puede ampliar el espectro de las plagas de invertebrados controladas más allá del espectro controlado por el compuesto de Fórmula **1** por sí solo.

La Tabla A enumera combinaciones específicas de un compuesto de Fórmula **1** con otros agentes para el control de

plagas de invertebrados ilustrativos de mezclas, composiciones y métodos de la presente invención. La primera columna de la Tabla A enumera los agentes específicos para el control de plagas de invertebrados (por ejemplo, “abamectina” en la primera línea). La segunda columna de la Tabla A enumera el modo de acción (de ser conocido) o la clase química de los agentes para el control de plagas de invertebrados. La tercera columna de la Tabla A enumera una o más modalidades de intervalos de relaciones en peso para concentraciones en las que un compuesto de Fórmula **1** se puede aplicar con respecto al agente para el control de plagas de invertebrados (por ejemplo, “de 50:1 a 1:50” de abamectina con respecto al compuesto de Fórmula **1** en peso). Por lo tanto, por ejemplo, la primera línea de la Tabla A describe, específicamente, que la combinación de un compuesto de la Fórmula **1** con abamectina puede aplicarse en una relación en peso de 50:1 a 1:50. Las líneas restantes de la Tabla A no se interpretarán de manera similar. Cabe destacar, además, que la Tabla A enumera combinaciones específicas de un compuesto de Fórmula **1** con otros agentes para el control de plagas de invertebrados ilustrativos de mezclas, composiciones y métodos de la presente invención e incluye otras modalidades de intervalos de relaciones en peso para concentraciones de aplicación.

Tabla A

Agente para Controlar Plagas de Invertebrados	Modo de Acción o Clase Química	Relación en Peso Relación de Peso
Abamectina	lactonas macrocíclicas	50:1 para 1:50
Acetamiprida	neonicotinoides	150:1 para 1:200
Amitraz	ligandos del receptor de octopamina	200:1 para 1:100
Avermectina	lactonas macrocíclicas	50:1 para 1:50
Azadiractina	agonistas de la ecdisona	100:1 para 1:120
Beta-ciflutrina	moduladores del canal de sodio	150:1 para 1:200
Bifentrina	moduladores del canal de sodio	100:1 para 1:10
Buprofezina	inhibidores de la síntesis de la quitina	500:1 para 1:50
Cartap	análogos de la nereistoxina	100:1 para 1:200
Clorantraniliprol	ligandos del receptor de rianodina	100:1 para 1:120
Clorfenapir	inhibidores del transporte	300:1 para

Agente para Controlar Plagas de Invertebrados	Modo de Acción o Clase Química	Relación en Peso Relación de Peso
	electrónico mitocondrial	1:200
Clorpirifos	inhibidores de la colinesterasa	500:1 para 1:200
Clotianidina	neonicotinoides	100:1 para 1:400
Ciantraniliprol	ligandos del receptor de rianodina	100:1 para 1:120
Ciflutrina	moduladores del canal de sodio	150:1 para 1:200
Cialotrina	moduladores del canal de sodio	150:1 para 1:200
Cipermetrina	moduladores del canal de sodio	150:1 para 1:200
Ciromacina	inhibidores de la síntesis de la quitina	400:1 para 1:50
Deltametrina	moduladores del canal de sodio	50:1 para 1:400
Dieldrina	insecticidas de ciclodieno	200:1 para 1:100
Dinotefurano	neonicotinoides	150:1 para

Agente para Controlar Plagas de Invertebrados	Modo de Acción o Clase Química	Relación en Peso Relación de Peso
		1:200
Diofenolán	inhibidor de muda	150:1 para 1:200
Emamectina	lactonas macrocíclicas	50:1 para 1:10
Ensodulfano	insecticidas de ciclodieno	200:1 para 1:100
Esfenvalerato	moduladores del canal de sodio	100:1 para 1:400
Etiprol	bloqueadores del canal de cloruro regulado por GABA	200:1 para 1:100
Fenotiocarb		150:1 para 1:200
Fenoxicarb	imitadores de la hormona juvenil	500:1 para 1:100
Fenvalerato	moduladores del canal de sodio	150:1 para 1:200
Fipronil	bloqueadores del canal de cloruro regulado por GABA	150:1 para 1:100
Flonicamida		200:1 para 1:100

Agente para Controlar Plagas de Invertebrados	Modo de Acción o Clase Química	Relación en Peso Relación de Peso
Flubendiamida	ligandos del receptor de rianodina	100:1 para 1:120
Flufenoxurón	inhibidores de la síntesis de la quitina	200:1 para 1:100
Hexaflumurón	inhibidores de la síntesis de la quitina	300:1 para 1:50
Hidrametilnon	inhibidores del transporte electrónico mitocondrial	150:1 para 1:250
Imidacloprida	neonicotinoides	1000:1 para 1:1000
Indoxacarb	moduladores del canal de sodio	200:1 para 1:50
Lambda cialotrina	moduladores del canal de sodio	50:1 para 1:250
Lufenurona	inhibidores de la síntesis de la quitina	500:1 para 1:250
Metaflumizona		200:1 para 1:200
Metomilo	inhibidores de la colinesterasa	500:1 para 1:100

Agente para Controlar Plagas de Invertebrados	Modo de Acción o Clase Química	Relación en Peso Relación de Peso
Metopreno	imitadores de la hormona juvenil	500:1 para 1:100
Metoxifenozida	agonistas de la ecdisona	50:1 para 1:50
Nitenpiram	neonicotinoides	150:1 para 1:200
Nitiazina	neonicotinoides	150:1 para 1:200
Novaluron	inhibidores de la síntesis de la quitina	500:1 para 1:150
Oxamilo	inhibidores de la colinesterasa	200:1 para 1:200
Pimetrozina		200:1 para 1:100
Piretrina	moduladores del canal de sodio	100:1 para 1:10
Piridaben	inhibidores del transporte electrónico mitocondrial	200:1 para 1:100
Piridalilo		200:1 para 1:100
Piriproxifeno	imitadores de la hormona	500:1 para

Agente para Controlar Plagas de Invertebrados	Modo de Acción o Clase Química	Relación en Peso Relación de Peso
	juvenil	1:100
Rianodina	ligandos del receptor de rianodina	100:1 para 1:120
Espinetoram	lactonas macrocíclicas	150:1 para 1:100
Espinosad	lactonas macrocíclicas	500:1 para 1:10
Espirodiclofeno	inhibidores de la biosíntesis de lípidos	200:1 para 1:200
Espiromesifeno	inhibidores de la biosíntesis de lípidos	200:1 para 1:200
Tebufenozida	agonistas de la ecdisona	500:1 para 1:250
Tiacloprida	neonicotinoides	100:1 para 1:200
Tiametoxam	neonicotinoides	1250:1 para 1:1000
Tiodicarb	inhibidores de la colinesterasa	500:1 para 1:400
Tiosultap-sodio		150:1 para

Agente para Controlar Plagas de Invertebrados	Modo de Acción o Clase Química	Relación en Peso Relación de Peso
		1:100
Tralometrina	moduladores del canal de sodio	150:1 para 1:200
Triazamato	inhibidores de la colinesterasa	250:1 para 1:100
Triflumurón	inhibidores de la síntesis de la quitina	200:1 para 1:100
Bacillus thuringiensis	agentes biológicos	50:1 para 1:10
Delta endotoxinas de *Bacillus thuringiensis*	agentes biológicos	50:1 para 1:10
NPV (por ejemplo, Gemstar)	agentes biológicos	50:1 para 1:50

Es de interés la composición de la presente invención en donde por lo menos uno de los compuestos o agentes adicionales biológicamente activos se selecciona de los agentes para el control de plagas de invertebrados enumerados anteriormente en la Tabla A.

Las relaciones en peso de un compuesto, que incluye un compuesto de la Fórmula **1**, un *N*-óxido o sal de este, con respecto al agente adicional para el control de plagas de invertebrados se encuentran entre 1000:1 y 1:1000, con una modalidad entre 500:1 y 1:500, otra modalidad entre 250:1 y 1:200 y otra modalidad entre 100:1 y 1:50.

Las modalidades de composiciones específicas que comprenden un compuesto de la Fórmula **1** se enumeran más abajo en las Tablas B1 a B15 (los números de los compuestos (Comp. comp.) se refieren a los compuestos de la Tabla índice A) y un agente adicional para el control de plagas de invertebrados.

Tabla B1

Núm. de Mezcla	Comp. y Núm.	Agente para Controlar Plagas de Invertebrados	Núm. de Mezcla	Comp. y Núm.	Agente para Controlar Plagas de Invertebrados
B1-1	41 y	Abamectina	B1-36	41 y	Imidacloprida
B1-2	41 y	Acetamiprida	B1-37	41 y	Indoxacarb
B1-3	41 y	Amitraz	B1-38	41 y	Lambda cialotrina
B1-4	41 y	Avermectina	B1-39	41 y	Lufenurona
B1-5	41 y	Azadiractina	B1-40	41 y	Metaflumizona
B1-5a	41 y	Bensultap	B1-41	41 y	Metomilo

Núm. de Mezcla	Comp. Núm.	y	Agente para Controlar Plagas de Invertebrados	Núm. de Mezcla	Comp. Núm.	y	Agente para Controlar Plagas de Invertebrados
B1-6	41	y	Beta-ciflutrina	B1-42	41	y	Metopreno
B1-7	41	y	Bifentrina	B1-43	41	y	Metoxifenozida
B1-8	41	y	Buprofezina	B1-44	41	y	Nitenpiram
B1-9	41	y	Cartap	B1-45	41	y	Nitiazina
B1-10	41	y	Clorantraniliprol	B1-46	41	y	Novaluron
B1-11	41	y	Clorfenapir	B1-47	41	y	Oxamilo
B1-12	41	y	Clorpirifos	B1-48	41	y	Fosmet
B1-13	41	y	Clotianidina	B1-49	41	y	Pimetrozina
B1-14	41	y	Ciantraniliprol	B1-50	41	y	Piretrina
B1-15	41	y	Ciflutrina	B1-51	41	y	Piridaben
B1-16	41	y	Cialotrina	B1-52	41	y	Piridalilo
B1-17	41	y	Cipermetrina	B1-53	41	y	Piriproxifeno
B1-18	41	y	Ciromacina	B1-54	41	y	Rianodina
B1-19	41	y	Deltametrina	B1-55	41	y	Espinetoram
B1-20	41	y	Dieldrina	B1-56	41	y	Espinosad
B1-21	41	y	Dinotefurano	B1-57	41	y	Espirodiclofeno
B1-22	41	y	Diofenolán	B1-58	41	y	Espiromesifeno
B1-23	41	y	Emamectina	B1-59	41	y	Espirotetramat
B1-24	41	y	Ensodulfano	B1-59a	41	y	Sulfoxaflor
B1-25	41	y	Esfenvalerato	B1-60	41	y	Tebufenozida

Núm. de Mezcla	Comp. Núm.	y	Agente para Controlar Plagas de Invertebrados	Núm. de Mezcla	Comp. Núm.	y	Agente para Controlar Plagas de Invertebrados
B1-26	41	y	Etiprol	B1-61	41	y	Tiacloprida
B1-27	41	y	Fenotiocarb	B1-62	41	y	Tiametoxam
B1-28	41	y	Fenoxicarb	B1-63	41	y	Tiodicarb
B1-29	41	y	Fenvalerato	B1-64	41	y	Tiosultap-sodio
B1-30	41	y	Fipronil	B1-65	41	y	Tolfenpirad
B1-31	41	y	Flonicamida	B1-66	41	y	Tralometrina
B1-32	41	y	Flubendiamida	B1-67	41	y	Triazamato
B1-33	41	y	Flufenoxurón	B1-68	41	y	Triflumurón
B1-34	41	y	Hexaflumurón	B1-69	41	y	*Bacillus thuringiensis* Delta endotoxinas de *Bacillus thuringiensis* NPV (por ejemplo, Gemstar)
B1-35	41	y	Hidrametilnon	B1-70	41	y	
				B1-71	41	y	

Tabla B2

La Tabla B2 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento

“Comp. núm.” se reemplaza por una referencia al Compuesto 77. Por ejemplo, la primera mezcla en la Tabla B2 se designa B2-1 y es una mezcla del Compuesto 77 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B3

La B3 Tabla es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 546. Por ejemplo, la primera mezcla en la Tabla B3 se designa B3 -1 y es una mezcla del Compuesto 546 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B4

La Tabla B4 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 613. Por ejemplo, la primera mezcla en la Tabla B4 se designa B4 -1 y es una mezcla del Compuesto 613 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B5

La Tabla B5 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento

“Comp. núm.” se reemplaza por una referencia al Compuesto 652. Por ejemplo, la primera mezcla en la Tabla B5 se designa B5 -1 y es una mezcla del Compuesto 652 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B6

La Tabla B6 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 720. Por ejemplo, la primera mezcla en la Tabla B6 se designa B6-1 y es una mezcla del Compuesto 720 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B7

La Tabla B7 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 800. Por ejemplo, la primera mezcla en la Tabla B7 se designa B7 -1 y es una mezcla del Compuesto 800 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B8

La Tabla B8 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento

“Comp. núm.” se reemplaza por una referencia al Compuesto 801. Por ejemplo, la primera mezcla en la Tabla B8 se designa B8 -1 y es una mezcla del Compuesto 801 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B9

La Tabla B9 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 802. Por ejemplo, la primera mezcla en la Tabla B9 se designa B9 -1 y es una mezcla del Compuesto 802 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B10

La Tabla B10 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 804. Por ejemplo, la primera mezcla en la Tabla B10 se designa B10 -1 y es una mezcla del Compuesto 804 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B11

La Tabla B11 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento

"Comp. núm." se reemplaza por una referencia al Compuesto 805. Por ejemplo, la primera mezcla en la Tabla B11 se designa B11 -1 y es una mezcla del Compuesto 805 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B12

La Tabla B12 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento "Comp. núm." se reemplaza por una referencia al Compuesto 806. Por ejemplo, la primera mezcla en la Tabla B12 se designa B12 -1 y es una mezcla del Compuesto 806 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B13

La Tabla B13 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento "Comp. núm." se reemplaza por una referencia al Compuesto 807. Por ejemplo, la primera mezcla en la Tabla B13 se designa B13 -1 y es una mezcla del Compuesto 807 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B14

La Tabla B14 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento

"Comp. núm." se reemplaza por una referencia al Compuesto 820. Por ejemplo, la primera mezcla en la Tabla B14 se designa B14 -1 y es una mezcla del Compuesto 820 y el agente adicional para el control de las plagas de invertebrados abamectina.

Tabla B15

La Tabla B15 es idéntica a la Tabla B1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento "Comp. núm." se reemplaza por una referencia al Compuesto 869. Por ejemplo, la primera mezcla en la Tabla B15 se designa B15 -1 y es una mezcla del Compuesto 869 y el agente adicional para el control de las plagas de invertebrados abamectina.

Las mezclas específicas enumeradas en la Tabla B1 a B15 combinan, generalmente, un compuesto de la Fórmula **1** con otro agente para plagas de invertebrados en las proporciones especificadas en la Tabla A.

Las Tablas C1 a C15 enumeran las modalidades de composiciones específicas que comprenden un compuesto de la Fórmula **1** (los números de los compuestos (Comp. comp.) se refieren a los compuestos en las Tablas índice A–E) y un fungicida adicional.

Tabla C1

Núm. de Mezcla	Comp. Núm.	y	Fungicida	Núm. de Mezcla	Comp. Núm.	y	Fungicida
C1-1	41	y	Probenazol	C1-17	41	y	Difenoconazol
C1-2	41	y	Tiadinil	C1-18	41	y	Ciproconazol
C1-3	41	y	Isotianil	C1-19	41	y	Propiconazol
C1-4	41	y	Piroquilona	C1-20	41	y	Fenoxanil
C1-5	41	y	Metominostrobina	C1-21	41	y	Ferimzona
C1-6	41	y	Flutolanil	C1-22	41	y	Ftalida
C1-7	41	y	Validamicina	C1-23	41	y	Kasugamicina
C1-8	41	y	Furametpir	C1-24	41	y	Picoxistrobina
C1-9	41	y	Pencicurona	C1-25	41	y	Pentiopirad
C1-10	41	y	Simeconazol	C1-26	41	y	Famoxadona
C1-11	41	y	Orysastrobin	C1-27	41	y	Cimoxanil
C1-12	41	y	Trifloxistrobina	C1-28	41	y	Proquinazid
C1-13	41	y	Isoprotiolano	C1-29	41	y	Flusilazol
C1-14	41	y	Azoxistrobina	C1-30	41	y	Mancozeb
C1-15	41	y	Triciclazol	C1-31	41	y	Hidróxido de cobre
C1-16	41	y	Hexaconazol	C1-32	41	y	(a)

(a) 1-[4-[4-[5-(2,6-difluorofenil)-4,5-dihidro-3-isoxazolil]-2-tiazolil]-1-piperidinil]-2-[5-metil-3-(trifluorometil)-1*H*-pirazol-1-il]etanona

Tabla C2

La Tabla C2 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 77. Por ejemplo, la primera mezcla en la Tabla C2 se designa C2 -1 y es una mezcla del Compuesto 77 y el fungicida adicional probenazol.

Tabla C3

La Tabla C3 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 546. Por ejemplo, la primera mezcla en la Tabla C3 se designa C3 -1 y es una mezcla del Compuesto 546 y el fungicida adicional probenazol.

Tabla C4

La Tabla C4 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 613. Por ejemplo, la primera mezcla en la Tabla C4 se designa C4 -1 y es una mezcla del Compuesto 613 y el fungicida adicional probenazol.

Tabla C5

La Tabla C5 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 652. Por ejemplo, la primera mezcla en la Tabla C5 se designa C5-1 y es una mezcla del Compuesto 652 y el fungicida adicional probenazol.

Tabla C6

La Tabla C6 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al compuesto 720. Por ejemplo, la primera mezcla en la Tabla C6 se designa C6-1 y es una mezcla del compuesto 720 y el fungicida adicional probenazol.

Tabla C7

La Tabla C7 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 800. Por ejemplo, la primera mezcla en la Tabla C7 se designa C7 -1 y es una mezcla del Compuesto 800 y el fungicida adicional probenazol.

Tabla C8

La Tabla C8 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 801. Por ejemplo, la primera mezcla en la Tabla C8 se designa C8 -1 y es una mezcla del Compuesto 801 y el fungicida adicional probenazol.

Tabla C9

La Tabla C9 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 802. Por ejemplo, la primera mezcla en la Tabla C9 se designa C9-1 y es una mezcla del Compuesto 802 y el fungicida adicional probenazol.

Tabla C10

La Tabla C10 es idéntica a la Tabla C1 excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 804. Por ejemplo, la primera mezcla en la Tabla C10 se designa C10-1 y es una mezcla del Compuesto 804 y el fungicida adicional probenazol.

Tabla C11

La Tabla C11 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 805. Por ejemplo, la primera mezcla en la Tabla C11 se designa C11 -1 y es una mezcla del Compuesto 805 y el fungicida adicional probenazol.

Tabla C12

La Tabla C12 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 806. Por ejemplo, la primera mezcla en la Tabla C12 se designa C12-1 y es una mezcla del Compuesto 806 y el fungicida adicional probenazol.

Tabla C13

La Tabla C13 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 807. Por ejemplo, la primera mezcla en la Tabla C13 se designa C13-1 y es una mezcla del Compuesto 807 y el fungicida adicional probenazol.

Tabla C14

La Tabla C14 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 820. Por ejemplo, la primera mezcla en la Tabla C14 se designa C14-1 y es una mezcla del Compuesto 820 y el fungicida adicional probenazol.

Tabla C15

La Tabla C15 es idéntica a la Tabla C1, excepto que cada referencia al Compuesto 41 en la columna con el encabezamiento “Comp. núm.” se reemplaza por una referencia al Compuesto 869. Por ejemplo, la primera mezcla en la Tabla C15 se designa C15-1 y es una mezcla del Compuesto 869 y el fungicida adicional probenazol.

Las plagas de invertebrados en aplicaciones agronómicas y no agronómicas se controlan al aplicar uno o más compuestos de esta invención, por lo general, en la forma de una composición, en una cantidad biológicamente eficaz, al hábitat de las plagas, que incluye el sitio agronómico y/o no agronómico de infestación, al área que se protegerá, o directamente a la plaga que se controla.

Por consiguiente, la presente invención comprende un método para controlar una plaga de invertebrados en aplicaciones agronómicas y/o no agronómicas; el método

comprende poner en contacto la plaga de invertebrados o su hábitat con una cantidad biológicamente eficaz de uno o más de los compuestos de la invención, o con una composición que comprende por lo menos uno de esos compuestos, o una composición que comprende por lo menos uno de esos compuestos y una cantidad biológicamente eficaz de por lo menos un agente o compuesto adicional biológicamente activo. Algunos ejemplos de composiciones adecuadas que comprenden un compuesto de la invención y una cantidad con eficacia biológica de al menos un agente o compuesto adicional biológicamente activo incluyen composiciones granulares, en donde el compuesto adicional activo está presente en el mismo gránulo que el compuesto de la invención o en gránulos separados de aquellos del compuesto de la invención.

Las modalidades del método de la invención incluyen contactar el hábitat. Se destaca el método en donde el hábitat es una planta. Se destaca, además, el método en donde el hábitat es un animal. Se destaca, además, el método en donde el hábitat es una semilla.

A fin de poner en contacto un compuesto o una composición de la invención para proteger un cultivo de campo contra plagas de invertebrados, el compuesto o la composición se aplican, por lo general, a la semilla del cultivo antes de la siembra, al follaje (por ejemplo, hojas, tallos, flores y

frutos) de las plantas de cultivo, o al suelo u otro medio de crecimiento antes o después de plantar la cosecha.

Una modalidad de un método de contacto es por atomización. Alternativamente, una composición granular que comprende un compuesto de la invención puede aplicarse al follaje de la planta o al suelo. Los compuestos de esta invención también pueden suministrarse eficazmente por absorción de la planta al poner en contacto la planta con una composición que comprende un compuesto de esta invención que se aplica como una formulación líquida para la impregnación del suelo, una formulación granular para el suelo, un tratamiento para cajas de viveros o un baño de inmersión de trasplantes. Es de interés una composición de la presente invención en la forma de una formulación líquida para la impregnación del suelo. También es de interés un método para controlar una plaga de invertebrados que comprende poner en contacto la plaga de invertebrados o su hábitat con una cantidad biológicamente eficaz de un compuesto de la presente invención o con una composición que comprende una cantidad biológicamente eficaz de un compuesto de la presente invención. Cabe destacar, además, un método en donde el hábitat es el suelo y la composición se aplica como una formulación para la impregnación del suelo. Cabe destacar, además, que los compuestos de esta invención también son eficaces para aplicarse localmente en el sitio de

infestación. Otros métodos de contacto incluyen la aplicación de un compuesto o una composición de la invención mediante atomización directa y residual, atomización aérea, geles, recubrimiento de semillas, microencapsulaciones, absorción sistémica, cebos, caravanas insecticidas, bolos de alimentos, nebulizadores, fumigadores, aerosoles y polvos, entre muchos otros. Una modalidad de un método de contacto es un gránulo, barra o tableta fertilizante dimensionalmente estable que comprende un compuesto o composición de la invención. Los compuestos de esta invención también pueden estar impregnados en materiales usados para fabricar dispositivos para el control de invertebrados (por ejemplo, redes para insectos).

Los compuestos de esta invención también son útiles en tratamientos de semillas para proteger las semillas contra plagas de invertebrados. En el contexto de la descripción y reivindicaciones de la presente, “tratar una semilla” significa poner en contacto la semilla con una cantidad biológicamente eficaz de un compuesto de la invención, formulado, por lo general, como una composición de la invención. Este tratamiento de la semilla protege la semilla contra plagas de invertebrados del suelo y, en general, también puede proteger las raíces y otras partes de la planta en contacto con el suelo de la plántula que se desarrolla a partir de la semilla germinadora. El tratamiento de la semilla también puede proteger el follaje por traslocación

del compuesto de esta invención o un segundo ingrediente activo dentro de la planta en desarrollo. Los tratamientos de semillas pueden aplicarse a todo tipo de semillas, que incluyen las provenientes de plantas modificadas genéticamente para expresar características especializadas en la germinación. Los ejemplos representativos incluyen los que expresan proteínas tóxicas para las plagas de invertebrados, tales como la toxina *Bacillus thuringiensis* o las que expresan resistencia a los herbicidas, tales como glifosato acetiltransferasa, que proporciona resistencia al glifosato.

Un método para tratar la semilla es atomizar o espolvorear la semilla con un compuesto de la invención (es decir, como una composición formulada) antes de sembrar las semillas. Las composiciones formuladas para el tratamiento de semillas comprenden, en general, un agente adhesivo o formador de película. Por lo tanto, típicamente, una composición de recubrimiento de semillas de la presente invención comprende una cantidad biológicamente eficaz de un compuesto de la Fórmula **1**, un *N*-óxido o sal de este y un formador de película o agente adhesivo. La semilla se puede recubrir mediante la atomización de concentrados fluidos en suspensión directamente sobre un lecho giratorio para semillas y luego secar las semillas. Alternativamente, se pueden atomizar sobre las semillas otros tipos de formulaciones, tales como polvos humedecidos, soluciones, suspoemulsiones, concentrados

emulsificables y emulsiones en agua. Este proceso es especialmente útil para aplicar recubrimientos peliculares sobre las semillas. Existen diversos procesos y equipos de recubrimiento para una persona experimentada en la técnica. Los procesos adecuados incluyen los enumerados en P. Kosters et al., *Seed Treatment*: *Progress and Prospects*, 1994 monografía núm. 57 de BCPC, y referencias indicadas en ella.

Por lo general, la semilla tratada comprende un compuesto de la presente invención en una cantidad de aproximadamente 0,1 g a 1 kg por 100 kg de semillas (es decir, de aproximadamente 0,0001 a 1 % en peso de la semilla antes del tratamiento). Una suspensión fluida formulada para tratamiento de semillas comprende, por lo general, de aproximadamente 0,5 a aproximadamente 70 % del ingrediente activo, de aproximadamente 0,5 a aproximadamente 30 % de un adhesivo formador de película, de aproximadamente 0,5 a aproximadamente 20 % de un agente dispersante, de 0 a aproximadamente 5 % de un espesante, de 0 a aproximadamente 5 % de un pigmento y/o colorante, de 0 a aproximadamente 2 % de un agente antiespumante, de 0 a aproximadamente 1 % de un conservante y de 0 a aproximadamente 75 % de un diluyente líquido volátil.

Los compuestos de esta invención pueden incorporarse en una composición de cebo que consumirá la plaga invertebrada o usarse dentro de un dispositivo, tal como una trampa, estación de cebo y similares. Tal composición cebo puede

estar en forma de gránulos que comprenden (a) ingredientes activos, particularmente, una cantidad con eficacia biológica de un compuesto de la Fórmula **1**, un *N* -óxido, o sal de estos; (b) uno o más materiales alimenticios; opcionalmente (c) un agente atrayente, y opcionalmente (d) uno o más humectantes. Destacan las composiciones de cebos o gránulos que comprenden entre aproximadamente 0,001-5 % de ingredientes activos, aproximadamente 40-99 % de material alimenticio y/o agente atrayente; opcionalmente, aproximadamente 0,05-10 % de humectantes, las cuales son eficaces para controlar las plagas de invertebrados del suelo con concentraciones de aplicación muy bajas, particularmente, en dosis de ingredientes activos que son letales por ingestión y no por contacto directo. Algunos materiales alimenticios pueden funcionar como fuente alimenticia y como agente atrayente. Los materiales alimenticios incluyen carbohidratos, proteínas y lípidos. Los ejemplos de materiales alimenticios son harinas vegetales, azúcar, almidones, grasa de origen animal, aceite vegetal, extractos de levadura y sólidos lácteos. Los ejemplos de agentes atrayentes son odorantes y saborizantes, tales como extractos de plantas o frutas, perfumes, u otro componente de origen animal o vegetal, feromonas u otros agentes conocidos para atraer a la plaga de invertebrados objetivo. Los ejemplos de humectantes, es decir, agentes que

retienen la humedad, son glicoles y otros polioles, glicerina y sorbitol. Es de interés una composición de cebo (y un método para usar la composición de cebo) empleada para controlar por lo menos una plaga de invertebrados seleccionada del grupo que consiste en hormigas, termitas y cucarachas. Un dispositivo para controlar una plaga de invertebrados puede comprender la composición de cebo de la presente y un alojamiento adaptado para recibir la composición de cebo, en donde el alojamiento tiene por lo menos una abertura dimensionada para permitir que la plaga de invertebrados pase a través de la abertura y pueda tener acceso a la composición de cebo desde un lugar externo al alojamiento y, en donde, además, el alojamiento está adaptado para colocarse en o cerca de un sitio de actividad potencial o conocida para la plaga de invertebrados.

Los compuestos de esta invención pueden aplicarse sin otros adyuvantes, aunque muy frecuentemente la aplicación será la de una formulación que comprende uno o más ingredientes activos con portadores, diluyentes y surfactantes adecuados y, posiblemente, en combinación con un alimento en función del uso final que se contemple. Un método de aplicación implica atomizar una dispersión de agua o solución de aceite refinado de un compuesto de la presente invención. Las combinaciones con aceites atomizables, concentraciones de aceites atomizables, adhesivos

extendedores, adyuvantes, otros solventes y sinergistas, tales como el butóxido de piperonilo, suelen aumentar la eficacia del compuesto. Para usos no agronómicos, estas aspersiones pueden aplicarse desde recipientes para pulverizaciones, tales como una lata, una botella u otro recipiente, ya sea por medio de una bomba o liberándolas desde un recipiente presurizado, por ejemplo, una lata de aerosol presurizada. Estas composiciones de pulverizables pueden adoptar diversas formas, por ejemplo, rocíos, vaporizaciones, espumas, humos o brumas. Así, tales composiciones de rociado pueden comprender propulsores, agentes espumantes, etc. según se necesite para la aplicación. De particular interés es una composición pulverizable que comprende una cantidad biológicamente eficaz de un compuesto o una composición de la presente invención y un vehículo. Una modalidad de dicha composición pulverizable comprende una cantidad biológicamente eficaz de un compuesto o una composición de la presente invención y un propulsor. Los propulsores ilustrativos incluyen, pero no se limitan a, metano, etano, propano, butano, isobutano, buteno, pentano, isopentano, neopentano, penteno, hidrofluorocarbonos, clorofluorocarbonos, éter dimetílico y sus mezclas. Es de interés una composición atomizable (y un método que usa esa composición atomizable dosificada desde un recipiente atomizador) empleada para controlar por lo

menos una plaga de invertebrados seleccionada del grupo que consiste en mosquitos, mosca negra, mosca de los establos, mosca del ciervo, mosca del caballo, avispas, avispas de chaqueta amarilla, avispones, garrapatas, arañas, hormigas, jejenes, y similares, tomadas individualmente o combinadas.

Los usos no agronómicos se refieren al control de plagas de invertebrados en áreas que no son campos de plantas de cultivo. Los usos no agronómicos de los compuestos y las composiciones de la presente incluyen el control de plagas de invertebrados en granos, semillas de leguminosas y otros productos alimenticios almacenados y en textiles, tales como ropa y alfombras. Los usos no agronómicos de los compuestos y las composiciones de la presente también incluyen el control de plagas de invertebrados en plantas ornamentales, bosques, jardines, a lo largo de caminos y derechos de paso de ferrocarriles, y en céspedes, tales como en parques, campos de golf y pasturas. Los usos no agronómicos de los compuestos y las composiciones de la presente también incluyen el control de plagas de invertebrados en casas y otros edificios que pueden estar ocupados por seres humanos y/o animales de compañía, granja, hacienda, zoológico u otros animales. Los usos no agronómicos de los compuestos y las composiciones de la presente también incluyen el control de plagas, tales

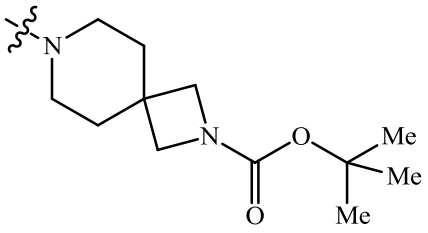
como termitas, que pueden dañar la madera u otros materiales estructurales usados en edificios.

Para aplicaciones agronómicas, la concentración de aplicación requerida para el control eficaz (es decir, la "cantidad con eficacia biológica") depende de factores como la especies de invertebrado a controlar, el ciclo de vida de la plaga, la etapa de vida, su tamaño, localización, época del año, cultivo o animal huésped, conducta alimenticia, conducta de apareamiento, humedad del ambiente, temperatura y similares. En circunstancias normales, una concentración de aplicación de aproximadamente 0,01 a 2 kg de ingredientes activos por hectárea es suficiente para controlar plagas en ecosistemas agronómicos, pero puede ser suficiente una cantidad tan pequeña como 0,0001 kg/hectárea o pueden requerirse cantidades tan grandes como 8 kg/hectárea. Para aplicaciones no agronómicas, las concentraciones de uso eficaces variarán de aproximadamente 1,0 a 50 mg/metro cuadrado, pero puede ser suficiente una cantidad tan pequeña como 0,1 mg/metro cuadrado o pueden requerirse cantidades tan grandes como 150 mg/metro cuadrado. Una persona con experiencia en la técnica podrá determinar fácilmente la cantidad biológicamente eficaz necesaria para el nivel de control deseado para la plaga de invertebrados.

Los compuestos representativos de la presente invención preparados mediante los métodos descritos en la presente descripción se muestran en las Tablas índice A–E. Ver la

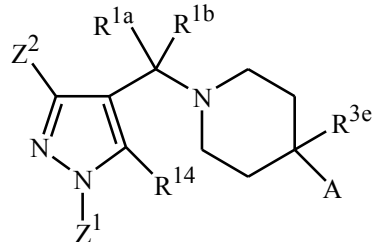
Tabla índice F para los datos de ^{1}H NMR. La columna titulada "m.p. (°C) o AP+ (M+1)" contiene ya sea datos espectrales de masa como una sola entrada numérica (por ejemplo, 348) o datos del punto de fusión como un intervalo numérico (por ejemplo, 122-124 °C). Para los datos espectrales de masa (AP^+ (M+1)), el valor numérico informado es el peso molecular del ion genitor molecular (M) formado por la adición de H^+ (peso molecular de 1) a la molécula para dar un pico M+1 observado por espectrometría de masas por medio de la ionización química a presión atmosférica (AP^+). No están reportados los picos de iones moleculares (por ejemplo, M+2 o M+4) que se producen con compuestos que contienen múltiples halógenos.

En la Tabla índice B, las entradas en la columna titulada "X" representan las definiciones de la variable M de la Fórmula **1**. Cuando M es $-C(R^{3e})(A)-$ y R^{3e} y A se toman en conjunto para formar un anillo, el anillo se representa en la forma "C(-miembros anulares-)" con el primer miembro anular y el último miembro anular unidos al átomo de carbono de $-C(R^{3e})(A)-$. Por ejemplo, cuando X se define como "C[-$CH_2N(C(O)OC(Me)_3)CH_2-$]", la estructura del anillo de piperidina que contiene X sería tal como se muestra a continuación.



Las siguientes abreviaciones se usan en las tablas índice a continuación: Comp. significa compuesto, Me es metilo, Et es etilo, c-Pr es ciclopropilo, Ph es fenilo, CHO es formilo y CN es ciano.

Tabla índice A



R^{1a}, R^{1b} y R^{14} son H

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
1	2-clorofenilo	4-fluorofenilo	fenilo	H	
2	3-metilfenilo	3-fluorofenilo	CO_2Me	H	408,5
3	2,4-difluorofenilo	2-metilfenilo	CO_2Me	H	426,5
4	4-metilfenilo	4-fluorofenilo	CO_2Me	H	408,5
5	3-metilfenilo	3-fluorofenilo	CH_2OCH_3	H	394,5
6	2-metilfenilo	3-fluoro-4-	CO_2Et	H	

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
		metoxifenilo			
7	4-metilfenilo	4-fluorofenilo	CH_2OCH_3	H	
8	4-metilfenilo	4-fluorofenilo	$C(O)NEt_2$	H	
9	2,4-difluorofenilo	4-fluorofenilo	CO_2Me	H	91-92 °C
10	4-(triflúorometoxi)fenilo	4-fluorofenilo	CO_2Me	H	478,4
11	3-(trifluorometil) fenilo	4-fluorofenilo	CO_2Me	H	462,5
12	3-(trifluorometil) fenilo	4-fluorofenilo	ciano	H	429,4
13	4-clorofenilo	4-fluorofenilo	CO_2Me	H	428,4
14	4-clorofenilo	4-fluorofenilo	ciano	H	395,4
15	2,4-difluorofenilo	3-(trifluorometil)	CO_2Me	H	480,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
		fenilo			
16	2,4-difluorofenilo	2-fluoro-4-metilfenilo	CO_2Me	H	444,5
17	2,4-difluorofenilo	4-clorofenilo	CO_2Me	H	446,4
18	2,6-dicloro-4-(trifluorometil) fenilo	4-clorofenilo	CO_2Me	H	546,3
19	3-clorofenilo	2-fluorofenilo	CO_2Me	H	442,5
20	3-clorofenilo	3-fluorofenilo	CO_2Et	H	442,4
21	3-clorofenilo	4-fluorofenilo	CO_2Et	H	442,4
22	3,4-diclorofenilo	2-fluorofenilo	CO_2Et	H	476,4
23	3,4-diclorofenilo	3-fluorofenilo	CO_2Et	H	476,4
24	3,4-diclorofenilo	4-fluorofenilo	CO_2Et	H	476,4
25	3-clorofenilo	3-fluorofenilo	CF_3	H	438,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
26	3-clorofenilo	2-fluorofenilo	NHC(O)OEt	H	457,5
27	3-clorofenilo	3-fluorofenilo	NHC(O)OEt	H	457,5
28	3-clorofenilo	4-fluorofenilo	NHC(O)OEt	H	457,5
29	3,4-diclorofenilo	2-fluorofenilo	C(O)Me	H	446,4
30	3,4-diclorofenilo	3-fluorofenilo	C(O)Me	H	446,4
31	3,4-diclorofenilo	4-fluorofenilo	C(O)Me	H	446,4
32	3,4-diclorofenilo	4-fluorofenilo	CO_2Me	H	462,4
33	3,4-diclorofenilo	4-fluorofenilo	ciano	H	429,4
34	3,5-bis(trifluorometil) fenilo	4-fluorofenilo	CO_2Me	H	530,5
35	3,5-diclorofenilo	4-fluorofenilo	CO_2Et	H	476,4
36	3,5-diclorofenilo	4-fluorofenilo	ciano	H	429,4
37	3-cloro-2-piridinilo	4-fluorofenilo	ciano	H	396,5
38	3,5-bis(trifluorometil)	4-fluorofenilo	ciano	H	497,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
	fenilo				
39	2-fluorofenilo	2-fluorofenilo	ciano	H	379,5
40	3-fluorofenilo	2-fluorofenilo	ciano	H	379,5
41	3-cloro-4-fluorofenilo	2-fluorofenilo	ciano	H	413,4
42	4-cianofenilo	4-fluorofenilo	ciano	H	386,5
43	2-fluorofenilo	2-fluorofenilo	CO_2Me	H	412,5
44	3-fluorofenilo	2-fluorofenilo	CO_2Me	H	412,5
45	3-cloro-4-fluorofenilo	2-fluorofenilo	CO_2Me	H	446,4
46	4-(trifluorometil)-2-pirimidinilo	2-fluorofenilo	ciano	H	431,5
47	4-(trifluorometil)-2-pirimidinilo	2-fluorofenilo	CO_2Me	H	464,5
48	4-(trifluorometil)fenilo	2-fluorofenilo	ciano	H	429,4
49	4-(trifluorometil)fenilo	2-fluorofenilo	NHC(O)OEt	H	491,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
50	4-(trifluorometil)fenilo	2-fluorofenilo	CO_2Me	H	462,5
51	4-bromofenilo	2-fluorofenilo	ciano	H	440,4
52	4-bromofenilo	2-fluorofenilo	CO_2Me	H	472,4
53	4-cloro-3-fluorofenilo	2-fluorofenilo	ciano	H	393,5
54	4-cloro-3-fluorofenilo	2-fluorofenilo	NHC(O)OEt	H	455,5
55	4-cloro-3-fluorofenilo	2-fluorofenilo	CO_2Me	H	426,5
56	3,4-diclorofenilo	2-fluorofenilo	ciano	H	429,4
57	3,4-diclorofenilo	2-fluorofenilo	NHC(O)OEt	H	491,4
58	4-(trifluorometil)fenilo	2-fluorofenilo	ciano	Ph	505,5
59	4-(trifluorometil)fenilo	2-fluorofenilo	NHC(O)Me	H	461,5
60	4-bromofenilo	2-fluorofenilo	NHPh	H	505,4
61	4-cloro-3-fluorofenilo	2-fluorofenilo	NHC(O)Me	H	425,5
62	3,4-diclorofenilo	2-fluorofenilo	NHC(O)Me	H	461,4
63	4-	2-fluorofenilo	ciano	H	445,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
	(triflúorometoxi)fenilo				
64	4-(triflúorometoxi)fenilo	2-fluorofenilo	CO_2Me	H	478,5
65	4-(triflúorometoxi)fenilo	2-fluorofenilo	NHC(O)Me	H	477,4
66	4-(triflúorometoxi)fenilo	2,4-difluorofenilo	ciano	H	463,4
67	4-(triflúorometoxi)fenilo	2,4-difluorofenilo	CO_2Me	H	496,4
68	4-(triflúorometoxi)fenilo	2,4-difluorofenilo	NHC(O)Me	H	495,5
69	4-(triflúorometoxi)fenilo	2-fluorofenilo	ciano	Ph	521,5
70	4-	2,4-	ciano	Ph	539,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
	(triflúorometoxi)fenilo	difluorofenilo			
71	3-(trifluorometil)fenilo	2-fluorofenilo	ciano	H	429,4
72	3-(trifluorometil)fenilo	2-fluorofenilo	CO_2Me	H	462,5
73	3-(trifluorometil)fenilo	2-fluorofenilo	ciano	Ph	505,5
74	3-(trifluorometil)fenilo	2-fluorofenilo	NHC(O)Me	H	461,5
75	4-clorofenilo	2-fluorofenilo	CO_2Me	H	428,4
76	4-clorofenilo	2-fluorofenilo	NHC(O)Me	H	427,5
77	4-clorofenilo	2-fluorofenilo	ciano	H	395,4
78	5-(trifluorometil)-2-piridinilo	2-fluorofenilo	ciano	H	#
79	4-(triflúorometoxi)fenilo	2,6-difluorofenilo	ciano	H	463,4
80	4-(triflúorometoxi)fenilo	2,6-difluorofenilo	CO_2Me	H	496,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
81	5-(trifluorometil)-2-piridinilo	2-fluorofenilo	CO_2Me	H	463,4
82	4-(triflúorometoxi)fenilo	2-fluorofenilo	1-BZT*	H	537,6
83	3,4-diclorofenilo	2-clorofenilo	ciano	H	445,4
84	3,4-diclorofenilo	2-clorofenilo	CO_2Me	H	478,4
85	3-cloro-4-cianofenilo	2-fluorofenilo	ciano	H	420
86	3,4-diclorofenilo	2-metilfenilo	ciano	H	425
87	3-clorofenilo	2-fluorofenilo	ciano	H	395
88	3-clorofenilo	2-fluorofenilo	CO_2Me	H	428
89	4-(metilsulfonil)fenilo	2-fluorofenilo	ciano	H	439
90	4-(metilsulfonil)fenilo	2-fluorofenilo	CO_2Me	H	472
91	4-(trifluorometil)fenilo	2-furanilo	ciano	H	401,5
92	4-(trifluorometil)fenilo	2-furanilo	CO_2Me	H	434

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
94	3,4-difluorofenilo	2-fluorofenilo	ciano	H	397
95	3,4-difluorofenilo	2-fluorofenilo	CO_2Me	H	430
96	3-cloro-4-metilfenilo	2-fluorofenilo	ciano	H	409
97	3-cloro-4-metilfenilo	2-fluorofenilo	CO_2Me	H	442,5
98	3,4-diclorofenilo	3-piridinilo	ciano	H	412,4
99	4-ciano-3-(trifluorometil)fenilo	2-fluorofenilo	ciano	H	454
100	4-ciano-3-(trifluorometil)fenilo	2-fluorofenilo	CO_2Me	H	487
101	4-ciano-3-(trifluorometil)fenilo	2-fluorofenilo	CO_2Et	H	501
102	3,4-diclorofenilo	2-fluorofenilo	CO_2Me	H	463
103	4-clorofenilo	2-fluorofenilo	CHO	H	398
104	4-(trifluorometil)-2-	2-fluorofenilo	NHC(O)Me	H	463,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
	pirimidinilo				
105	4-(triflúorometoxi)fenilo	2,6-difluorofenilo	NHC(O)Me	H	495,5
106	5-(trifluorometil)-2-piridinilo	2-fluorofenilo	NHC(O)Me	H	462,5
107	3,4-diclorofenilo	2-clorofenilo	NHC(O)Me	H	477
108	3,4-diclorofenilo	2-metilfenilo	NHC(O)Me	H	457,4
109	3-clorofenilo	2-fluorofenilo	NHC(O)Me	H	427,5
110	4-(metilsulfonil)fenilo	2-fluorofenilo	NHC(O)Me	H	471,5
111	4-(trifluorometil)fenilo	2-furanilo	NHC(O)Me	H	433,4
112	3,4-difluorofenilo	2-fluorofenilo	NHC(O)Me	H	429,5
113	3-cloro-4-metilfenilo	2-fluorofenilo	NHC(O)Me	H	441,5
114	3,4-diclorofenilo	2-fluorofenilo	$NHC(O)OC(Me)_3$	H	519,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
115	3,4-diclorofenilo	2-(trifluorometil) fenilo	ciano	H	479,4
116	3,4-diclorofenilo	2-(trifluorometil) fenilo	CO_2Me	H	512,4
117	3,4-diclorofenilo	2-(trifluorometil) fenilo	NHC(O)Me	H	511,4
118	3,4-diclorofenilo	2-tienilo	ciano	H	417,4
119	3,4-diclorofenilo	2-tienilo	NHC(O)Me	H	201-202 °C
120	3,4-diclorofenilo	2-fluorofenilo	NH_2	H	419,5
121	3,4-diclorofenilo	2-fluorofenilo	$NHC(O)CF_3$	H	515
122	3,4-difluorofenilo	2-fluorofenilo	$CH_2NHC(O)Me$	H	443,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
123	3,4-diclorofenilo	2-(trifluorometil)fenilo	$CH_2NHC(O)Me$	H	525,4
124	3,4-diclorofenilo	2-clorofenilo	$CH_2NHC(O)Me$	H	492,4
125	3-(trifluorometil)fenilo	2-fluorofenilo	$CH_2NHC(O)Me$	H	475,5
126	4-(triflúorometoxi)fenilo	2-fluorofenilo	$CH_2NHC(O)Me$	H	491,5
127	3-cloro-4-metilfenilo	2-fluorofenilo	$CH_2NHC(O)Me$	H	455,5
128	3,4-diclorofenilo	5-cloro-2-tienilo	ciano	H	451
129	5-(trifluorometil)-3-piridinilo	2-fluorofenilo	ciano	H	430,5
130	3,4-dimetilfenilo	2-fluorofenilo	CO_2Me	H	422,5
131	3,4-dimetilfenilo	2-fluorofenilo	ciano	H	389,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
132	3-bromofenilo	2-fluorofenilo	CO_2Me	H	472,4
133	3-bromofenilo	2-fluorofenilo	ciano	H	439,4
134	4-fluorofenilo	2-metilfenilo	ciano	H	375,5
135	3-bromofenilo	2-fluorofenilo	C(O)NHMe	H	471,4
136	3,4-difluorofenilo	2-fluorofenilo	C(O)NHMe	H	429,5
137	3-cloro-4-metilfenilo	2-fluorofenilo	C(O)NHMe	H	441,5
138	3,4-diclorofenilo	2-(trifluorometil) fenilo	C(O)NHMe	H	511,5
500	4-metilfenilo	4-fluorofenilo	C(O)N(-$(CH_2)_4$-)	H	
505	2,5-dimetilfenilo	fenilo	CO_2Me	H	
506	4-metilfenilo	3-metilfenilo	OMe	H	
510	4-clorofenilo	2-fluorofenilo	CH_2OH	H	400

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
511	3,4-diclorofenilo	2-fluorofenilo	NHC(O)OC(Me)$_3$	H	519,4
512	4-fluorofenilo	2-metilfenilo	CO_2Me	H	408,4
516	3,4-diclorofenilo	5-cloropiridin-2-ilo	ciano	H	448
517	3-metilfenilo	2-metilfenilo	ciano	H	371,5
519	3,4-diclorofenilo	5-metiltiofen-2-ilo	ciano	H	431
520	3,4-diclorofenilo	tiofen-2-ilo	ciano	H	417
530	3,4-difluorofenilo	2-clorofenilo	ciano	H	413,5
531	3,4-difluorofenilo	2-clorofenilo	CO_2Me	H	446,4
534	3,4-difluorofenilo	2-bromofenilo	ciano	H	457,4
535	3,4-difluorofenilo	2-bromofenilo	CO_2Me	H	490,4
538	3,4-difluorofenilo	2-	ciano	H	447,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
		(trifluorometil) fenilo			
539	3,4-difluorofenilo	2-(trifluorometil) fenilo	CO_2Me	H	480,4
542	3,4-diclorofenilo	2,5-diclorotiofen-3-ilo	ciano	H	487
543	3,4-diclorofenilo	2,5-dimetiltiofen-3-ilo	ciano	H	445
544	3,4-diclorofenilo	3-metiltiofen-2-ilo	ciano	H	431
546	4-cloro-3-fluorofenilo	2-fluorofenilo	ciano	H	413,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
547	4-cloro-3-fluorofenilo	2-fluorofenilo	CO_2Me	H	446,4
549	4-cloro-3-fluorofenilo	2-fluorofenilo	NHC(O)Me	H	445,5
550	4-cloro-3-fluorofenilo	2-clorofenilo	ciano	H	429,4
551	4-cloro-3-fluorofenilo	2-clorofenilo	CO_2Me	H	462,4
553	4-cloro-3-fluorofenilo	2-clorofenilo	NHC(O)Me	H	461,5
556	4-(triflúorometoxi)fenilo	2-clorofenilo	ciano	H	461,5
557	4-(triflúorometoxi)fenilo	2-clorofenilo	NHC(O)Me	H	493,5
559	4-(triflúorometoxi)fenilo	2-metilfenilo	ciano	H	441,5
560	4-(triflúorometoxi)fenilo	2-metilfenilo	NHC(O)Me	H	473,5
562	4-	2-metilfenilo	CO_2Me	H	474,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
	(triflúorometoxi)fenilo				
563	4-(triflúorometoxi)fenilo	2-(trifluorometil)fenilo	ciano	H	495,5
565	2-tienilo	2-fluorofenilo	CO_2Me	H	400,2
566	3,4-diclorofenilo	2-fluoropiridin-3-ilo	ciano	H	430
567	4-metilfenilo	2-fluorofenilo	ciano	H	375,5
568	4-metilfenilo	2-fluorofenilo	NHC(O)Me	H	407,6
570	4-metilfenilo	2-fluorofenilo	CO_2Me	H	408,5
571	4-metilfenilo	2-metilfenilo	ciano	H	371,6
572	4-fluorofenilo	2-fluorofenilo	ciano	H	379,5
573	4-fluorofenilo	2-fluorofenilo	NHC(O)Me	H	411,5
575	4-fluorofenilo	2-fluorofenilo	CO_2Me	H	412,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
576	3,4-difluorofenilo	2-fluorofenilo	OH	H	388,5
577	3-cloro-4-fluorofenilo	4-fluorofenilo	ciano	H	413,4
579	3-cloro-4-fluorofenilo	4-clorofenilo	ciano	H	429,4
581	3-cloro-4-fluorofenilo	2,6-difluorofenilo	ciano	H	431,4
583	3-cloro-4-fluorofenilo	2,4-difluorofenilo	ciano	H	431,4
585	3-cloro-4-fluorofenilo	2-fluorofenilo	Cl	H	422,4
586	3-cloro-4-fluorofenilo	2-fluorofenilo	F	H	406,4
587	4-cloro-2-fluorofenilo	2-fluorofenilo	ciano	H	390,4
591	3-cloro-2-fluorofenilo	2-fluorofenilo	ciano	H	413,4
594	3-cloro-4-fluorofenilo	2-fluorofenilo	$C(S)NH_2$	H	447,4
597	3-cloro-4-fluorofenilo	2-fluorofenilo	OH	H	404,4
602	4-clorofenilo	2,4,6-	ciano	H	431,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
		trifluorofenilo			
604	4-clorofenilo	2-cloro-4-fluorofenilo	ciano	H	429,4
606	4-clorofenilo	3-cloro-5-fluorofenilo	ciano	H	429,4
609	5-bromopirinidin-2-ilo	2-fluorofenilo	ciano	H	443,1
610	2-tiofen-2-ilo	2-fluorofenilo	ciano	H	367,1
613	5-bromopiridin-2-ilo	2-fluorofenilo	ciano	H	440,4
615	4-cloro-2-metilfenilo	2-fluorofenilo	ciano	H	409,5
617	3-cloro-4-fluorofenilo	2,4-difluorofenilo	ciano	CO_2Me	489,4
618	4-cloro-3-fluorofenilo	2-fluorofenilo	ciano	CO_2Me	471,4
626	4-clorofenilo	2-fluorofenilo	NHC(O)Me	$C(O)NHC(Me)_3$	526,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
627	4-clorofenilo	2-fluorofenilo	NHC(O)Me	$C(O)NH_2$	470,5
629	4-clorofenilo	2,4-difluorofenilo	ciano	H	413,5
632	4-cloro-3-(trifluorometil)fenilo	2-fluorofenilo	ciano	H	463,4
633	4-clorofenilo	2,4-difluorofenilo	N(Me)C(O)Me	H	459,5
634	4-clorofenilo	2-fluorofenilo	N(Me)C(O)Me	H	441,5
641	4-clorofenilo	2-fluorofenilo	SO_2CH_3	H	448
643	4-clorofenilo	2,4-difluorofenilo	ciano	NHC(O)Me	470,4
644	4-clorofenilo	2,4-difluorofenilo	NHC(O)Me	$C(O)NH_2$	488,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
645	4-clorofenilo	2-fluorofenilo	ciano	NHC(O)Me	452,4
646	3-cloro-4-fluorofenilo	2,4-difluorofenilo	NHC(O)Me	$C(O)NH_2$	506,4
647	3-cloro-4-fluorofenilo	2,4-difluorofenilo	ciano	NHC(O)Me	488,4
648	4-(triflúorometoxi)fenilo	2,4-difluorofenilo	ciano	NHC(O)Me	520,4
649	4-(triflúorometoxi)fenilo	2,4-difluorofenilo	NHC(O)Me	$C(O)NH_2$	538,5
650	2,4-difluorofenilo	2,4-difluorofenilo	ciano	H	415,4
652	5-cloropiridin-2-ilo	2,4-difluorofenilo	ciano	H	414,4
654	5-	2-fluorofenilo	ciano	H	430,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
	(trifluorometil)piridina-2-ilo				
663	4-clorofenilo	2,4-difluorofenilo	1*H*-imidazol-2-ilo	H	454,4
664	5-cloropiridin-2-ilo	2,4-difluorofenilo	1*H*-imidazol-2-ilo	H	455,4
667	4-clorofenilo	2-fluorofenilo	1*H*-imidazol-2-ilo	H	436,5
674	2-benzotriazolilo	2-fluorofenilo	NHC(O)Me	H	450,4
676	2-benzotriazolilo	2-fluorofenilo	ciano	H	418,4
677	4-clorofenilo	2-fluorofenilo	OH	H	386,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
678	4-clorofenilo	2-fluorofenilo	OC(O)Me	H	428,4
679	4-clorofenilo	2-fluorofenilo	COOH	H	414
680	4-clorofenilo	2-fluorofenilo	C(O)NHNHC(O)Me	H	470
681	4-clorofenilo	2-fluorofenilo	C(O)NHNHC(O)OEt	H	500
686	4-(triflúorometoxi)fenilo	2-fluorofenilo	NHC(O)OC(Me)$_3$	H	535,1
690	4-(triflúorometoxi)fenilo	2-fluorofenilo	NHSO$_2$Me	H	513
691	4-(triflúorometoxi)fenilo	2-fluorofenilo	NHC(O)CF$_3$	H	531
692	4-(triflúorometoxi)fenilo	2-fluorofenilo	NHCHO	H	463,1

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
693	4-bromofenilo	2-fluorofenilo	$CH(OH)CH_3$	H	414
694	3-cloro-4-fluorofenilo	2-fluorofenilo	1,2,4-triazol-1-ilo	H	455,4
695	4-clorofenilo	2-fluorofenilo	1,2,4-triazol-1-ilo	H	437,4
696	4-(triflúorometoxi)fenilo	2,4-difluorofenilo	1,2,4-triazol-1-ilo	H	505,4
697	3-cloro-4-fluorofenilo	2-fluorofenilo	imidazol-1-ilo	H	454,4
698	4-clorofenilo	2-fluorofenilo	imidazol-1-ilo	H	436,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
699	3,4-difluorofenilo	2-clorofenilo	imidazol-1-ilo	H	454,4
700	3-cloro-4-fluorofenilo	2-fluorofenilo	$CH_2N(Me)_2$	H	445,2
702	3-cloro-4-fluorofenilo	2-fluorofenilo	$N(Me)_2$	H	431,31
704	3-cloro-4-fluorofenilo	2-fluorofenilo	$NHC(O)NH_2$	H	196-198 °C
706	3,4-diclorofenilo	2-fluorofenilo	$NHC(O)NH_2$	H	214-216 °C
707	3,4-diclorofenilo	2-fluorofenilo	$CH_2N(Me)_2$	H	460,97
708	3,4-diclorofenilo	2-fluorofenilo	$N(Me)_2$	H	447,1
710	3-cloro-4-fluorofenilo	2-fluorofenilo	ciano	cyano	438,3
717	4-clorofenilo	2-fluorofenilo	CH_2Br	H	463
718	4-clorofenilo	2-fluorofenilo	CH_2OCH_3	H	415
719	4-clorofenilo	2-fluorofenilo	$C(O)NHNH_2$	H	428,4
720	4-clorofenilo	2-fluorofenilo	1,3,4-oxadiazol-	H	438,3

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
			2-ilo		
721	4-clorofenilo	2-fluorofenilo	5-metil-1,3,4-oxadiazol-2-ilo	H	452,4
727	4-clorofenilo	2-fluorofenilo	5-CF_3-pirazol-1-ilo	H	518
729	2,3,4-trifluorofenilo	2-fluorofenilo	NHC(O)Me	H	505,2
730	2,3,4-trifluorofenilo	2-fluorofenilo	ciano	H	415,3
736	4-(triflúorometoxi)fenilo	2,4-difluorofenilo	1,2,4-triazol-4-ilo	H	505,3
737	3-cloro-4-fluorofenilo	2-fluorofenilo	1,2,4-	H	455,3

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
			triazol-4-ilo		
738	4-clorofenilo	2,4,6-trifluorofenilo	1,2,4-triazol-4-ilo	H	473,3
742	4-clorofenilo	2-fluorofenilo	3-CH_3-1,2,4-oxadiazol-5-ilo	H	452,4
743	4-clorofenilo	2-fluorofenilo	2-oxo-1,3-oxazolidin-3-ilo	H	455,3
744	3-cloro-4-fluorofenilo	2-fluorofenilo	2-oxo-1,3-oxazolidin	H	473,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
			-3-ilo		
745	4-clorofenilo	2,4,6-trifluorofenilo	2-oxo-1,3-oxazolidin-3-ilo	H	491,4
746	4-clorofenilo	2-fluorofenilo	piridin-4-ilo	H	446,7
747	3-cloro-4-fluorofenilo	2-fluorofenilo	piridin-4-ilo	H	464,6
748	4-clorofenilo	2,4,6-trifluorofenilo	piridin-4-ilo	H	483
755	4-clorofenilo	fenilo	ciano	H	377,3
765	4-clorofenilo	2-cianofenilo	ciano	H	402,4
767	4-bromofenilo	2-fluorofenilo	$C(O)NHNH_2$	H	474,3
768	4-bromofenilo	2-fluorofenilo	1,3,4-	H	484,3

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
			oxadiazol-2-ilo		
769	4-bromofenilo	2-fluorofenilo	5-metil-1,3,4-oxadiazol-2-ilo	H	498,3
770	4-bromofenilo	2,4,6-trifluorofenilo	ciano	H	475,2
771	4-bromofenilo	2,4-difluorofenilo	ciano	H	457,2
772	4-clorofenilo	fenilo	CO_2Me	H	410,4
773	4-bromofenilo	2,4-difluorofenilo	CO_2Me	H	490,2
774	4-bromofenilo	2,4,6-	CO_2Me	H	508,3

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
		trifluorofenilo			
778	2'-fluoro[1,1'-bifenil]-4-ilo	2,4,6-trifluorofenilo	ciano	H	491,4
779	3'-fluoro[1,1'-bifenil]-4-ilo	2,4,6-trifluorofenilo	ciano	H	491,3
780	4'-fluoro[1,1'-bifenil]-4-ilo	2,4,6-trifluorofenilo	ciano	H	491,3
784	2'-fluoro[1,1'-bifenil]-4-ilo	2,4-difluorofenilo	ciano	H	473,4
785	3'-fluoro[1,1'-bifenil]-4-ilo	2,4-difluorofenilo	ciano	H	473,4
786	4'-fluoro[1,1'-bifenil]-4-ilo	2,4-difluorofenilo	ciano	H	473,4
787	4-clorofenilo	fenilo	$C(O)NHNH_2$	H	410,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
788	4-bromofenilo	2,4-difluorofenilo	$C(O)NHNH_2$	H	492,2
789	3-cloro-4-fluorofenilo	2-fluorofenilo	$C(O)NHNH_2$	H	446,3
790	4-(triflúorometoxi)fenilo	2-fluorofenilo	$C(O)NHNH_2$	H	478,3
791	3,4-diclorofenilo	2-fluorofenilo	$C(O)NHNH_2$	H	462,3
792	4-clorofenilo	fenilo	5-oxo-1,3,4-oxadiazol-2-ilo	H	436,3
793	4-clorofenilo	2,4,6-trifluorofenilo	5-oxo-1,3,4-oxadiazol-2-ilo	H	490,2

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
794	5-cloropiridin-2-ilo	2,4-difluorofenilo	5-oxo-1,3,4-oxadiazol-2-ilo	H	473,3
795	4-clorofenilo	2-fluorofenilo	5-oxo-1,3,4-oxadiazol-2-ilo	H	454,3
798	4-clorofenilo	fenilo	1,3,4-oxadiazol-2-ilo	H	420,3
799	4-bromofenilo	2,4-difluorofenilo	1,3,4-oxadiazol-2-ilo	H	502,3

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
800	3-cloro-4-fluorofenilo	2-fluorofenilo	1,3,4-oxadiazol-2-ilo	H	456,3
801	4-(triflúorometoxi)fenilo	2-fluorofenilo	1,3,4-oxadiazol-2-ilo	H	488,3
802	3,4-diclorofenilo	2-fluorofenilo	1,3,4-oxadiazol-2-ilo	H	472,3
803	4-(triflúorometoxi)fenilo	2,6-difluorofenilo	1,3,4-oxadiazol-2-ilo	H	506,4
804	3-bromofenilo	2-fluorofenilo	1,3,4-oxadiazol-	H	484,2

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
			2-ilo		
805	3-(trifluorometil)fenilo	2-fluorofenilo	1,3,4-oxadiazol-2-ilo	H	472,4
806	5-cloropiridin-2-ilo	2,4,6-trifluorofenilo	ciano	H	432,4
807	5-cloropiridin-2-ilo	2-fluorofenilo	ciano	H	396,4
808	4-isopropilfenilo	2-fluorofenilo	ciano	H	403,5
809	4-clorofenilo	fenilo	ciano	H	376,4
810	4-clorofenilo	2,4,6-trifluorofenilo	ciano	H	430,3
811	4-bromofenilo	2,4,6-trifluorofenilo	ciano	H	474,2
812	4-clorofenilo	piridin-2-ilo	ciano	H	378,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
814	4-clorofenilo	piridin-2-ilo	NHC(O)Me	H	410,4
815	quinolin-2-ilo	2-fluorofenilo	ciano	H	412,4
816	quinolin-2-ilo	2,4-difluorofenilo	ciano	H	430,4
817	3'-(trifluorometil)[1,1'-bifenil]-3-ilo	2-fluorofenilo	ciano	H	505,8
818	2'-(trifluorometil)[1,1'-bifenil]-3-ilo	2-fluorofenilo	ciano	H	505,3
819	4'-(trifluorometil)[1,1'-bifenil]-3-ilo	2-fluorofenilo	ciano	H	505,2
822	4-clorofenilo	2-fluorofenilo	1,3-	H	437,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
			oxazol-5-ilo		
823	4-clorofenilo	2-fluorofenilo	4,5-dihidro-1,3-oxazol-2-ilo	H	439,4
824	3,5-difluorofenilo	2,4,6-trifluorofenilo	ciano	H	433,3
825	4-clorofenilo	2,4-difluorofenilo	CO_2Me	Me	460,4
826	5-cloropiridin-2-ilo	2,4-difluorofenilo	CO_2Me	Me	461,4
827	4-clorofenilo	piridin-2-ilo	1,2,4-	H	421,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
			oxadiazol-3-ilo		
828	4-bromofenilo	2,4,6-trifluorofenilo	1,2,4-oxadiazol-3-ilo	H	518,4
829	5-cloropiridin-2-ilo	2-fluorofenilo	1,2,4-oxadiazol-3-ilo		439,4
830	4-clorofenilo	2-fluorofenilo	1,2,4-oxadiazol-3-ilo		438,4
831	4-clorofenilo	2-fluorofenilo	1,2,4-triazol-3-ilo	H	437,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
832	4-clorofenilo	2-fluorofenilo	$C(O)CH_3$	H	412,4
834	4-clorofenilo	2-fluorofenilo	4-metil-4*H*-1,2,4-triazol-3-ilo	H	451,4
835	5-cloropiridin-2-ilo	2,4-difluorofenilo	4-metil-4*H*-1,2,4-triazol-3-ilo	H	470,4
836	4-bromofenilo	2,4,6-trifluorofenilo	4-metil-4*H*-1,2,4-triazol-3-ilo	H	531,3
837	3-cloro-4-fluorofenilo	2,6-	4-metil-	H	487,3

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
		difluorofenilo	4*H*-1,2,4-triazol-3-ilo		
838	4-clorofenilo	2-fluorofenilo	1*H*-tetrazol-5-ilo	H	438,3
839	5-cloropiridin-2-ilo	2,4-difluorofenilo	1*H*-tetrazol-5-ilo	H	457,4
840	4-bromofenilo	2,4,6-trifluorofenilo	1*H*-tetrazol-5-ilo	H	518,3
841	3-cloro-4-fluorofenilo	2,6-difluorofenilo	1*H*-tetrazol-	H	474,3

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
			5-ilo		
846	4-clorofenilo	2,3,4,5,6-tetrafluorofenilo	ciano	H	467,3
847	4-clorofenilo	2-bromo-4-fluorofenilo	ciano	H	473,2
848	4-clorofenilo	2,3-difluorofenilo	ciano	H	413,3
849	4-clorofenilo	2,4,5-trifluorofenilo	ciano	H	431,3
850	4-clorofenilo	5-cloro-2-metoxifenilo	ciano	H	441,3
851	4-clorofenilo	2-cloro-6-fluorofenilo	ciano	H	429,3

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
852	4-clorofenilo	5-fluoro-2-metoxifenilo	ciano	H	425,4
853	4-clorofenilo	2,5-difluorofenilo	ciano	H	413,3
854	4-clorofenilo	2,6-difluoro-3-metilfenilo	ciano	H	427,3
855	4-clorofenilo	2,3,6-trifluorofenilo	ciano	H	431,3
856	4-clorofenilo	4-fluoro-2-metoxifenilo	ciano	H	425,4
857	quinoxalin-2-ilo	2-fluorofenilo	ciano	H	413,4
858	quinolin-6-ilo	2-fluorofenilo	ciano	H	412,4
860	4-clorofenilo	2-fluorofenilo	tiazol-2-ilo	H	453

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
861	4-clorofenilo	2-fluorofenilo	isoxazol-5-ilo	H	437,4
862	3,4-diclorofenilo	2-fluorofenilo	isoxazol-5-ilo	H	471,3
863	3,5-dicloropiridin-2-ilo	4-fluorofenilo	ciano	H	430,3
864	2,3-dibromopiridin-5-ilo	4-fluorofenilo	ciano	H	520,2
865	4-fenoxifenilo	2-fluorofenilo	ciano	H	453,5
866	4-(4-clorofenoxi)fenilo	2-fluorofenilo	ciano	H	487,4
867	5-cloro-3-fluoropiridin-2-ilo	2-fluorofenilo	ciano	H	414,4
868	5-cloropiridin-2-ilo	2-fluorofenilo	1,3,4-oxadiazol-2-ilo	H	439,4
877	4-(2,2,2-	2-fluorofenilo	ciano	H	459,4

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
	trifluoroetoxi)fenilo				
878	6-cloropiridin-2-ilo	2-fluorofenilo	ciano	H	396,4
879	5-cloropiridin-2-ilo	2,4,6-trifluorofenilo	pirimidin-2-ilo	H	485,4
880	4-clorofenilo	2,4,6-trifluorofenilo	pirimidin-2-ilo	H	484,4
881	5-bromopiridin-2-ilo	2-fluorofenilo	pirimidin-2-ilo	H	493,4
882	5-cloro-6-fluoropiridin-2-ilo	2-fluorofenilo	ciano	H	414,4
883	5-bromo-6-fluoropiridin-2-ilo	2,4,6-trifluorofenilo	ciano	H	494,3
884	1,3-benzodioxol-5-ilo	2-fluorofenilo	ciano	H	405,2
885	4-clorofenilo	2-fluorofenilo	pirimidin-	H	448,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
			5-ilo		
886	4-clorofenilo	2-metoxifenilo	ciano	H	407,3
887	2-cloropiridin-4-ilo	2,4,6-trifluorofenilo	ciano	H	432,4
888	4-clorofenilo	2-fluoro-4-metoxifenilo	ciano	H	425,4
889	4-clorofenilo	2,6-difluoro-4-metoxifenilo	ciano	H	443,4
890	4-clorofenilo	4-metoxifenilo	ciano	H	407,2
891	5-cloropiridin-2-ilo	2,6-difluorofenilo	ciano	H	414
893	5-bromopiridin-2-ilo	2,6-difluorofenilo	ciano	H	458,4
895	5-cloropiridin-2-ilo	4-fluorofenilo	ciano	H	396,2

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
897	5-bromopiridin-2-ilo	4-fluorofenilo	ciano	H	440,4
899	5-bromopiridin-2-ilo	2,4,6-trifluorofenilo	ciano	H	476,4
904	3,4-diclorofenilo	fenilo	ciano	H	411,4
905	5-fluoropiridin-2-ilo	4-fluorofenilo	ciano	H	380,3
907	3,4-diclorofenilo	4-fluorofenilo	NHC(O)Me	H	461,5
908	3,4-diclorofenilo	fenilo	NHC(O)Me	H	443,4
909	5-cloropiridin-2-ilo	4-fluorofenilo	NHC(O)Me	H	428,5
924	3-cloro-4-fluorofenilo	2,4,6-trifluorofenilo	ciano	H	449,5
927	4-(trifluorometil)piridin-2-ilo	4-fluorofenilo	ciano	H	430,5
928	4-	4-fluorofenilo	NHC(O)Me	H	462,5

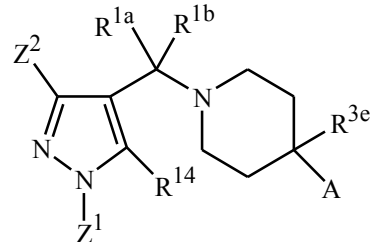
Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
	(trifluorometil)piridin-2-ilo				
930	6-(trifluorometil)piridin-2-ilo	4-fluorofenilo	ciano	H	430,4
932	3-cloro-4-fluorofenilo	2,4,6-trifluorofenilo	CO_2Me	H	482,5
933	3,4-diclorofenilo	1*H*-1,2,3-triazol-4-ilo	ciano	H	402,1
937	3-cloro-4-fluorofenilo	2,4,6-trifluorofenilo	1,3,4-oxadiazol-2-ilo	H	492,5
938	3,4-diclorofenilo	4-fluorofenilo	1,3,4-oxadiazol-	H	472,5

Compuesto	Z^1	Z^2	A	R^{3e}	m.p. (°C) o AP+ (M+1)
			2-ilo		
939	6-cloropiridin-2-ilo	4-fluorofenilo	ciano	H	396,5
941	6-cloropiridin-2-ilo	4-fluorofenilo	NHC(O)Me	H	428,5

Ver la Tabla índice F para datos de ^{1}H NMR.

* 1-BZT significa 1-benzotriazol

Tabla índice A1

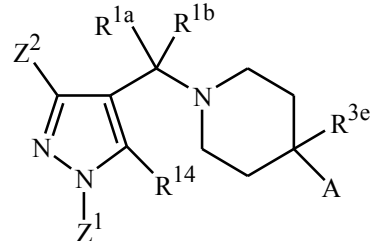


R^{1a}y R^{14} son H

Compuesto	Z^1	Z^2	R^{1b}	A	R^{3e}	m.p. (°C) o AP+ (M+1)
545	3-(trifluorometil)fenilo	2-fluorofenilo	ciano	NHC(O)Me	H	193-195 °C
590	3-(trifluorometil)fenilo	4-fluorofenilo	ciano	CN	H	127-129 °C
635	3-(trifluorometil)fenilo	4-fluorofenilo	Me	NHC(O)Me	H	185-187 °C
636	3-(trifluorometil)fenilo	2-fluorofenilo	Me	CO_2Me	H	124-125 °C
655	3-(trifluorometil)fenilo	2-fluorofenilo	Me	CN	H	95-97 °C
656	3-(trifluorometil)fenilo	4-fluorofenilo	Me	CO_2Me	H	165-166 °C
658	3-(trifluorometil)fenilo	4-fluorofenilo	Me	CN	H	157-160 °C

Compuesto	Z^1	Z^2	R^{1b}	A	R^{3e}	m.p. (°C) o AP+ (M+1)
659	3-(trifluorometil)fenilo	2-fluorofenilo	Me	NHC(O)Me	H	110-113 °C
701	3-cloro-4-fluorofenilo	2-fluorofenilo	Me	CN	H	264-268 °C
703	3-cloro-4-fluorofenilo	2-fluorofenilo	Me	NHC(O)Me	H	459,2
709	3-cloro-4-fluorofenilo	2-fluorofenilo	Me	CO_2Me	H	460,2

Tabla índice A2

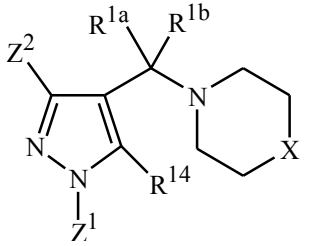


R^{1a} y R^{1b} son H

Compuesto	Z^1	Z^2	R^{14}	A	R^{3e}	AP+ (M+1)
739	4-clorofenilo	2-fluorofenilo	Cl	CO_2Me	H	462,3
740	4-clorofenilo	2-fluorofenilo	Cl	ciano	H	429,3
741	4-clorofenilo	2-fluorofenilo	Cl	NHC(O)Me	H	461,3
759	4-clorofenilo	2-fluorofenilo	F	CO_2Me	H	446,3
760	4-clorofenilo	2-fluorofenilo	F	ciano	H	413,3
761	4-clorofenilo	2-fluorofenilo	F	NHC(O)Me	H	445,3
762	4-clorofenilo	2-fluorofenilo	OMe	CO_2Me	H	458,3
763	4-	2-	OMe	ciano	H	425,3

Compuesto	Z^1	Z^2	R^{14}	A	R^{3e}	AP+ (M+1)
	clorofenilo	fluorofenilo				
764	4-clorofenilo	2-fluorofenilo	OMe	NHC(O)Me	H	457,3

Tabla B



R^{1a}, R^{1b} y R^{14} son H

Compuesto	Z^1	Z^2	X	AP+ (M+1)
201	3-metilfenilo	3-fluorofenilo	$NCH_2C(O)NMe_2$	

Compuesto	Z^1	Z^2	X	AP+ (M+1)
202	3-clorofenilo	2-fluorofenilo	NCO_2Et	443,5
203	3,4-diclorofenilo	2-fluorofenilo	NCO_2Et	477,4
204	3,4-diclorofenilo	3-fluorofenilo	NCO_2Et	477,4
205	3,5-bis(trifluorometil) fenilo	4-fluorofenilo	NCO_2Et	545,5
206	3,5-diclorofenilo	4-fluorofenilo	NCO_2Et	477,4
207	2-fluorofenilo	2-fluorofenilo	NCO_2Et	427,5
208	3-fluorofenilo	2-fluorofenilo	NCO_2Et	427,5
209	3-cloro-4-fluorofenilo	2-fluorofenilo	NCO_2Et	461,4
210	4-(triflúorometoxi) fenilo	2-fluorofenilo	N(2-pirimidinilo)	499,5
211	4-(triflúorometoxi) fenilo	2-fluorofenilo	O	422,5
212	2,4-difluorofenilo	2-metilfenilo	$CHC(O)NH_2$	411,5

Compuesto	Z^1	Z^2	X	AP+ (M+1)
213	4-ciano-3-(trifluorometil)fenilo	2-fluorofenilo	NCO_2Et	502,5
214	4-ciano-3-(trifluorometil)fenilo	2-fluorofenilo	$S(O)_2$	479
215	3,4-diclorofenilo	2-(trifluorometil)fenilo	NC(O)Me	497,4
216	3,4-dimetilfenilo	2-fluorofenilo	O	366,5
217	3-bromofenilo	2-fluorofenilo	O	416,4
218	4-fluorofenilo	2-metilfenilo	O	352,5
219	3-(trifluorometil)fenilo	2-fluorofenilo	O	406,4
220	3,4-diclorofenilo	2-fluorofenilo	NC(O)Me	447,4
501	3-clorofenilo	2-fluorofenilo	$C(-OCH_2CH_2O-)$	429,7
502	3-clorofenilo	3-fluorofenilo	$C(-OCH_2CH_2O-)$	429,7
503	3-clorofenilo	4-fluorofenilo	$C(-OCH_2CH_2O-)$	428,7
504	4-	2-fluorofenilo	$C(-OC(O)NHCH_2-)$	492,2

Compuesto	Z^1	Z^2	X	AP+ (M+1)
	(triflúorometoxi)fenilo			
525	3,4-diclorofenilo	2-fluorofenilo	O	406,4
526	3,4-diclorofenilo	2-clorofenilo	O	422,3
527	3,4-diclorofenilo	2-metilfenilo	O	402,4
528	3,4-diclorofenilo	2-(trifluorometil)fenilo	O	456,4
532	3,4-difluororofenilo	2-clorofenilo	O	390,4
533	3,4-difluororofenilo	2-clorofenilo	S	406,4
536	3,4-difluororofenilo	2-bromofenilo	O	434,4
537	3,4-difluororofenilo	2-bromofenilo	S	450,4
540	3,4-difluororofenilo	2-(trifluorometil)fenilo	O	424,5
541	3,4-difluororofenilo	2-(trifluorometil)fenilo	S	440,5
548	4-cloro-3-fluorofenilo	2-fluorofenilo	O	390,4
552	4-cloro-3-fluorofenilo	2-clorofenilo	O	406,4
554	4-cloro-3-fluorofenilo	2-clorofenilo	NC(O)Me	447,4

Compuesto	Z^1	Z^2	X	AP+ (M+1)
555	3-cloro-4-fluorofenilo	2-fluorofenilo	O	390,1
558	4-(triflúorometoxi) fenilo	2-clorofenilo	O	438,4
561	4-(triflúorometoxi) fenilo	2-metilfenilo	O	418,5
569	4-metilfenilo	2-fluorofenilo	O	352,5
574	4-fluorofenilo	2-fluorofenilo	O	356,5
578	3-cloro-4-fluorofenilo	4-fluorofenilo	O	390,4
580	3-cloro-4-fluorofenilo	4-clorofenilo	O	406,4
582	3-cloro-4-fluorofenilo	2,6-difluorofenilo	O	408,4
584	3-cloro-4-fluorofenilo	2,4-difluorofenilo	O	408,4
588	4-cloro-2-fluorofenilo	2-fluorofenilo	O	390,4
593	3-cloro-2-fluorofenilo	2-fluorofenilo	O	390,4
595	3-cloro-4-fluorofenilo	2-fluorofenilo	$NC(O)OC(Me)_3$	489,5
596	3-cloro-4-fluorofenilo	2-fluorofenilo	NCN	414,4

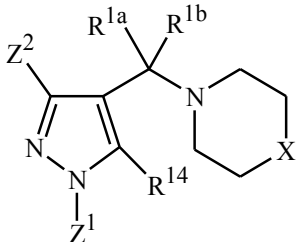
Compuesto	Z^1	Z^2	X	AP+ (M+1)
598	4-clorofenilo	2-fluorofenilo	C(-OC(O)CH_2CH_2-)	440
599	3,4-diclorofenilo	2-fluorofenilo	C(-OC(O)$NHCH_2$-)	476
600	3,4-diclorofenilo	2-fluorofenilo	C(-CH_2C(O)$NHCH_2$-)	474
601	3,4-diclorofenilo	2-fluorofenilo	C(-OC(O)CH_2CH_2-)	475
603	4-clorofenilo	2,4,6-trifluorofenilo	O	408,4
605	4-clorofenilo	2-cloro-4-fluorofenilo	O	406,4
607	4-clorofenilo	4-chloro-2-fluorophenyl	O	406,1
611	4-clorofenilo	2-fluorofenilo	C(-CH_2C(O)$NHCH_2$-)	439
612	4-clorofenilo	2-fluorofenilo	C(-OC(O)$NHCH_2$-)	441
614	5-bromopiridin-2-ilo	2-fluorofenilo	O	417,4
616	4-cloro-2-metilfenilo	2-fluorofenilo	O	386,5
622	4-clorofenilo	2-fluorofenilo	C(-CH_2CH(CN))CH_2-)	435
623	4-clorofenilo	2-fluorofenilo	C(-O CH_2 CH_2CH_2-)	426
624	4-clorofenilo	2-fluorofenilo	C(-CH_2 OCH_2-)	412

Compuesto	Z^1	Z^2	X	AP+ (M+1)
630	4-clorofenilo	2,4-difluorofenilo	O	390,4
631	4-clorofenilo	2-fluorofenilo	O	372,4
651	2,4-difluorofenilo	2,4-difluorofenilo	O	392,4
653	5-cloropiridin-2-ilo	2,4-difluorofenilo	O	391,4
668	4-clorofenilo	2-fluorofenilo	NCH_2CN	410,5
669	4-clorofenilo	2,4-difluorofenilo	NCH_2CN	428,4
670	3-cloro-4-fluorofenilo	2,6-difluorofenilo	NCH_2CN	446,4
675	benzotiazol-2-ilo	2-fluorofenilo	O	395,4
683	4-clorofenilo	2-fluorofenilo	C(-C(O)NHC(O)NH-)	454,3
684	4-(triflúorometoxi) fenilo	2,4-difluorofenilo	C(-C(O)NHC(O)NH-)	522,3
685	3-cloro-4-fluorofenilo	2,6-difluorofenilo	C(-C(O)NHC(O)NH-)	490,3
688	3,4-diclorofenilo	2-fluorofenilo	S(O)	438,3
705	4-clorofenilo	2-fluorofenilo	$C(-C(O)OCH_2CH_2-)$	440
711	3-cloro-4-fluorofenilo	2-fluorofenilo	C[-	529,4

Compuesto	Z^1	Z^2	X	AP+ (M+1)
			$CH_2N(C(O)OC(Me)_3)CH_2-]$	
712	4-clorofenilo	2-fluorofenilo	$C[-CH_2N(C(O)OC(Me)_3)CH_2-]$	511,4
713	3,4-difluororofenilo	2-clorofenilo	$C[-CH_2N(C(O)OC(Me)_3)CH_2-]$	529,4
731	2,3,4-trifluorofenilo	2-fluorofenilo	O	391,8
756	4-clorofenilo	fenilo	O	354,3
757	3-cloro-4-fluorofenilo	2-fluorofenilo	NCH_2(c-Pr)	443,4
758	5-cloropiridin-2-ilo	2,4-difluorofenilo	NCH_2(c-Pr)	444,3
766	4-clorofenilo	2-cianofenilo	O	379,4
775	4-clorofenilo	fenilo	$C(-CH_2CH_2C(O)NH-)$	421,4
776	3-cloro-4-fluorofenilo	2-fluorofenilo	$C(-CH_2CH_2C(O)NH-)$	457,3

Compuesto	Z^1	Z^2	X	AP+ (M+1)
777	4-clorofenilo	2,4,6-trifluorofenilo	C(-CH_2CH_2C(O)NH-)	475,3
813	4-clorofenilo	piridin-2-ilo	O	355,4
926	3-cloro-4-fluorofenilo	2,4,6-trifluorofenilo	O	427,2
940	6-cloropiridin-2-ilo	4-fluorofenilo	O	373,4

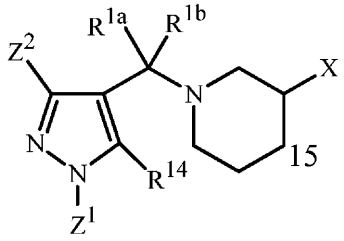
Tabla índice B1



R^{1a} y R^{14} son H

Compuesto	Z^1	Z^2	R^{1b}	X	m.p. (°C)
592	3-(trifluorometil) fenilo	2-fluorofenilo	ciano	O	110-113 °C
657	3-(trifluorometil) fenilo	2-fluorofenilo	CH_3	O	135-137 °C

Tabla índice C



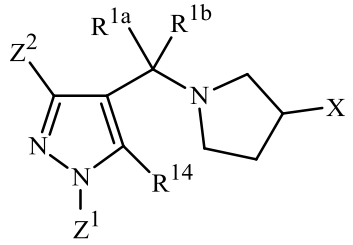
R^{1a}, R^{1b} y R^{14} son H

Compuesto	Z^1	Z^2	X	AP+ (M+1)
301	4-bromofenilo	2-fluorofenilo	CO_2Et	486,4
302	4-cloro-3-fluorofenilo	2-fluorofenilo	CO_2Et	440,6
303	3-(trifluorometil)fenilo	2-fluorofenilo	CO_2Et	476,5
304	3,4-diclorofenilo	2-metilfenilo	CO_2Et	472
305	3-clorofenilo	2-fluorofenilo	CO_2Et	442
306	4-(metilsulfonil)fenilo	2-fluorofenilo	CO_2Et	486
307	4-(trifluorometil)fenilo	2-furanilo	CO_2Et	448
308	4-metilfenilo	4-fluorofenilo	CH_2OMe	394,5
309	3,4-difluorofenilo	2-fluorofenilo	CO_2Et	444,5
310	4-clorofenilo	2-fluorofenilo	CHO	398
311	4-ciano-3-(trifluorometil)fenilo	2-fluorofenilo	NHC(O)Me	486
312	4-ciano-3-(trifluorometil)fenilo	2-fluorofenilo	CO_2Et	501
313	3,4-diclorofenilo	2-fluorofenilo	NHC(O)Me	462
314	3,4-diclorofenilo	2-fluorofenilo	CO_2Me	462,4

Compuesto	Z^1	Z^2	X	AP+ (M+1)
315	3,4-diclorofenilo	2-(trifluorometil) fenilo	NHC(O)Me	511,4
316	3,4-diclorofenilo	2-(trifluorometil) fenilo	CO_2Me	512,4
507	3-cloro-4-metilfenilo	2-fluorofenilo	CO_2Et	456,4
508	4-clorofenilo	2-fluorofenilo	CH_2OH	400
521	3,4-diclorofenilo	2-fluorofenilo	ciano	429,4
522	3,4-diclorofenilo	2-clorofenilo	ciano	445,3
523	3,4-diclorofenilo	2-metilfenilo	ciano	425,4
524	3,4-diclorofenilo	2-(trifluorometil) fenilo	ciano	479,4
608	3-cloro-4-fluorofenilo	2,4-difluorofenilo	ciano	431,4
620	3-cloro-4-fluorofenilo	2,4-difluorofenilo	NHC(O)Me	463,5
621	4-clorofluorofenilo	2,4,6-trifluorofenilo	NHC(O)Me	463,5
726	3,4-diclorofenilo	2-fluorofenilo	NHC(O)OC(	519,0

Compuesto	Z^1	Z^2	X	AP+ (M+1)
			Me)$_3$	7

Tabla índice D



R^{1a}, R^{1b} y R^{14} son H

Compuesto	Z^1	Z^2	X	AP+ (M+1)
402	4-(triflúorometoxi) fenilo	2-fluorofenilo	CO_2Me	464
403	3-cloro-4-fluorofenilo	2-fluorofenilo	CO_2Me	432
404	3-(trifluorometil) fenilo	4-fluorofenilo	CO_2Me	448
408	3-(trifluorometil) fenilo	4-fluorofenilo	NHC(O)Me	447,1
513	3,4-diclorofenilo	2-fluorofenilo	CO_2Me	448

Compuesto	Z^1	Z^2	X	AP+ (M+1)
514	3,4-diclorofenilo	2-fluorofenilo	CO_2H	434
515	3,4-diclorofenilo	2-fluorofenilo	$C(O)NH_2$	433
518	3,4-diclorofenilo	2-fluorofenilo	ciano	415
637	3-(trifluorometil) fenilo	4-fluorofenilo	(*R*)-$NHC(O)OC(Me)_3$	505,2
638	3-(trifluorometil) fenilo	4-fluorofenilo	(*S*)-$NHC(O)OC(Me)_3$	505,2
639	3-(trifluorometil) fenilo	4-fluorofenilo	(*R*)-NH_2-TFA**	405,1
640	3-(trifluorometil) fenilo	4-fluorofenilo	(*R*)-NHC(O)Me	447,1
642	3-(trifluorometil) fenilo	4-fluorofenilo	(*S*)-NH_2-TFA**	#
660	3-(trifluorometil) fenilo	4-fluorofenilo	(*S*)-NHC(O)Me	447,2
661	3-(trifluorometil) fenilo	4-fluorofenilo	(*R*)-$NHSO_2Me$	483,2
662	3-(trifluorometil) fenilo	4-fluorofenilo	(*S*)-$NHSO_2Me$	483,1
665	3-(trifluorometil) fenilo	4-fluorofenilo	(*R*)-NHCHO	433,2
666	3-(trifluorometil)	4-fluorofenilo	(*S*)-NHCHO	#

Compuesto	Z^1	Z^2	X	AP+ (M+1)
	fenilo			
749	3-cloro-4-fluorofenilo	2-fluorofenilo	(*S*)-NHC(O)Me	431
750	3-(trifluorometil)fenilo	4-fluorofenilo	(*S*)-$NHC(O)C(Me)_3$	489
751	4-clorofenilo	2-fluorofenilo	(*S*)-NHC(O)Me	413
752	4-clorofenilo	2,4,6-trifluorofenilo	(*S*)-NHC(O)Me	449,3
753	3,4-diclorofenilo	2-fluorofenilo	(*S*)-NHC(O)Me	447
781	3,4-diclorofenilo	2-fluorofenilo	(*S*)-$NHC(O)C(Me)_3$	490
782	3,4-diclorofenilo	2-fluorofenilo	(*S*)-NHC(O)-c-Pr	473
783	3,4-diclorofenilo	2-fluorofenilo	(*S*)-$NHC(O)CF_3$	500,9
820	3,4-diclorofenilo	4-fluorofenilo	(*S*)-NHC(O)Me	447
821	3,4-diclorofenilo	3-tienilo	(*S*)-NHC(O)Me	
833	5-bromo-2-piridinilo	2-fluorofenilo	(*S*)-NHC(O)Me	460,1
842	3,4-diclorofenilo	2,4,6-trifluorofenilo	(*S*)-NHC(O)Me	483,1
843	3,4-diclorofenilo	2,4,6-trifluorofenilo	(*S*)-NHC(O)-c-Pr	509

Compuesto	Z^1	Z^2	X	AP+ (M+1)
844	3-(trifluorometil) fenilo	2-fluorofenilo	(*S*)-NHC(O)Me	447,1
845	3-(trifluorometil) fenilo	2-fluorofenilo	(*S*)-NHC(O)-c-Pr	473,1
859	3-(trifluorometil) fenilo	4-fluorofenilo	(*S*)-NHC(O)C(Me)$_3$	489,1
869	3,4-diclorofenilo	4-fluorofenilo	(*S*)-NHC(O)-c-Pr	473,1
870	3,4-diclorofenilo	3-fluorofenilo	(*S*)-NHC(O)-c-Pr	473,1
871	3-cloro-4-fluorofenilo	4-fluorofenilo	(*S*)-NHC(O)-c-Pr	457,1
872	3-cloro-4-fluorofenilo	4-clorofenilo	(*S*)-NHC(O)-c-Pr	473,1
873	3,4-diclorofenilo	2-metilfenilo	(*S*)-NHC(O)-c-Pr	469,1
874	3,4-diclorofenilo	4-fluorofenilo	(*S*)-NHC(O)CF_3	501
892	5-cloro-2-piridinilo	2,6-difluorofenilo	(*S*)-NHC(O)Me	432
894	5-bromo-2-piridinilo	2,6-difluorofenilo	(*S*)-NHC(O)Me	476,4
896	5-cloro-2-	4-fluorofenilo	(*S*)-NHC(O)Me	414

Compuesto	Z^1	Z^2	X	AP+ (M+1)
	piridinilo			
898	5-bromo-2-piridinilo	4-fluorofenilo	(*S*)-NHC(O)Me	458,4
900	5-bromo-2-piridinilo	2,4,6-trifluorofenilo	(*S*)-NHC(O)Me	495,4
901	3,4-diclorofenilo	4-fluorofenilo	(*S*)-NHC(O)CH(-CH_2CF_2-)	509,1
902	3,4-diclorofenilo	4-fluorofenilo	(*S*)-NHC(O)CH(-CH_2CCl_2-)	541,1
903	3,4-diclorofenilo	4-fluorofenilo	(*S*)-NHC(O)C(CF_3)(-CH_2CH_2-)	591,1
906	5-fluoro-2-piridinilo	4-fluorofenilo	(*S*)-NHC(O)Me	398,3
910	3,4-diclorofenilo	4-fluorofenilo	(*S*)-1-imidazolilo	456,4
911	4-clorofenilo	2-fluorofenilo	(*S*)-1-imidazolilo	422,5
912	3,4-diclorofenilo	4-fluorofenilo	3-piridinilo	467,5
913	4-clorofenilo	2-fluorofenilo	3-piridinilo	433,5

Compuesto	Z^1	Z^2	X	AP+ (M+1)
914	3,4-diclorofenilo	4-fluorofenilo	4-piridinilo	467,5
915	4-clorofenilo	2-fluorofenilo	4-piridinilo	433,5
916	3,4-diclorofenilo	4-fluorofenilo	2-piridinilo	467,5
917	4-clorofenilo	2-fluorofenilo	2-piridinilo	433,5
918	3-clorofenilo	2-fluorofenilo	(*S*)-NHC(O)Me	413,2
919	3,4-diclorofenilo	4-fluorofenilo	(*S*)-OC(O)Me	448,1
920	3,4-diclorofenilo	4-fluorofenilo	(*S*)-OC(O)-c-Pr	474,1
921	3,4-diclorofenilo	4-fluorofenilo	(*S*)-N(Me)C(O)OC(Me)$_3$	519,5
922	3,4-diclorofenilo	4-fluorofenilo	(*S*)-N(Me)C(O)-c-Pr	487,6
923	3,4-diclorofenilo	4-fluorofenilo	(*S*)-N(Me)C(O)Me	461,5
925	3-cloro-4-fluorofenilo	2,4,6-trifluorofenilo	(*S*)-NHC(O)Me	467,5
929	4-(trifluorometil)-2-piridinilo	4-fluorofenilo	(*S*)-NHC(O)Me	448,5
931	6-	4-fluorofenilo	(*S*)-NHC(O)Me	448,5

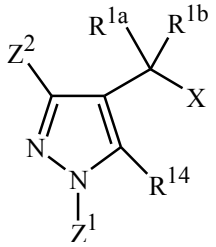
Compuesto	Z^1	Z^2	X	AP+ (M+1)
	(trifluorometil)-2-piridinilo			
934	3,4-diclorofenilo	4-fluorofenilo	(*S*)-1-pirrolidinona	473,5
935	6-(trifluorometil)-2-piridinilo	4-fluorofenilo	(*S*)-1-pirrolidinona	474,6
936	4-(trifluorometil)-2-piridinilo	4-fluorofenilo	(*S*)-1-pirrolidinona	474,6
942	6-cloro-2-piridinilo	4-fluorofenilo	(*S*)-NHC(O)Me	414,5
943	3,4-diclorofenilo	2-fluorofenilo	(*S*)-$NHC(O)OC(Me)_3$	505,3
944	3,4-diclorofenilo	2-fluorofenilo	(*S*)-$NHCH(Me)_2$	447,2
945	3,4-diclorofenilo	2-fluorofenilo	(*S*)-NHC(O)-c-Pn	501,18
946	3,4-diclorofenilo	2-fluorofenilo	(*R*)-$NHC(O)OC(Me)_3$	505,2
947	3,4-diclorofenilo	2-fluorofenilo	(*S*)-NH_2	405,14

Compuesto	Z^1	Z^2	X	AP+ (M+1)
948	3,4-diclorofenilo	2-fluorofenilo	(*R*)-NH_2	405,1
949	3,4-diclorofenilo	fenilo	(*S*)-NHC(O)Me	429,2

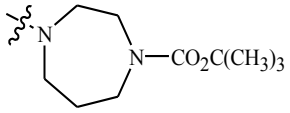
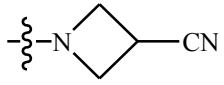
Ver la Tabla índice F para datos de ^{1}H NMR.

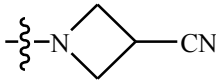
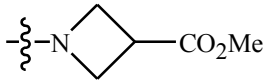
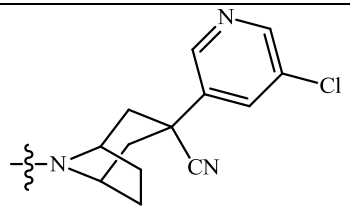
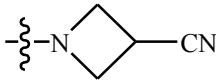
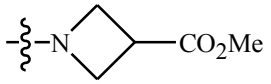
** TFA es ácido trifluoroacético

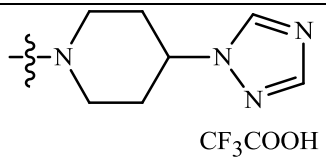
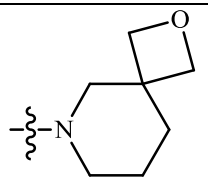
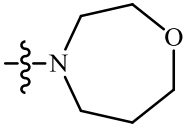
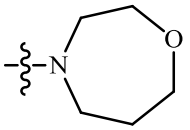
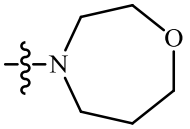
Tabla E

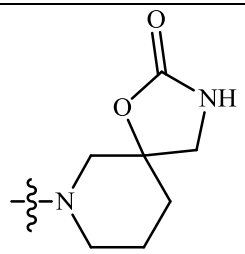
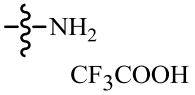
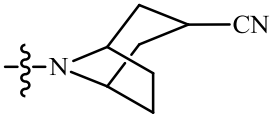
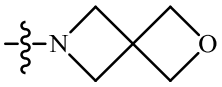
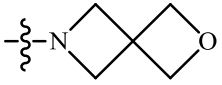


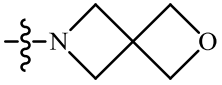
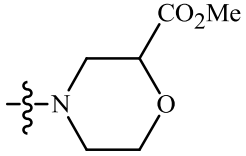
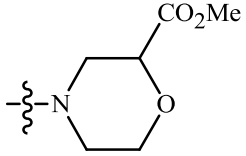
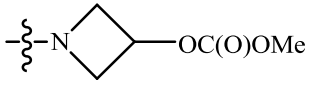
R^{1a}, R^{1b} y R^{14} son H

Compuesto	Z^1	Z^2	X	m.p. (°C) o AP+ (M+1)
401	4-(triflúorometoxi) fenilo	2-fluorofenilo		535,6
405	4-fluorofenilo	2-fluorofenilo		351,4

Compuesto	Z^1	Z^2	X	m.p. (°C) o AP+ (M+1)
406	4-clorofenilo	2-fluorofenilo		367,5
407	4-clorofenilo	2-fluorofenilo		400,5
529	3,4-diclorofenilo	2-fluorofenilo		566,4
564	3-(trifluorometil) fenilo	2-fluorofenilo		74-76 °C
589	3-(trifluorometil) fenilo	2-fluorofenilo		434

Compuesto	Z^1	Z^2	X	m.p. (°C) o AP+ (M+1)
619	4-fluorofenilo	2-fluorofenilo	 CF_3COOH	421,5
625	4-clorofenilo	2-fluorofenilo		412
671	4-clorofenilo	2-fluorofenilo		386,4
672	3-(trifluorometil) fenilo	4-fluorofenilo		420,4
673	3,4-difluorofenilo	2-clorofenilo		404,3

Compuesto	Z^1	Z^2	X	m.p. (°C) o AP+ (M+1)
682	4-clorofenilo	2-fluorofenilo		441
687	4-(triflúorometoxi) fenilo	2-fluorofenilo		435,4
689	4-clorofenilo	2-fluorofenilo		421,4
714	3-cloro-4-fluorofenilo	2-fluorofenilo		402,4
715	2-clorofenilo	2-fluorofenilo		384,3

Compuesto	Z^1	Z^2	X	m.p. (°C) o AP+ (M+1)
716	3,4-difluorofenilo	2-clorofenilo		402,4
722	3-cloro-4-fluorofenilo	2-fluorofenilo		416,4
723	4-clorofenilo	2-fluorofenilo		398,4
724	3-cloro-4-fluorofenilo	2-fluorofenilo		448,4
725	3,4-diclorofenilo	2-clorofenilo		482,3
728	4-clorofenilo	2-fluorofenilo		416

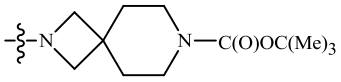
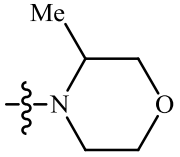
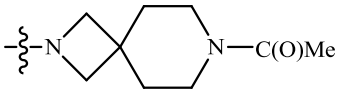
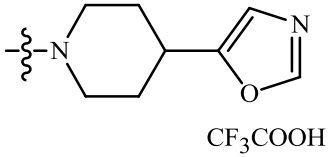
Compuesto	Z^1	Z^2	X	m.p. (°C) o AP+ (M+1)
732	4-clorofenilo	2,4,6-trifluorofenilo		547,4
733	4-clorofenilo	2,4,6-trifluorofenilo		422,3
734	4-clorofenilo	2,4,6-trifluorofenilo		489,3
796	4-clorofenilo	2-fluorofenilo		505,3

Tabla F

Comp. Núm.	Datos de ^{1}H NMR [a]
78	δ 8,66 (s, 1H), 8,58 (s, 1H), 8,15 (d, 1H), 8,02 (dd, 1H), 7,61 (dt, 1H), 7,42 (dq, 1H), 7,24 (t, 1H), 7,17 (t, 1H), 3,50 (s, 2H), 2,63 (m, 2H), 2,56 (m, 1H), 2,28 (m, 2H), 1,80-1,84 (m, 2H), 1,70-1,76 (m, 2H).
642	δ 8,45 (br s, 1H), 8,03 (br s, 1H), 7,92-7,90 (m, 1H), 7,64 (d, 2H), 7,51-7,57 (m, 2H), 7,21 (t, 2H), 5,43 (br s, 2H), 4,51 (d, 1H), 4,23-4,41 (m, 2H), 3,92 (d, 1H), 3,62 (br s, 1H), 3,31 (br s, 1H), 2,74 (br s, 1H), 2,61 (br s, 1H), 2,16-2,23 (m, 1H).
666	δ 8,04 (s, 1H), 8,02 (s, 1H), 7,84-7,96 (m, 4), 7,59 (t, 1H), 7,54 (d, 1H), 7,15 (t, 2 H), 5,72 (d, 1H), 4,57-4,51 (m, 1H), 3,69 (d, 1H), 3,62 (d, 1H), 2,87-2,97 (m, 1H), 2,27-2,43 (m, 2H) 2,56-2,70 (m, 2H), 1,65-1,69 (m, 1H).

Los datos de [a1]H NMR están en ppm con desplazamiento a campo más bajo respecto del tetrametilsilano. Solución $CDCl_3$ a menos que se indique de otra manera. Los acoplamientos están designados por (s)-singulete, (d)-doblete, (t)-triplete, (m)-multiplete, (dd)-doblete de dobletes, (dt)-doblete de tripletes, (dq)-doblete de cuartetos, (br s)-singulete amplio.

Las siguientes pruebas demuestran la eficacia del control de los compuestos de la presente invención en plagas específicas. La “eficacia del control” representa la inhibición del desarrollo de las plagas de invertebrados

(que incluye la mortalidad) que causa una alimentación significativamente reducida. Sin embargo, la protección de control de plagas proporcionada por los compuestos no se limita a estas especies. Los números de los compuestos se refieren a los compuestos en las Tablas índice A–E.

Ejemplos biológicos de la invención

Prueba A

Para evaluar el control de la polilla de dorso de diamante (*Plutella xylostella*), la unidad de prueba consistió de un pequeño recipiente abierto con una planta de rábano de 12–14 días en su interior. La planta se infestó previamente con aproximadamente 50 larvas neonatas que se colocaron en la unidad de prueba por medio de sémola de mazorca de maíz con un inoculador manual. Las larvas se movieron sobre la planta de prueba después de introducidas en la unidad de prueba.

Los compuestos de prueba se formularon con una solución que contenía 10 % de acetona, 90 % de agua y 300 ppm del surfactante no iónico de fórmula de baja espuma Spreader de X-77, que contiene alquilarilpolioxietileno, ácidos grasos libres, glicoles e isopropanol (Loveland Industries, Inc. Greeley, Colorado, Estados Unidos). Los compuestos formulados se aplicaron en 1 ml de líquido a través de una boquilla rociadora SUJ2 con un cuerpo 1/8 JJ (Spraying Systems Co. Wheaton, Illinois, Estados Unidos) colocado a 1,27 cm (0,5 pulgadas) por encima de la parte superior de cada unidad

de prueba. Los compuestos de prueba se rociaron a 250 ppm y/o 50 ppm y se repitió tres veces. Después de atomizar el compuesto de prueba formulado, se dejó secar cada unidad de prueba durante una (1) hora y luego se colocó sobre ellas una tapa de tela metálica negra. Las unidades de prueba se mantuvieron durante 6 días en una cámara de crecimiento a 25 °C y 70 % de humedad relativa. El daño en el alimento de la planta se evaluó visualmente en base al follaje consumido.

De los otros compuestos de la Fórmula **1** probados a 250 ppm, los siguientes proporcionaron niveles de eficacia del control muy buenos a excelentes (40 % o menos de daño de alimentación y/o 100 % de mortalidad):

3, 4, 7, 9, 10, 11, 12, 13, 14, 16, 17, 19, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 79, 80, 81, 82, 83, 84, 85, 86, 103, 202, 203, 207, 208, 209, 210, 211, 301, 302, 303, 310, 401, 403, 404, 508 y 510.

De los otros compuestos de la Fórmula **1** probados a 50 ppm, los siguientes proporcionaron niveles de eficacia del control muy buenos a excelentes (40 % o menos de daño de alimentación y/o 100 % de mortalidad): 4, 9, 10, 11, 12, 13, 14, 19, 22, 24, 26, 28, 29, 30, 31, 32, 33, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 62, 63, 64, 65, 66, 67, 68, 69, 71, 72, 74, 75, 76,

77, 78, 79, 80, 81, 82, 83, 84, 86, 87, 88, 91, 94, 95, 96, 97, 98, 99, 102, 105, 106, 107, 108, 109, 112, 114, 116, 117, 118, 121, 124, 129, 130, 131, 132, 133, 134, 135, 203, 207, 209, 211, 216, 217, 218, 219, 220, 301, 309, 315, 404, 408, 508, 510, 511, 512, 513, 515, 516, 517, 518, 519, 520, 521, 522, 523, 525, 526, 527, 528, 530, 531, 532, 534, 535, 536, 539, 546, 547, 548, 549, 550, 551, 553, 555, 556, 558, 560, 562, 566, 572, 581, 583, 596, 602, 629, 630, 631, 632, 633, 634, 640, 648, 649, 650, 651, 652, 653, 654, 660, 661, 662, 665, 666, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 780, 781, 782, 783, 784, 785, 786, 792, 793, 794, 795, 796, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 815, 816, 820, 821, 822, 824, 825, 826, 827, 829, 830, 831, 832, 833, 835, 839, 842, 843, 844, 845, 847, 848, 849, 851, 852, 854, 855, 856, 857, 858, 860, 861, 862, 863, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 884, 885, 886, 887, 889, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902 y 903.

Prueba B

Para evaluar el control del gusano cogollero (*Spodoptera frugiperda*) tla unidad usada en la prueba consistió en un contenedor pequeño abierto que contenía en su interior una planta de maíz de 4 a 5 días. Esta unidad se infestó previamente (usando un recolector de muestras de

núcleo) con 10-15 larvas de un (1) día de edad sobre un trozo de dieta para insectos.

Los compuestos de prueba se formularon y se rociaron a 250 ppm y/o 50 ppm como se describió para la Prueba A. Las aplicaciones se repitieron tres veces. Después del rociado, las unidades de prueba se mantuvieron en una cámara de crecimiento a 25 °C y 70 % de humedad relativa y, después, se evaluaron visualmente como se describió para la prueba A.

De los otros compuestos de la Fórmula **1** probados a 250 ppm, los siguientes proporcionaron niveles de eficacia del control muy buenos a excelentes (40 % o menos de daño de alimentación y/o 100 % de mortalidad): 4, 13, 14, 57, 82, 83, 84, 85, 86, 203, 211, 404, 559, 561, 563, 567, 569, 571, 574, 577, 578, 579, 582, 584, 585, 586, 587, 588, 591, 594, 601, 603, 604, 605, 606, 607, 608, 609, 613, 614, 619, 620, 621, 622, 624, 675, 676, 691, 694, 695, 696, 705, 720, 721, 726, 727, 730, 731, 733, 740, 742, 745, 746, 747, 748, 749, 750, 752, 753, 754, 755, 756, 757, 758, 759, 760, 768, 769, 770, 771, 773, 774, 776, 778, 780, 781, 782 y 796.

De los otros compuestos de la Fórmula **1** probados a 50 ppm, los siguientes proporcionaron niveles de eficacia del control muy buenos a excelentes (40 % o menos de daño de alimentación y/o 100 % de mortalidad): 10, 12, 14, 33, 40, 41, 42, 48, 49, 51, 53, 56, 57, 63, 65, 66, 71, 77, 78, 79, 83, 86, 87, 91, 94, 115, 118, 121, 129, 131, 133, 134, 209,

211, 216, 217, 218, 219, 220, 408, 517, 520, 521, 523, 525, 526, 527, 530, 532, 534, 536, 544, 546, 548, 550, 552, 555, 556, 559, 563, 566, 567, 569, 571, 572, 574, 577, 578, 581, 582, 583, 584, 587, 588, 594, 602, 603, 604, 605, 606, 607, 608, 613, 614, 629, 630, 632, 633, 637, 650, 651, 652, 653, 654, 660, 676, 705, 720, 721, 733, 742, 748, 750, 753, 754, 755, 760, 768, 769, 770, 771, 777, 778, 780, 781, 782, 783, 784, 785, 786, 794, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 809, 810, 811, 815, 820, 821, 822, 824, 825, 826, 829, 842, 843, 845, 847, 848, 849, 851, 854, 855, 857, 858, 860, 861, 862, 868, 869, 870, 871, 872, 873, 874, 875, 876, 878, 879, 880, 884, 885, 886, 888, 889, 891, 893, 895, 897, 899, 900, 901, 902 y 903.

Prueba C

Para evaluar el control del pulgón verde del melocotonero (*Myzus persicae*) por métodos de contacto y/o sistémicos, la unidad de prueba consistió de un pequeño recipiente abierto con una planta de rábano de 12-15 días de edad en su interior. Esta unidad se infestó previamente al colocar sobre una hoja de la planta de prueba de 30 a 40 áfidos en un trozo de hoja cortada de una planta de cultivo (método de hoja cortada). Los áfidos se desplazaron sobre la planta de prueba cuando la hoja se secó. Después de la preinfestación, el suelo de la unidad de prueba se cubrió con una capa de arena.

Los compuestos de prueba se formularon y se rociaron a 250 ppm y/o 50 ppm como se describió para la Prueba A. Las aplicaciones se repitieron tres veces. Después de atomizar el compuesto de prueba formulado, se dejó secar cada unidad de prueba durante una (1) hora y luego se colocó sobre ellas una tapa de tela metálica negra. Las unidades de prueba se mantuvieron durante 6 días en una cámara de crecimiento a 19–21 °C y 50–70 % de humedad relativa. Seguidamente, se evaluó visualmente cada unidad de prueba para determinar la mortalidad de los insectos.

De los compuestos de la Fórmula **1** probados a 250 ppm, los siguientes resultaron en al menos 80 % de mortalidad: 3, 41, 63, 77, 79, 86, 88, 94, 131, 132, 512, 521, 522, 523, 525, 529, 531, 546, 556, 567, 581, 587, 602, 603, 613, 625, 629, 650, 720, 733, 748, 770, 784, 806, 807, 810, 825, 826, 830, 861 y 880.

De los compuestos de la Fórmula **1** probados a 50 ppm, los siguientes resultaron en al menos 80 % de mortalidad: 806.

Prueba D

Para evaluar el control del áfido algodonoso del melón (*Aphis gossypii*) por métodos de contacto y/o sistémicos, la unidad de prueba consistió de un pequeño recipiente abierto con una planta de algodón de 6–7 días de edad en su interior. Esta unidad se infestó previamente con 30–40 insectos sobre un trozo de hoja de conformidad con el método

de hoja cortada descrito para la Prueba C, y el suelo de la unidad de prueba se cubrió con una capa de arena.

Los compuestos de prueba se formularon y atomizaron a 250 ppm, tal como se describió para la Prueba C. Las aplicaciones se repitieron tres veces Después de rociar, las unidades de prueba se mantuvieron en una cámara de crecimiento y se evaluaron visualmente, tal como se describió para la Prueba C.

De los compuestos de la Fórmula **1** probados a 250 ppm, los siguientes resultaron en al menos 80 % de mortalidad: 529 y 806.

Prueba E

Para evaluar el control del saltador de la planta del maíz (*Peregrinus maidis*) por métodos de contacto y/o sistémicos, la unidad de prueba consistió de un recipiente pequeño abierto con una planta de maíz (espiga) de 3–4 días de edad en su interior. Se añadió arena blanca sobre el suelo antes de la aplicación. Los compuestos de prueba se formularon y se rociaron a 250 ppm y se repitió tres veces, como se describió para la Prueba A. Después de rociar, se dejó que las unidades de prueba se secaran durante 1 h antes de posinfestarlas con ~15-20 ninfas (de 18 a 21 días de edad) al rociarlas sobre arena con un agitador de sal. Se colocó una tapa de tela metálica negra encima de cada unidad de prueba, y las unidades de prueba se mantuvieron durante 6 días en una

cámara de crecimiento a 22–24 °C y 50–70 % de humedad relativa. Seguidamente, se evaluó visualmente cada unidad de prueba para determinar la mortalidad de los insectos.

De los compuestos de la Fórmula **1** probados a 250 ppm, los siguientes compuestos proporcionaron niveles de eficacia del control muy buenos a excelentes (una mortalidad del 80 % o más): 64, 66, 742, 863, 880 y 881.

Prueba F

Para evaluar el control del saltador de la papa (*Empoasca fabae*) por métodos de contacto y/o sistémicos, la unidad de prueba consistió de un pequeño recipiente abierto que contenía en su interior una planta de frijol Soleil de 5–6 días de edad (con hojas primarias emergidas). En la parte superior del suelo se añadió arena blanca y se extrajo una de las hojas principales antes de la aplicación.

Los compuestos de prueba se formularon y se rociaron a 250 ppm y/o 50 ppm y las pruebas se repitieron tres veces como se describió para la Prueba A. Después de rociar, se dejó que las unidades de prueba se secaran durante 1 h antes de post-infestarlas con 5 insectos saltadores de papa (adultos de 18 a 21 días de edad). Se colocó una tapa negra de tela metálica en la parte superior de cada unidad de prueba y las unidades de prueba se mantuvieron durante 6 días en una cámara de cultivo a 24 °C y 70 % de humedad

relativa. Seguidamente, se evaluó visualmente cada unidad de prueba para determinar la mortalidad de los insectos.

De los compuestos de la Fórmula **1** probados a 250 ppm, los siguientes compuestos proporcionaron niveles de eficacia del control muy buenos a excelentes (una mortalidad del 80 % o más): 11, 12, 22, 32, 33, 34, 41, 45, 46, 47, 50, 56, 57, 59, 62, 63, 71, 72, 74, 76, 78, 79, 80, 81, 83, 84, 95, 99, 102, 105, 106, 107, 108, 109, 112, 113, 114, 117, 121, 122, 124, 125, 126, 127, 129, 130, 132, 135, 136, 137, 209, 211, 213, 216, 218, 219, 220, 304, 311, 314, 408, 511, 525, 526, 527, 530, 531, 532, 534, 546, 547, 549, 550, 551, 553, 555, 557, 558, 560, 561, 568, 569, 570, 573, 581, 582, 584, 600, 602, 603, 605, 608, 609, 619, 620, 621, 622, 624, 630, 633, 634, 647, 650, 651, 660, 670, 685, 692, 694, 696, 702, 705, 720, 729, 733, 738, 742, 744, 747, 748, 749, 750, 751, 752, 753, 754, 761, 768, 770, 774, 781, 782, 783, 793, 794, 800, 801, 802, 803, 804, 805, 806, 810, 820, 821, 824, 829, 833, 837, 842, 843, 844, 845, 862, 868, 871, 874, 875, 876, 879, 880, 891, 892, 893, 894, 896, 900, 902 y 903.

De los compuestos de la Fórmula **1** probados a 50 ppm, los siguientes compuestos proporcionaron niveles de eficacia del control muy buenos a excelentes (una mortalidad del 80 % o más): 62, 74, 76, 105, 106, 107, 108, 112, 113, 121, 136, 137, 525, 548, 549, 582, 584, 602, 603, 633, 647, 660, 685, 729, 744, 761, 800, 806, 879, 892 y 896.

Prueba G

Para evaluar el control del trip occidental de las flores (*Frankliniella occidentalis*) por métodos de contacto y/o sistémicos, la unidad de prueba consistió de un pequeño recipiente abierto con una planta de frijol Soleil de 5–7 días de edad en su interior.

Los compuestos de prueba se formularon y se rociaron a 250 y/o 50 ppm y las pruebas se repitieron tres veces como se describió para la Prueba A. Después de rociar, se dejó que las unidades de prueba se secaran durante 1 hora y, después, 22–27 pulgones adultos se agregaron a la unidad. Se colocó una tapa negra de tela metálica en la parte superior de cada unidad de prueba y las unidades de prueba se mantuvieron durante 7 días a 25 °C y 45–55 % de humedad relativa.

De los compuestos de la Fórmula **1** sometidos a prueba a 250 ppm, los siguientes proporcionaron niveles de eficacia del control muy buenos a excelentes (40 % o menos de daño a la planta y/o 100 % de mortalidad): 50, 52, 56, 57, 63, 66, 67, 77, 79, 80, 81, 92, 102 y 211.

De los compuestos de la Fórmula **1** sometidos a prueba a 50 ppm, los siguientes proporcionaron niveles de eficacia del control muy buenos a excelentes (40 % o menos de daño a la planta y/o 100 % de mortalidad): 86, 211 o 404.

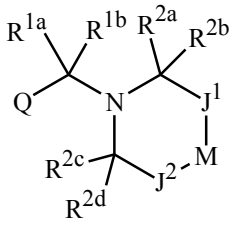
Se hace constar que con relación a esta fecha, el mejor método conocido por la solicitante para llevar a la práctica

la citada invención, es el que resulta claro de la presente descripción de la invención.

REIVINDICACIONES.

Habiéndose descrito la invención como antecede, se reclama como propiedad lo contenido en las siguientes reivindicaciones:

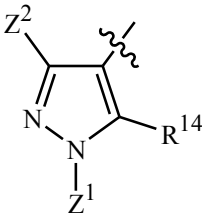
1. Una composición que comprende un compuesto de la Fórmula **1**, un *N*-óxido, o sal de este,



1

en donde

Q es



Q-1 ;

R^{1a} es H, ciano, alquilo de C_1–C_6, cicloalquilo de C_3–C_6, haloalquilo de C_1–C_6, C(O)OH, $C(O)R^{5a}$, $C(O)OR^{6a}$ o $C(O)NR^{7a}R^{8a}$;

R^{1b} es H o alquilo de C_1–C_6;

R^{2a} y R^{2c} son, independientemente cada uno, H, halógeno, ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ o $S(O)_nR^{11}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$;

R^{2b} y R^{2d} son, independientemente cada uno, H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

J^1 es un enlace directo, $-C(R^{3a}R^{3b})-$ o $-C(R^{3a}R^{3b})C(R^{3a}R^{3b})-$;

J^2 es un enlace directo o $-C(R^{3c}R^{3d})-$;

M es $-C(R^{3e})(A)-$, $-N(A^1)-$, $-O-$ o $-S(O)_n-$;

A es halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, alquilo de C_1–C_4, haloalquilo de C_1–C_4, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a} y $S(O)_nR^{11a}$; o fenilo, un anillo heteroaromático de 5 o 6 miembros o un sistema anular heteroaromático de 7 a 11 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^4;

A^1 es ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, alquilo de C_1–C_4, haloalquilo de C_1–C_4, $C(O)R^{5a}$, $C(O)OR^{6a}$,

$C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a} y $S(O)_nR^{11a}$; o fenilo, un anillo heteroaromático de 5 o 6 miembros o un sistema anular heteroaromático de 7 a 11 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^4; o bencilo no sustituido o sustituido con 1 a 3 R^4;

R^{3a} y R^{3c} son, independientemente cada uno, H, halógeno, ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, OR^{12} o $S(O)_nR^{11}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$;

R^{3b} y R^{3d} son, independientemente cada uno, H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en

halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

R^{3e} es H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4; o

R^{3e} y A se pueden tomar en conjunto con el átomo de carbono al cual se unen para formar un anillo de 3 a 7 miembros que contiene miembros anulares seleccionados de átomos de carbono y hasta 2 heteroátomos independientemente seleccionados de un átomo de oxígeno, un átomo de azufre y hasta 2 átomos de nitrógeno, en donde hasta 2 miembros del anillo de átomos de carbono se seleccionan independientemente de C(=O) y C(=S) y el miembro

del anillo de átomos de azufre se selecciona de S, S(O) o $S(O)_2$, el anillo no sustituido o sustituido con hasta 4 sustituyentes independientemente seleccionados del grupo que consiste en halógeno, ciano y alquilo de C_1–C_4; o o cuando dos sustituyentes independientemente seleccionados del grupo que consiste en R^{2a}, R^{2b}, R^{2c}, R^{2d}, R^{3a}, R^{3b}, R^{3c}, R^{3d} y R^{3e} son alquilo de C_1–C_4, entonces los dos sustituyentes se pueden tomar juntos para formar un anillo;

Z^1 es fenilo sustituido con 1 a 4 R^{4a}; o Z^1 es un anillo heteroaromático de 5 o 6 miembros o un sistema anular bicíclico heteroaromático de 8 a 10 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^{4a};

Z^2 es fenilo, no sustituido o sustituido con 1 a 4 R^{4b}; o Z^2 es un anillo heteroaromático de 5 o 6 miembros o un sistema anular bicíclico heteroaromático de 8 a 10 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^{4b};

cada R^4, R^{4a} y R^{4b} es, independientemente, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo

de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13}; siempre que cuando dos grupos R^4, dos grupos R^{4a} o dos grupos R^{4b} se unen a átomos de carbono adyacentes, entonces los dos grupos R^4, los dos grupos R^{4a} o los dos grupos R^{4b} se pueden tomar en conjunto con los átomos de carbono a los cuales se unen para formar un anillo;

cada R^5 es independientemente H; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{5a} es independientemente alquilo de C_1–C_4, haloalquilo de C_1–C_4 o cicloalquilo de C_3–C_7;

cada R^6 es, independientemente, alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{6a} es independientemente alquilo de C_1 a C_4 o haloalquilo de C_1 a C_4;

cada R^7 y cada R^8 son independientemente H; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13}; o R^7 y R^8 se pueden tomar en conjunto con el átomo de

nitrógeno al cual se unen para formar un anillo de 5, 6 o 7 miembros;

cada R^{7a} y R^{8a} es independientemente H, alquilo de C_1–C_4 o haloalquilo de C_1–C_4;

cada R^{7b} es independientemente $N(R^{7a})_2$, OH o OR^{12a};

cada R^9 y cada R^{10} son independientemente H, $C(X)R^5$, $C(O)OR^6$ o $C(X)NR^7R^8$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13}; o R^9 y R^{10} se pueden tomar en conjunto con el átomo de nitrógeno al cual se unen para formar un anillo de 5, 6 o 7 miembros;

cada R^{9a} y R^{10a} es, independientemente, H, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, alquilo de C_1–C_4 o haloalquilo de C_1–C_4;

cada R^{11} es independientemente alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–

C_8 cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{11a} es independientemente alquilo de C_1 a C_4 o haloalquilo de C_1 a C_4;

cada R^{12} es independientemente H; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7 o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^{13};

cada R^{12a} es independientemente H, alquilo de C_1 a C_4 o haloalquilo de C_1 a C_4;

cada R^{13} es, independientemente, halógeno, ciano, nitro, $C(X)R^{5a}$, $C(O)OR^{6a}$, $C(X)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$, OR^{12a}, $S(O)_nR^{11a}$ o $SO_2NR^{9a}R^{10a}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7

o cicloalquilalquilo de C_4–C_8, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; siempre que cuando dos grupos R^{13} se unen a átomos de carbono adyacentes, entonces los dos grupos R^{13} se pueden tomar en conjunto con los átomos de carbono a los cuales se unen para formar un anillo;

R^{14} es H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, OR^{12}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$;

cada X es independientemente O o S; y

cada n es independientemente 0, 1 o 2;

y por lo menos un componente adicional seleccionado del grupo que consiste en surfactantes, diluyentes sólidos y diluyentes líquidos.

2. La composición de conformidad con la reivindicación 1, que comprende, además, por lo menos un compuesto o agente adicional biológicamente activo.

3. La composición de conformidad con la reivindicación 2, en donde el por lo menos único compuesto o agente adicional biológicamente activo se selecciona del grupo que consiste en abamectina, acefato, acequinocilo, acetamiprida, acrinatrina, amidoflumet, amitraz, avermectina, azadiractina, azinfos-metilo, benfuracarb, bensultap, bifentrina, bifenazato, bistriflurona, borato, buprofezina, cadusafos, carbarilo, carbofurano, cartap, carzol, clorantraniliprol, clorfenapir, clorfluazurona, clorpirifos, clorpirifos-metilo, cromafenozida, clofentezina, clotianidina, ciantraniliprol, cicloprotrina, ciflumetofeno, ciflutrina, beta-ciflutrina, cihalotrina, gamma-cihalotrina, lambda-cihalotrina, cipermetrina, alfa-cipermetrina, zeta-cipermetrina, ciromacina, deltametrina, diafentiurona, diazinona, dieldrina, diflubenzurona, dimeflutrina, dimehipo, dimetoato, dinotefurano, diofenolán, emamectina, endosulfano, esfenvalerato, etiprol, etofenprox, etoxazol, óxido de fenbutatina, fenitrotiona, fenotiocarb, fenoxicarb, fenpropatrina, fenvaleriato, fipronil, flonicamida, flubendiamida, flucitrinato, flufenerim, flufenoxurona, fluvalinato, tau-fluvalinato, fonofós, formetanato, fostiazato, halofenozida, hexaflumurona, hexitiazox,

hidrametilnona, imidacloprida, indoxacarb, jabones insecticidas, isofenfós, lufenurona, malatión, meperflutrina, metaflumizona, metaldehído, metamidofós, metidationa, metiodicarb, metomilo, metopreno, metoxicloro, metoflutrina, monocrotofós, metoxifenozida, nitenpiram, nitiacina, novalurona, noviflumurona, oxamil, paratión, paratión-metilo, permetrina, forato, fosalona, fosmet, fosfamidona, pirimicarb, profenofós, proflutrina, propargita, protrifenbuto, pimetrozina, pirafluprol, piretrina, piridabeno, piridalil, pirifluquinazona, piriprol, piriproxifeno, rotenona, rianodina, silafluofeno, espinetoram, espinosad, espirodiclofeno, espiromesifeno, espirotetramato, sulprofós, sulfoxaflor, tebufenocida, tebufenpirad, teflubenzurona, teflutrina, terbufós, tetraclorvinfós, tetrametrina, tetrametilflutrina, tiacloprid, tiametoxam, tiodicarb, tiosultap-sodio, tolfenpirad, tralometrina, triazamato, triclorfón, triflumurona, delta-endotoxinas de *Bacillus thuringiensis*, bacteria entomopatogénica, virus entomopatogénicos y hongos entomopatogénicos.

4. Un método para controlar una plaga de invertebrados; el método comprende poner la plaga de invertebrados o su ambiente en contacto con una cantidad con eficacia biológica de un compuesto de la Fórmula **1**, como se describió en la reivindicación 1.

5. Una semilla tratada que comprende un compuesto de la Fórmula **1**, como se describió en la reivindicación 1, en una cantidad de aproximadamente 0,0001 a 1 % en peso de la semilla antes del tratamiento.

6. El compuesto de la Fórmula **1** tal como se describió en la reivindicación 1, en donde:

J^1 es $-C(R^{3a}R^{3b})-$;

J^2 es $-C(R^{3c}R^{3d})-$; y

M es $-C(R^{3e})(A)-$;

siempre que cuando A es $C(X)NR^7R^8$ y X es O, entonces ni R^7 ni R^8 son H.

7. El compuesto de acuerdo con la reivindicación 6, en donde

X es O;

R^{1a} es H; y

R^{1b} es H.

8. El compuesto de acuerdo con la reivindicación 7, en donde

R^{2a}, R^{2b}, R^{2c} y R^{2d} son H;

R^{3e} es H, halógeno o alquilo de C_1 a C_6; y

A es ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$ o NR^9R^{10}; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

9. El compuesto de acuerdo con la reivindicación 8, en donde

A es ciano, $C(O)OR^{6a}$ o $NHC(O)R^{5a}$; o un anillo heteroaromático de 5 miembros, no sustituido o sustituido con 1 a 3 R^4.

10. El compuesto de la Fórmula **1** tal como se describió en la reivindicación 1, en donde:

R^{1a} y R^{1b} son H;

J^1 es $-C(R^{3a}R^{3b})-$;

J^2 es un enlace directo;

M es $-C(R^{3e})(A)-$;

R^{2a} y R^{2c} son H;

cada R^{2b} y cada R^{2d} son independientemente H, alquilo de C_1–C_4 o haloalquilo de C_1–C_4;

R^{3a} y R^{3b} son H;

R^{3e} es H, halógeno, ciano, nitro, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_4, alquenilo de C_3–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, OR^{12a}, alquilo de C_1–C_4, haloalquilo de C_1–C_4 y $S(O)_nR^{11a}$; o fenilo o un

anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4;

A es ciano, $C(X)R^5$, $C(O)OR^6$, $C(X)NR^7R^8$, $C(X)NR^{7b}R^8$, NR^9R^{10}, $S(O)_nR^{11}$ o $SO_2NR^9R^{10}$; o alquilo de C_1–C_6, alquenilo de C_2–C_6, alquinilo de C_2–C_6, cicloalquilo de C_3–C_7, cicloalquilalquilo de C_4–C_8 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con al menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, ciano, nitro, alquilo de C_1–C_4, haloalquilo de C_1–C_4, $C(O)R^{5a}$, $C(O)OR^{6a}$, $C(O)NR^{7a}R^{8a}$, $NR^{9a}R^{10a}$ y $S(O)_nR^{11a}$; o fenilo, un anillo heteroaromático de 5 o 6 miembros o un sistema anular heteroaromático de 7 a 11 miembros, cada anillo o sistema anular no sustituido o sustituido con 1 a 3 R^4; siempre que cuando A es $NHC(O)CH_3$ y R^{3e} es H, entonces Z^1 no es 2-fluorofenilo, 3-metilfenilo, 4-metilfenilo ni 2,5-dimetilfenilo; o

R^{3e} y A se pueden tomar en conjunto con el átomo de carbono al cual se unen para formar un anillo de 3 a 7 miembros que contiene miembros anulares seleccionados de átomos de carbono y hasta 2 heteroátomos independientemente seleccionados de un átomo de oxígeno, un átomo de azufre y hasta 2

átomos de nitrógeno, en donde hasta 2 miembros del anillo de átomos de carbono se seleccionan independientemente de C(=O) y C(=S) y el miembro del anillo de átomos de azufre se selecciona de S, S(O) o $S(O)_2$, el anillo no sustituido o sustituido con hasta 4 sustituyentes independientemente seleccionados del grupo que consiste en halógeno, ciano y alquilo de C_1–C_4; siempre que R^{3e} y A son distintos a $N(CH_3)_2$.

11. El compuesto de acuerdo con la reivindicación 10, en donde

R^{3e} es H, halógeno, $C(X)R^5$ o $C(O)OR^6$; o alquilo de C_1–C_6, alquenilo de C_2–C_6 o cicloalquenilo de C_3–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente seleccionado del grupo que consiste en halógeno, OR^{12a}, alquilo de C_1–C_4 y haloalquilo de C_1–C_4; o fenilo o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

12. El compuesto de acuerdo con la reivindicación 11, en donde

R^{3e} es H o halógeno; o alquilo de C_1–C_6 o alquenilo de C_2–C_6, cada uno no sustituido o sustituido con por lo menos un sustituyente independientemente

seleccionado del grupo que consiste en halógeno y haloalquilo de C_1–C_4; o un anillo heteroaromático de 5 o 6 miembros, cada anillo no sustituido o sustituido con 1 a 3 R^4.

13. El compuesto de acuerdo con la reivindicación 10, en donde

A es $NHC(O)R^{5a}$; o un anillo heteroaromático de 5 o 6 miembros, no sustituido o sustituido con 1 a 3 R^4.

14. El compuesto de la Fórmula **1** como se describió en la reivindicación 1 que se selecciona del grupo que consiste en:

metil 1-[[3-(4-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarboxilato;

1-[[3-(4-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(3,4-diclorofenil)-3-(4-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2-fluorofenil)-1-[4-(trifluorometoxi)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2,4-difluorofenil)-1-[4-(trifluorometoxi)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(4-clorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(3-cloro-4-fluorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(4-bromofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2-fluorofenil)-1-[4-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2-fluorofenil)-1-[5-(trifluorometil)-2-piridinil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2,6-difluorofenil)-1-[4-(trifluorometoxi)fenil]-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

N-[(3*S*)-1-[[1-(3,4-diclorofenil)-3-(4-fluorofenil)-1*H*-pirazol-4-il]metil]-3-pirrolidinil]ciclopropanocarboxamida;

1-[[1-(3-cloro-4-fluorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina;

1-[[1-(3,4-diclorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina;

1-[[1-(5-cloro-2-piridinilo)-3-(2,4,6-trifluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(4-clorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina;

1-[[1-(3-cloro-4-fluorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(4-cloro-3-fluorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

N-[(3*S*)-1-[[1-(3,4-diclorofenil)-3-(4-fluorofenil)-1*H*-pirazol-4-il]metil]-3-pirrolidinil]acetamida;

1-[[1-(4-clorofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(5-cloro-2-piridinil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[3-(2-fluorofenil)-1-[3-(trifluorometil)fenil]-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina;

1-[[1-(3-bromofenil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina;

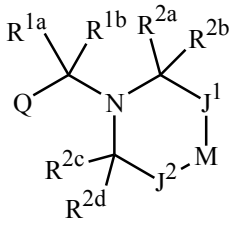
1-[[1-(5-bromo-2-piridinil)-3-(2-fluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo;

1-[[1-(5-cloro-2-piridinil)-3-(2,4-difluorofenil)-1*H*-pirazol-4-il]metil]-4-piperidinacarbonitrilo; y

1-[[3-(2-fluorofenil)-1-[4-(trifluorometoxi)fenil]-1*H*-pirazol-4-il]metil]-4-(1,3,4-oxadiazol-2-il)piperidina.

RESUMEN DE LA INVENCIÓN

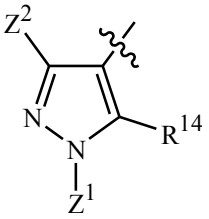
En la presente invención se describen compuestos de la Fórmula **1**, *N*-óxidos, y sales de estos,



1

en donde

Q es



Q-1 ;

y Z^1, Z^2, J^1, J^2, M, R^{1a}, R^{1b}, R^{2a}, R^{2b}, R^{2c}, R^{2d} y R^{14} son como se definió en la descripción.

Se describen, además, composiciones que contienen los compuestos de la Fórmula **1** y los métodos para controlar una plaga invertebrada; el método comprende la etapa de poner la plaga invertebrada o su ambiente en contacto con cantidad

biológicamente eficaz de un compuesto o una composición de la presente invención.

ADVANCE E-MAIL

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF THE RECORDING OF A CHANGE

(PCT Rule 92*bis*.1 and Administrative Instructions, Section 422)

To:

KUCHARCZYK, Roman
E. I. du Pont de Nemours and Company
Legal Patent Records Center
4417 Lancaster Pike
Wilmington, Delaware 19805
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*
29 January 2014 (29.01.2014)

Applicant's or agent's file reference
BA9504PCT

IMPORTANT NOTIFICATION

International application No.
PCT/US2012/061948

International filing date *(day/month/year)*
25 October 2012 (25.10.2012)

1. The following indications appeared on record concerning:

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3. Further observations, if necessary:

4. A copy of this notification has been sent to:

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☐ the International Searching Authority
☐ the Authority(ies) specified for supplementary search
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25 October 2012 (25.10.2012)

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3. Further observations, if necessary:

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☒ the receiving Office
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