

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO	
RAD: 14-42582- -6	FECHA: 2015-07-02 10:35:56
DEP: 2020 DIRECCION DE NUEVAS CREACIONES	EVE: 378 FASE NACIONAL INCLUIDO CAPITULO I
TRA: 11 PCT-PATENTE DE INVENCION CAPITULOS I Y II	FOLIOS: 9
ACT: 430 REQUERSOLICITA	

DIRECCIÓN DE NUEVAS CREACIONES

2020
Bogotá, D.C.,

Abogado(a)/Señor(a)
ALVARO CORREA ORDOÑEZ

Asunto: Radicación: 14-42582- -6
 Trámite: 11
 Evento: 378
 Actuación: 430
 Oficio: 7446
 Folios: 9

Patente de Invención	X			Patente de Modelo de Utilidad	
Vía Nacional					
Vía PCT (Fase Nacional)	X	Capítulo I	X	Capítulo II	
No. Solicitud Internacional	PCT/US2012/052648				
Fecha de Presentación Internacional	28/08/2012				

Como resultado del examen de fondo realizado, con fundamento en el Artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se comunica:

1. Documentos estudiados

Descripción:	Radicado N° 14-042582-00000-0000	28/Febrero/2014
	Radicado N° 14-042582-00005-0000	01/Junio/2015
Reivindicaciones:	Radicado N° 14-042582-00000-0000	28/Febrero/2014
	Radicado N° 14-042582-00005-0000	01/Junio/2015
Prioridad:	US 61/528,998	30/Agosto/2011

2. Análisis de la Prioridad

Se acepta la reivindicación de prioridad porque ésta solicitud fue presentada dentro del plazo establecido (Art. 9 D 486) y su contenido técnico corresponde con el de la prioridad reivindicada.

3. Objeto de la invención

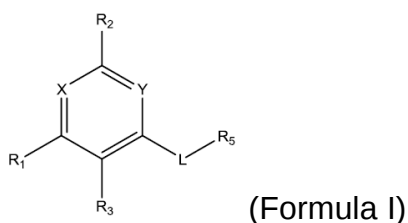
De acuerdo con lo establecido en el numeral 1.2.2.2 del capítulo primero del Título 10 de la Circular Única para efectos del examen de patentabilidad, se tendrá en cuenta la tasa pagada por la solicitante al momento de comenzar el examen para las reivindicaciones adicionales; esto es que cuando la solicitud contenga más de diez (10) reivindicaciones y no se haya pagado la tasa complementaria, sólo se estudiarán las

cubiertas por la tasa pagada. En el presente caso se estudiarán las reivindicaciones 1 a 39 del capítulo reivindicatorio (Radicado N°. 14-042582-00005-0000).

Título de la solicitud: "INHIBIDORES DE QUINURENINA-3-MONOOXIGENASA, COMPOSICIONES FARMACÉUTICAS Y MÉTODOS DE USO DE LOS MISMOS"

El problema planteado en esta solicitud consiste en la necesidad de proporcionar compuestos que sean inhibidores eficaces de (KMO) y que puedan usarse en el tratamiento de trastornos neurodegenerativos.

Para resolver este problema técnico la solicitud en estudio proporciona una entidad química seleccionada de los compuestos de fórmula (I) o una sal farmacéuticamente aceptable de los mismos, así como composiciones que los contienen.



El objeto de la presente solicitud se relaciona con la Clasificación Internacional de Patentes (CIP): A61K 31/44; C07D 401/00.

4. Excepción a la Patentabilidad (Art 20 D 486 literal (d))

El objeto de las reivindicaciones 36 – 39 no es patentable de acuerdo con el Art citado, puesto que se refieren a métodos para tratar afecciones o desordenes en pacientes.

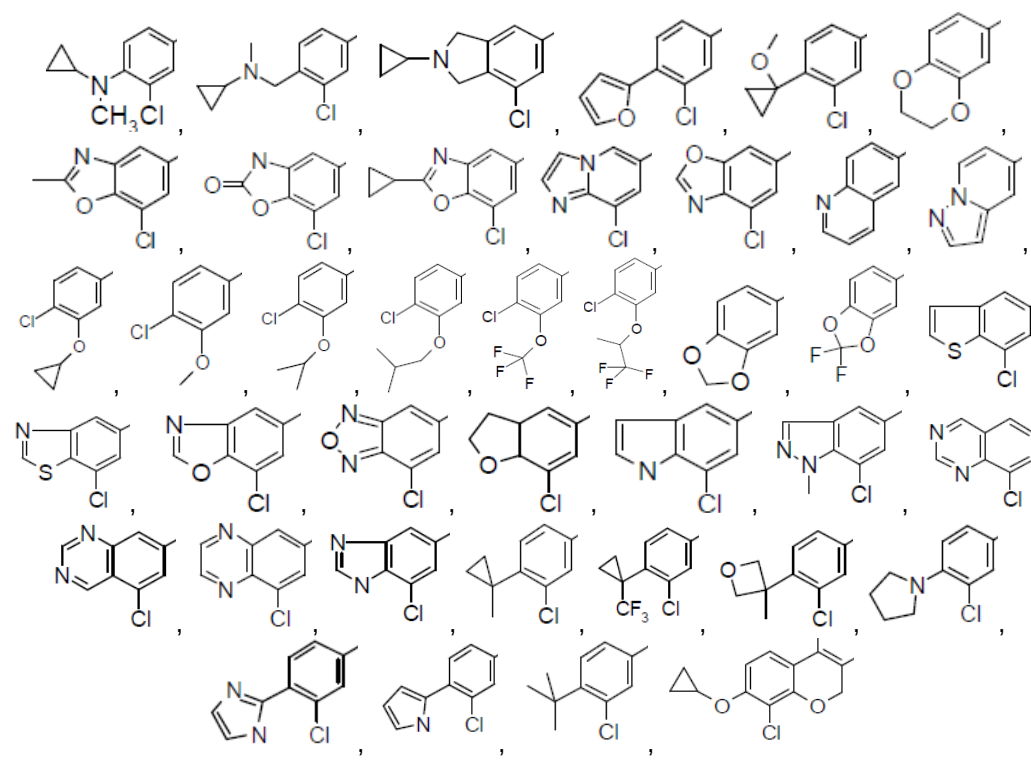
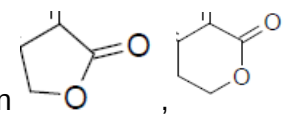
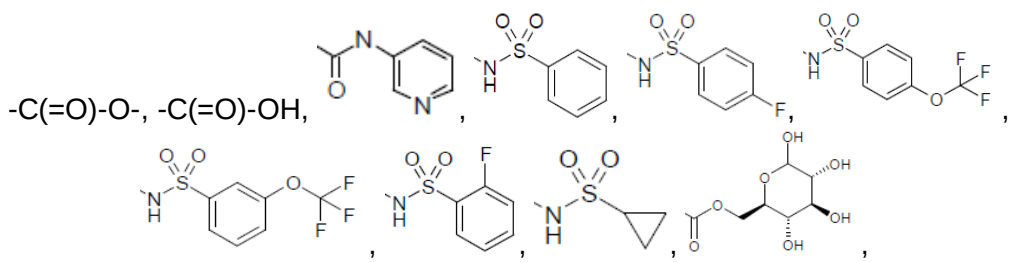
Si bien la reivindicación 38 se encabeza como una composición farmacéutica, la parte característica de dicha reivindicación incluye instrucciones para su uso como agente terapéutico, el cual no es una característica técnica de una composición farmacéutica, por lo que es evidente que se trata de un método de tratamiento. Por su parte la reivindicación 39 define la condición o desorden, por lo que también se refiere a métodos de tratamiento.

5. De la solicitud de patente

Reivindicaciones (Art 30 D 486, Art 22 PCT)

1. La reivindicación 1 no es clara porque:

- Las expresiones “*al menos*” y “*opcionalmente sustituido*” no son precisos, por lo que no permiten comprender los alcances de la materia reclamada. Se sugiere a la solicitante remplazar el encabezado de la reivindicación de “*al menos una entidad química escogida*” por “*compuesto*”.
- Los términos “*alquilo inferior*”, “*arilo*”, “*heteroarilo*”, “*alcoxilo inferior*”, “*cicloalquilo*”, “*heterocicloalquilo*” son muy generales y por lo tanto imprecisos, puesto que no limitan el número de átomos de carbono en este tipo de sustituyentes, lo cual dificulta su comparación con el estado de la técnica. Se sugiere a la solicitante definir de manera clara y concisa el significado de dichos sustituyentes.
- La definición del sustituyente R₅ (Pág. 190) está incompleta, puesto que la expresión “*siempre y cuando L es -N(R₄)S(O)₂-*”, no se comprende en el sentido de la reivindicación.

Sustituciones	Soporte de los ejemplos presentados
	
R^2	-H
R^3	-CH ₃ , -CH ₂ OH, junto a R ⁵ forman 
L-R ⁴	-C(=O)-O-, -C(=O)-OH, 
W	-O-
m, n	m=1, n=0

La reivindicación 35 no se encuentra sustentada en la descripción, ya que no se encuentra un desarrollo de composiciones o formulaciones que comprendan los compuestos reclamados.

Se sugiere a la solicitante hacer las aclaraciones necesarias.

6. Descripción (Art 28 D 486)

La descripción no soporta de manera adecuada la materia reclamada, ya que en ella se establece el efecto farmacológico únicamente para los compuestos en los cuales el sustituyente “Y” es N, y el sustituyente R² es H, por lo que es evidente que estas son características esenciales de los compuestos reclamados, por lo que se sugiere que así sea establecido.

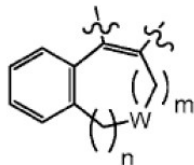
Se sugiere a la solicitante que realice las aclaraciones reclamadas.

7. Unidad de invención (Art 25 D 486)

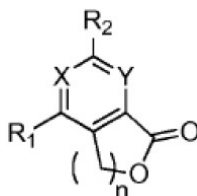
La solicitud no cumple con el requisito de unidad de invención porque se refiere a 4 grupos inventivos.

Los grupos inventivos están definidos por las siguientes características esenciales:

1. Compuestos en los cuales el sustituyente R1 corresponde a un grupo monoarilico disustituido. Reivindicaciones 1, 13-30, 33-39, parcialmente y 2-9 totalmente.
2. Compuestos en los cuales el sustituyente R1 se selecciona de 2,3 - dihidrobenzofuran - 5- il, croman - 6- il, 1,3- benzodioxol - 5- il, 2,3 - dihidro- 1,4- benzodioxin - 6- il, 1,3 -benzoxazol - 5- il, 1,3- benzoxazol - 6- il, 2- oxo - 2,3- dihidro - 1,3 -benzoxazol - 5- il, benzotiofen - 5- il, benzotiazol - 5- il, 5 benzoimidazol - 5- il, benzofuran - 5- il, iH- indol - 5- il, 1H- indazol - 5- il, isoindolin - 5- il, venzo [e] [1,2,5] oxadiazol - 5- il, 1,2,3,4- tetrahydroquinolin - 6- il, imidazo [1,2- a] piridin - 6- il, pirazolo [1,5- a] piridin - 5- il, quinolin - 6- il, quinazolin - 6- il, quinazolin - 7- il, y quinoxalin - 6- il. Reivindicaciones 1, 13-30, 33-39 parcialmente y 10-12 totalmente.
3. Compuestos en los cuales R1 Y R3 forman un anillo biciclico de estructura: Reivindicaciones 1, 13-30, 33-39 parcialmente.



4. Compuestos de formula II. Reivindicaciones 30-32 totalmente:



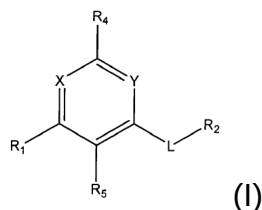
El concepto común a los grupos anteriores, compuestos derivados de piridina o pirimidina útiles como inhibidores de KMO se encuentra divulgado en el documento D1. Por lo tanto no existe un concepto estructural común inventivo que proporcione la unidad de invención a la presente solicitud. Se sugiere presentar las solicitudes divisionales que considere necesarias, o limitar la solicitud inicial a una sola invención, eliminando de ella las otras invenciones.

8. Determinación del Estado de la Técnica

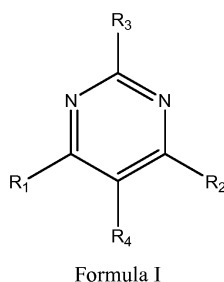
El estado de la técnica se determinó con base en la fecha de presentación de la solicitud de prioridad: agosto 30 de 2011 y se encontraron los siguientes documentos que anticipan el objeto de esta solicitud:

Ítem	Documento	Título	Fecha de Publicación
D1	WO2010017179	Certain kynurenine-3-monooxygenase inhibitors, pharmaceutical compositions, and methods of use thereof	28/Julio/2011
D2	WO2011091153	Certain kynurenine-3-monooxygenase inhibitors, pharmaceutical compositions, and methods of use thereof	28/Julio/2011

El documento D1¹ divulga compuestos inhibidores de quinurenina 3-monooxigenasa (KMO), formulaciones que los comprenden y métodos para su uso (Pág. 1, Párr. [0002]). Los compuestos divulgados en este documento corresponden a la formula (I). (Pág. 1, Párr. [0005]).



El documento D2² divulga compuestos inhibidores de quinurenina 3-monooxigenasa (KMO), formulaciones que los comprenden y métodos para su uso (Pág. 1, Párr. [0002]).



9. Examen de Patentabilidad (Art 14 D486)

El examen de patentabilidad se realizará al primer grupo inventivo.

Novedad (Art 16 D486)

La reivindicación 1 consiste en: “Al menos una entidad química escogida entre compuestos de formula I...” (Radicado N°. 14-042582-00000-00000).

Comparación de las características técnicas esenciales, con las del estado de la técnica:

Características esenciales	D1
Compuestos de formula I Y sales y profarmacos farmacéuticamente aceptables de estos en D donde: X y Y son seleccionados de -N- y -CH-, siempre que uno de los dos sea -N-. R2 y R3 se seleccionan de un grupo que incluye H	Compuestos de formula I Y sales y profarmacos farmacéuticamente aceptables de estos en donde: X y Y son seleccionados de -N- y -CH-, siempre que uno de los dos sea -N-. (Pág. 78, reivindicación 1)
R1: arilo o heteroarilo mono-cíclico sustituido con: Un primer grupo: -Z-R6 donde -Z se selecciona de un grupo que incluye -O-, -S-, -S(O)-, -CR11R12-, -OCR11R12-, -NR13-, -NR13CR11R12-, -CR11R12NR13-, R6 se selecciona de H, alquilo C1-C6, cicloalquilo, arilo, heteroarilo, heterocicloalquilo opcionalmente	R1 se selecciona de arilo o heteroarilo opcionalmente sustituido por uno, dos o tres grupos, seleccionados de halo, alquilo inferior, alcoxi inferior, amino, heterocicloalquilo, e hidroxilo.

1 http://worldwide.espacenet.com/publicationDetails/originalDocument;jsessionid=M5LooNS507yHu80BJChlSmQ6.espacenet_levelx_prod_3?

CC=WO&NR=2010017179A1&KC=A1&FT=D&ND=&date=20100211&DB=&&locale=en_EP

2 <http://worldwide.espacenet.com/publicationDetails/originalDocument?>

CC=WO&NR=2011091153A1&KC=A1&FT=D&ND=&date=20110728&DB=&&locale=en_EP

Características esenciales	D1
sustituidos. Y un segundo grupo que se selecciona de halo y alquilo inferior opcionalmente sustituido	
R ₂ se selecciona entre hidrogeno y alquilo inferior	R ₄ se selecciona de hidrógeno, alquilo inferior
R ₃ se selecciona de H, halo, alquilo inferior opcionalmente sustituido, hidroxilo, alcóxido inferior, y amino	R ₅ se selecciona de hidrógeno y fluor
L se selecciona de -C(O)-, -C(O)O-, -C(O)NR ₄ -, -C(O)N(OR ₇)-, -N(R ₄)S(O) ₂ -, -S(O) ₂ N(R ₄)- y -C(O)N(R ₄)-S(O) ₂ -	L se selecciona de -C(O)O-, -C(O)NR ₃ -, -N(R ₃)C(O) ₂ -, -N(R ₃)S(O) ₂ - y -S(O) ₂ N(R ₃)-
R ₅ se selecciona de H, alquilo inferior, arilo, heteroarilo, cicloalquilo, heterocicloalquilo, opcionalmente sustituido	R ₂ se selecciona de hidrogeno, alquilo inferior, arilo, heteroarilo, cicloalquilo, heterocicloalquilo, opcionalmente sustituido

Compuestos con las características esenciales de la fórmula I de la reivindicación 1 habían sido divulgadas previamente en el documento D1, el cual da a conocer compuestos inhibidores de KMO de formula general I, la cual se superpone con la formula I de la actual solicitud, como se demostró en la tabla anterior.

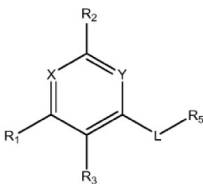
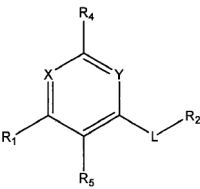
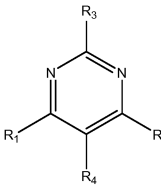
En consecuencia, la reivindicación 1 no es nueva o carece de novedad, según lo divulgado en el documento D1.

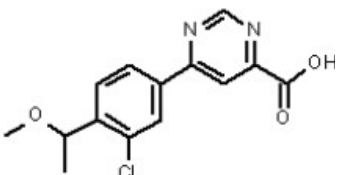
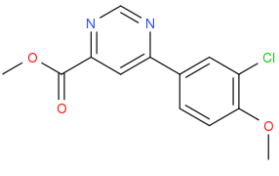
Las reivindicaciones dependientes 2, 3, 7- 9, 13 - 18, 21-24, 28 y 29 no mencionan alguna característica que haga nuevos a los compuestos de la reivindicación 1, por lo cual se considera que la materia allí reclamada no es nueva.

Nivel inventivo (Art 18 D486)

La reivindicación 19 consiste en: “Al menos una entidad química según una cualquiera de las reivindicaciones 1 a 16 en donde R₃ es metilo” (Radicado N°. 14-042582-00005-00000).

Comparación de las características técnicas esenciales, con las del estado de la técnica:

Características esenciales	D1	D2
Compuestos de formula I  Y sales y profarmacos farmacéuticamente aceptables de estos en donde: X y Y son seleccionados de -N- y -CH-, siempre que uno de los dos sea -N-.	Compuestos de formula I  Y sales y profarmacos farmacéuticamente aceptables de estos en donde: X y Y son seleccionados de -N- y -CH-, siempre que uno de los dos sea -N-. (Pág. 78, reivindicación 1)	Compuestos de formula (I)  (I) O una sal farmacéuticamente aceptable y profármacos del mismo (Pág.83, reivindicación 1)
R ₁ : arilo o heteroarilo mono-cíclico sustituido con:	R ₁ se selecciona de arilo o heteroarilo opcionalmente sustituido por uno, dos o tres	R ₁ : arilo o heteroarilo opcionalmente sustituido

Características esenciales	D1	D2
Un primer grupo: -Z-R₆ donde -Z se selecciona de un grupo que incluye -O-, -S-, -S(O)-, -CR₁₁R₁₂-, -OCR₁₁R₁₂-, -NR₁₃-, -NR₁₃CR₁₁R₁₂-, -CR₁₁R₁₂NR₁₃-, R₆ se selecciona de H, alquilo C₁-C₆, cicloalquilo, arilo, heteroarilo, heterocicloalquilo opcionalmente sustituidos. Y un segundo grupo que se selecciona de halo y alquilo inferior opcionalmente sustituido.	grupos, seleccionados de halo, alquilo inferior, alcoxi inferior, amino, heterocicloalquilo, e hidroxí.	
R ₂ se selecciona entre hidrogeno y alquilo inferior	R ₄ se selecciona de hidrógeno, alquilo inferior	R ₃ se selecciona de hidrógeno, alquilo inferior
R ₃ es metilo	R ₅ se selecciona de hidrógeno y fluor	R ₄ se selecciona de hidrógeno, halo, alquilo inferior opcionalmente sustituido
L se selecciona de -C(O)-, -C(O)O-, -C(O)NR₄-, -C(O)N(OR₇)-, -N(R₄)S(O)₂-, -S(O)₂N(R₄)- y -C(O)N(R₄)-S(O)₂-	L se selecciona de -C(O)O-, -C(O)NR₃-, -N(R₃)C(O)₂-, -N(R₃)S(O)₂- y -S(O)₂N(R₃)-	R ₂ Se selecciona de ciano, heteroarilo o heterocicloalquilo opcionalmente sustituido
R ₅ se selecciona de H, alquilo inferior, arilo, heteroarilo, cicloalquilo, heterocicloalquilo, opcionalmente sustituido	R ₂ se selecciona de hidrogeno, alquilo inferior, arilo, heteroarilo, cicloalquilo, heterocicloalquilo	No se menciona
Comparación de ejemplos específicos		
 (Pág. 106, esquema de reacción 4)	 Metil éster de ácido 6- (3- cloro - 4- metoxi- fenil) –pirimidina - 4- carboxílico ácido 6- (3- cloro - 4- metoxi- fenil) –pirimidina - 4- carboxílico (Pág. 25, líneas 4 y 5)	

El documento D1 se considera el estado de la técnica cercano a la solicitud definida en la reivindicación 1 porque divulga compuestos de formula (I) útiles como inhibidores de la enzima KMO, y su aplicación como agentes terapéuticos para el tratamiento de enfermedades neurodegenerativas como Alzheimer, Huntington o demencia causada por el síndrome de inmunodeficiencia adquirida (Pág. 1, Párr. [0004-0005]).

La diferencia entre la solicitud, definida en la reivindicación 1 y los compuestos divulgados en D1 consiste en el sustituyente R³, ya que en la solicitud este corresponde a metilo, mientras que en D1 este sustituyente corresponde a hidrógeno o flúor

únicamente.

No se evidencia un efecto técnico asociado al cambio de sustituyente en la posición 5 de la pirimidina de los compuestos reclamados, puesto que el porcentaje de inhibición para el ejemplo presentado con este tipo de sustitución (6-(3-cloro-4-ciclopropoxifenil)-5-metilpirimidin-4-carboxilato) es del 100% (Pág. 126), mientras que por su parte los compuestos descritos en el documento D1 presentan valores en un rango de 48,3 – 100% (Pág. 71-76).

Por lo tanto, el problema técnico objetivo que pretende resolver esta invención se puede considerar como la necesidad de proporcionar compuestos alternativos a los divulgados en D1 que mantengan la capacidad inhibidora sobre KMO.

Sin embargo, la sustitución en posición 5 de la pirimidina con otros grupos, tales como grupos alquilo, se encuentra divulgada en el documento D2, que se refiere a compuestos derivados de pirimidina que actúan como inhibidores de KMO (Pág. 1, Párr. [0002]). El documento sugiere la inclusión de otros sustituyentes en la posición 5 de la pirimidina además de hidrogeno o halógeno.

En consecuencia, la persona del oficio normalmente versada en la materia, incluiría otros sustituyentes, tales como grupos alquilo, en el anillo de pirimidina de los compuestos divulgados en D1 de acuerdo a lo mostrado en el documento D2, para llegar así al objeto de la reivindicación 14 de la solicitud. Por lo cual la materia reclamada se considera obvia.

Puesto que las reivindicaciones 4 – 6, 20, 25– 27, 33 - 35 no mencionan características inventivas adicionales tampoco se pueden considerar inventivas.

Conclusión:

Las reivindicaciones 4 – 6, 19, 20, 25– 27, 33 – 35 cumplen el requisito de novedad (Art. 16), pero no cumplen con el requisito de nivel inventivo (Art. 18).

10. Conclusión

Los requisitos de Patentabilidad de la presente solicitud están afectados así:

Ítem	Documento	Reivindicaciones afectadas	Requisito que afecta
D1	WO2010017179	1 - 3, 7- 9, 13 - 18, 21-24, 28 y 29	Novedad
		4 – 6, 19, 20, 25– 27, 33 – 35	Nivel inventivo
D2	WO2011091153	4 – 6, 19, 20, 25– 27, 33 – 35	Nivel Inventivo

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de sesenta (60) días contados a partir del día siguiente de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Se invita al solicitante se sirva indicar, si así lo considera, su renuncia al término faltante de sesenta (60) días para dar respuesta a este requerimiento y presentarla por escrito.

Finalmente, se le recuerda al solicitante que si como respuesta a este requerimiento llegara a modificar el capítulo reivindicatorio y éste contenga más de diez (10) reivindicaciones, no pagará la tasa de modificación voluntaria pero sí la correspondiente al pago por reivindicación adicional.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única No. 10 de 2001.



JOSÉ LUIS SALAZAR LÓPEZ
Director de Nuevas Creaciones (c)

El anterior requerimiento fue notificado por fijación en lista, de fecha 2015-07-07

Elaboró: Ruth Andrea Rodriguez
Revisó: Jeny Paola Villate Becerra

INFORME DE BÚSQUEDA DE PATENTES PARA EL RADICADO 14-042582-00005-0000						
CRITERIOS PARA LA BÚSQUEDA						
Palabras clave utilizadas		Pyridine or pyrimidine KMO inhibitors				
CLASIFICACIONES INTERNACIONALES UTILIZADAS PARA LA BÚSQUEDA		C07D 491/06				
BASES DE DATOS CONSULTADAS.						
Google patents		Espacenet		Science Direct		
INFORMES DE EXÁMENES REALIZADOS EN OTRAS OFICINAS						
Oficina	Fecha del examen o de reporte de búsqueda de documentos	Anterioridades encontradas para el examen o reportados en el examen de búsqueda (relacionarlos todos)	Reiv. afectadas	RELEVANCIA (requisito que afecta)	FUERON TENIDOS EN CUENTA PARA EL EXAMEN EN LA OFICINA COLOMBIANA	
					SI	NO
EUROPEA	16/Diciembre/2014	US2011183957	1 - 3, 7- 9, 13 - 18, 21- 24, 28 y 29	Novedad	X	
			4 - 6, 19, 20, 25- 27, 33 - 35	Nivel inventivo		
		US2008070937				
USPTO	Sin presentación					
DOCUMENTOS ADICIONALES ENCONTRADOS POR EL EXAMINADOR DE ACUERDO A LOS CRITERIOS DE BÚSQUEDA.						
WO2011091153						
BÚSQUEDA DE SECUENCIAS						
Número de depósito / patente y N° de secuencia % de identidad						
SEQ ID NO (de la solicitud)	NCBI	The Lens	EMBL-EBI	DDJB	Genome Quest	
N/A						

KMO inhibitors pyridine or pyrimidine



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Before Aug 30, 2011 ▾

Any Patent Office ▾

Any filing status ▾

Any patent type ▾

Sorted by r

[Small molecule inhibitors of kynurenine-3-monooxygenase](#)



www.google.com.co/patents/US20080070937

App. - Filed 16 Aug 2007 - Published 20 Mar 2008 - [Paul Muchowski](#) - [J.](#)

[David Gladstone Institutes](#)

Therefore, compounds which act as **inhibitors** of **KMO** are of particular interest imidazole, pyrazole, **pyridine**, pyrazine, **pyrimidine**, pyridazine, indolizine, ...

[Overview](#) - [Related](#) - [Discuss](#)

[Certain kynurenine-3-monooxygenase inhibitors, ...](#)



www.google.com.co/patents/CA2732806A1?cl=en

App. - Filed 4 Aug 2009 - Published 11 Feb 2010 - [John Wityak](#) - [John](#)

[Wityak](#)

Also provided are methods for screening compounds capable of **inhibiting KMO** activity. ... is chosen from 6-(2-Trifluoromethyl-phenyl)-**pyrimidine**-4-carboxylic acid; 4-(3-Chloro-phenyl)-**pyridine**-2-carboxylic acid methyl ester;

[Overview](#) - [Related](#) - [Discuss](#)

Title: CERTAIN KYNURENINE-3-MONOOXYGENASE **INHIBITORS**, PHARMACEUTICAL COMPOSITIONS, AND METHODS OF USE THEREOF

Abstract: Source: US2011230428A Certain chemical entities are provided herein. Pharmaceutical compositions comprising at least one chemical entity and one or more pharmaceutically acceptable vehicle. Methods of treating patients suffering from certain diseases and disorders responsive to the inhibition of **KMO** activity are described, which comprise administering to such patients an amount of at least one chemical entity effective to reduce signs or symptoms of the disease or disorder are disclosed. These diseases include neurodegenerative disorders such as Huntington's disease. Methods of treatment include administering at least one chemical entity as a single active agent or administering at least one chemical entity in combination with one or more other therapeutic agents. Also provided are methods for screening compounds capable of inhibiting **KMO** activity.

Classifications:

International (IPC 8-9): A01N33/24 A61K31/13 A61K31/15 A61K31/18 A61K31/192 A61K31/277 A61K31/40 A61K31/41 A61K31/4164 A61K31/4245 A61K31/437 A61K31/5375 A61K31/7024 A61P25/00 A61P25/08 A61P25/16 A61P25/28 C07C251/38 C07C255/64 C07C311/05 C07D207/50 C07D233/64 C07D257/04 C07D271/06 C07D295/13 C07D471/04 C07H13/04 (Advanced/Invention)
CPIC: C07C251/48 C07C251/58 C07C255/61 C07C311/05 C07C2101/02 C07C2101/04 C07C2101/08 C07D207/09 C07D207/12 C07D207/14 C07D211/46 C07D211/56 C07D213/53 C07D213/71 C07D213/75 C07D231/40 C07D233/61 C07D233/64 C07D237/20 C07D239/42 C07D241/20 C07D249/08 C07D257/04 C07D261/08 C07D261/10 C07D261/14 C07D271/06 C07D285/125 C07D309/10 C07D471/04 C07H15/18
European: C07C251/48 C07C251/58 C07C255/61 C07C311/05 C07D207/09 C07D207/12 C07D207/14 C07D211/46 C07D211/56 C07D213/53 C07D213/71 C07D213/75 C07D231/40 C07D233/61 C07D233/64 C07D237/20 C07D239/42 C07D241/20 C07D249/08 C07D257/04 C07D261/08 C07D261/10 C07D261/14 C07D271/06 C07D285/125 C07D309/10 C07D471/04 C07H15/18 M07C101/02 M07C101/04 M07C101/08
US: 514/23 514/237.5 514/237.500S 514/238.2 514/238.200S 514/23P 514/303 514/303S 514/364 514/364S 514/381 514/381S 514/399 514/399S 514/426 514/426S 514/523 514/523S 514/567 514/567S 514/605 514/605S 514/640 514/640S 536/18.7 536/18.700S 544/162 544/162S 544/168 544/168S 546/118 546/118S 548/131 548/131S 548/252 548/252S 548/336.1 548/336.100S 548/557 548/557S 558/408 558/408S 562/440 562/440S 564/256 564/256S 564/99 564/99S

Family:

Publication number	Publication date	Application number	Application date
US2011230428 AA	20110922	US20090054931	20090722
WO10011302 A1	20100128	WO2009US04244	20090722

Priority:

US20080082744P 20080722 WO2009US04244 20090722 US20090054931 20090722

Probable Assignee: CHDI FOUNDATION INC

Assignee(s): (std): CHDI INC ; COURTNEY STEPHEN M ; COURTNEY STEPHEN MARTIN ; DE AGUIAR PENA PAULA C ; DOMINGUEZ CELIA ; SCHEEL ANDREAS ; WITYAK JOHN ; LEEDS JANET ; WINKLER DIRK ; YARNOLD CHRISTOPHER J ; TOLEDO SHERMAN LETICIA M ; YARNOLD CHRISTOPHER JOHN

Assignee(s): CHDI FOUNDATION INC

Inventor(s): (std): COURTNEY STEPHEN M ; COURTNEY STEPHEN MARTIN ; DE AGUIAR PENA PAULA C ; DOMINGUEZ CELIA ; LEEDS JANET ; SCHEEL ANDREAS ; TOLEDO SHERMAN LETICIA M ; WINKLER DIRK ; WITYAK JOHN ; YARNOLD CHRISTOPHER J ; YARNOLD CHRISTOPHER JOHN

Agent(s): GARRETT ARTHUR S

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: CERTAIN KYNURENINE-3-MONOOXYGENASE **INHIBITORS**, PHARMACEUTICAL COMPOSITIONS, AND METHODS OF USE THEREOF

Abstract: Source: US2011183957A Certain chemical entities are provided herein. Also provided are pharmaceutical compositions comprising at least one chemical entity and one or more pharmaceutically acceptable vehicle. Methods of treating patients suffering from certain diseases and disorders responsive to the inhibition of **KMO** activity are described, which comprise administering to such patients an amount of at least one chemical entity effective to reduce signs or symptoms of the disease or disorder are disclosed. These diseases include neurodegenerative disorders such as Huntington's disease. Also described are methods of treatment include administering at least one chemical entity as a single active agent or administering at least one chemical entity in combination with one or more other therapeutic agents. Also provided are methods for screening compounds capable of inhibiting **KMO** activity.

Classifications:

International (IPC 8-9): A01N43/54 A61K31/426 A61K31/4418 A61K31/4439 A61K31/444 A61K31/4453 A61K31/505 A61K31/506 A61K31/5377 A61P25/00 A61P25/08 A61P25/14 A61P25/16 A61P25/28 A61P43/00 C07D213/79 C07D213/81 C07D239/24 C07D239/28 C07D239/30 C07D239/38 C07D239/42 C07D239/52 C07D239/56 C07D239/69 C07D401/04 C07D401/06 C07D401/12 C07D403/06 C07D403/12 C07D405/12 C07D413/04 C07D413/06 C07D413/12 C07D417/12 C07D471/04 (Advanced/Invention); A61K31/426 A61K31/4453 A61K31/505 A61P25/28 (Advanced/Non-invention); A61K31/426 A61K31/4453 (Core/Invention); A61K (Subclass/Invention)
CPC: C07D239/52 C07D239/38 C07D403/12 C07D239/69 C07D401/12 A61K31/505 A61K31/506 C07D213/79 C07D213/81 C07D239/28 C07D239/42 C07D401/04 C07D401/06 C07D403/06 C07D405/12 C07D413/12 C07D417/12 C07D471/04
European: C07D213/79 C07D213/81 C07D239/28 C07D239/42 C07D239/69 C07D401/04 C07D401/06 C07D401/12 C07D403/06 C07D405/12 C07D413/12 C07D417/12 C07D471/04
US: 514/210.2 514/210.200P 514/235.8 514/235.800S 514/252.02 514/252.020S 514/252.14 514/252.140S 514/256 514/256S 514/269 514/269S 514/322 514/325 514/339 514/339S 514/354 514/354S 544/122 544/122S 544/238 544/238S 544/319 544/319S 544/327 544/327S 544/328 544/328S 544/333 544/333S 544/334 544/335 544/335S 546/263 546/263S 546/278.1 546/278.100S 546/326 546/326S

Family:

Publication number	Publication date	Application number	Application date
AU2009279787 AA	20100211	AU20090279787	20090804
AU2009279787 BB	20140529	AU20090279787	20090804
CA2732806 AA	20100211	CA20092732806	20090804
CN102238950 A	20111109	CN200980138960	20090804
CN102238950 B	20140507	CN200980138960	20090804
EP2331095 A1	20110615	EP20090805426	20090804
EP2331095 A4	20120321	EP20090805426	20090804
EP2331095 B1	20141015	EP20090805426	20090804
HK1162352 A1	20150130	HK20120103228	20120402
IL210843 A0	20110428	IL20110210843	20110124
IL210843 A1	20140528	IL20110210843	20110124
IN00482KN2011 A	20111125	IN2011KN00482	20110131
JP2011529969 T2	20111215	JP20110522158T	20090804
JP5693452 B2	20150401	JP20110522158T	20090804
KR20110092266 A	20110817	KR20117005294	20090804
MX2011001349 A1	20110817	MX20110001349	20110204
NZ590887 A	20120928	NZ20090590887	20090804
NZ601483 A	20131025	NZ20090601483	20090804
RU2011107437 A	20120910	RU20110107437	20090804
RU2523448 C2	20140720	RU20110107437	20090804
US2011183957 AA	20110728	US20090056305	20090804
US2013331370 AA	20131212	US20130963822	20130809
US8536186 BB	20130917	US20090056305	20090804
WO10017179 A1	20100211	WO2009US52667	20090804

Priority:
US20080086090P 20080804 WO2009US52667 20090804 US20090056305 20090804
NZ20090590887 20090804 US20130963822 20130809 US20110056305 20110413

Probable Assignee: CHDI FOUNDATION INC

Assignee(s): (std): CHDI FOUNDATION INC ; DE AGUIAR PENA PAULA CRISTINA ; CHDI INC ; COURTNEY STEPHEN MARTIN ; DOMINGUEZ CELIA ; DOMINGUEZ CELIA ; DE AGUIAR PENA PAULA C ; CHIDI INC ; SCHEEL ANDREAS ; WITYAK JOHN ; TOLEDO SHERMAN LETICIA M ; YARNOLD CHRISTOPHER JOHN ; LEEDS JANET ; WINKLER DIRK ; PENA PAULA CRISTINA DE AGUIAR ; AGUIAR PENA PAULA CRISTINA DE ; SIEHJCHDIAJ FAUNDEJSHN INK

Assignee(s): ANDREAS SCHEEL ; CELIA DOMINGUEZ ; PAULA CRISTINA DE AGUIAR PENA ; STEPHEN MARTIN COURTNEY ; LETICIA M TOLEDO SHERMAN ; JOHN WITYAK ; DIRK WINKLER ; CHRISTOPHER JOHN YARNOLD ; JANET LEEDS

Inventor(s): (std): ANDREAS SCHEEL ; CELIA DOMINGUEZ ; DE AGUIAR PENA PAULA C ; DE AGUIAR PENA PAULA CRISTINA ; DE AGUIAR PENA PAULA KRISTINA ; DIRK WINKLER ; DOMINGEZ SELIJA ; COURTNEY STEPHEN MARTIN ; CRISTINA DE AGUIAR PENA PAULA ; DOMINGUEZ CELIA ; DOMINGUEZ CELIA ; JARNOL D KRISTOFER DZHON ; JOHN WITYAK ; JOHN YARNOLD CHRISTOPHER ; KURTNEJ STIVEN MARTIN ; LEEDS JANET ; PENA PAULA CRISTINA DE AGUIAR ; PENA PAULA CRISTINA DE AGUIAR ; SCHEEL ANDREAS ; SHILL ANDREAS ; MARTIN COURTNEY STEPHEN ; TOLEDO SHERMAN LETICIA M ; TOLEDO SHERMAN LETISIA M ; VINKLER DIRK ; VITJAK DZHON ; WINKLER DIRK ; WITYAK JOHN ; YARNOLD CHRISTOPHER JOHN

Inventor(s): YARNOLD CHRISTOPHER ; TOLEDOSHERMAN LETICIA ; PAULA CRISTINA DE AGUIAR PENA ; PAULA CRISTINA DE AGUIAR PENA ; STEPHEN MARTIN COURTNEY ; LETICIA M TOLEDO SHERMAN ; JANET LEEDS ; DE AGUIAR PENA PAULA ; DOMINGGUEZ CELIA ; CHRISTOPHER JOHN YARNOLD ; COURTNEY STEPHEN

Agent(s): HOWARD PAUL NICHOLAS; GARRETT ARTHUR S

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LT LK LR LS LT LU LV MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: CERTAIN KYNURENINE-3-MONOOXYGENASE **INHIBITORS**, PHARMACEUTICAL COMPOSITIONS, AND METHODS OF USE THEREOF

Abstract: Source: US2012329812A Certain chemical entities are provided herein. Also provided are pharmaceutical compositions comprising at least one chemical entity and one or more pharmaceutically acceptable vehicle. Methods of treating patients suffering from certain diseases and disorders responsive to the inhibition of **KMO** activity are described, which comprise administering to such patients an amount of at least one chemical entity effective to reduce signs or symptoms of the disease or disorder are disclosed. These diseases include neurodegenerative disorders such as Huntington's disease. Also described are methods of treatment include administering at least one chemical entity as a single active agent or administering at least one chemical entity in combination with one or more other therapeutic agents. Also provided are methods for screening compounds capable of inhibiting **KMO** activity.

Classifications:

International (IPC 8-9): A01N43/80 A61K31/42 A61K31/422 A61K31/437 A61K31/4439 A61K31/497 A61K31/506 A61P25/08 A61P25/16 A61P25/28 C07D261/04 C07D413/06 C07D413/12 C07D471/04 (Advanced/Invention);

A01N43/72 A61K31/42 (Core/Invention)

CPC: A61K31/42

European: A61K31/42

US: 514/254.01 514/254.04 514/256 514/300 514/340 514/378 544/322 544/367 546/113 546/272.1 548/240

Family:

Publication number	Publication date	Application number	Application date
US2012329812 AA	20121227	US20090056919	20090803
US8691824 BB	20140408	US20090056919	20090803
WO10017132 A1	20100211	WO2009US52560	20090803

Priority:

US20080086083P 20080804 WO2009US52560 20090803 US20090056919 20090803

Probable Assignee: CHDI FOUNDATION INC

Assignee(s): (std): CHDI FOUNDATION INC ; CHDI INC ; COURTNEY STEPHEN MARTIN ; DE AGUIAR PENA PAULA C ; DE AGUIAR PENA PAULA CRISTINA ; DOMINGUEZ CELIA ; SCHEEL ANDREAS ; WITYAK JOHN ; YARNOLD CHRISTOPHER JOHN ; LEEDS JANET ; WINKLER DIRK ; TOLEDO SHERMAN LETICIA M

Inventor(s): (std): COURTNEY STEPHEN MARTIN ; DE AGUIAR PENA PAULA C ; DE AGUIAR PENA PAULA CRISTINA ; DOMINGUEZ CELIA ; LEEDS JANET ; SCHEEL ANDREAS ; TOLEDO SHERMAN LETICIA M ; WINKLER DIRK ; WITYAK JOHN ; YARNOLD CHRISTOPHER JOHN

Agent(s): GARRETT ARTHUR S

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: CERTAIN KYNURENINE-3-MONOOXYGENASE **INHIBITORS**, PHARMACEUTICAL COMPOSITIONS, AND METHODS OF USE THEREOF

Abstract: Source: US2013029988A Certain chemical entities are provided herein. Also provided are pharmaceutical compositions comprising at least one chemical entity and one or more pharmaceutically acceptable vehicle. Methods of treating patients suffering from certain diseases and disorders responsive to the inhibition of **KMO** activity are described, which comprise administering to such patients an amount of at least one chemical entity effective to reduce signs or symptoms of the disease or disorder are disclosed. These diseases include neurodegenerative disorders such as Huntington's disease. Also described are methods of treatment include administering at least one chemical entity as a single active agent or administering at least one chemical entity in combination with one or more other therapeutic agents. Also provided are methods for screening compounds capable of inhibiting **KMO** activity.

Classifications:

International (IPC 8-9): A01N43/54 A61K31/41 A61K31/4155 A61K31/4178 A61K31/4245 A61K31/505 A61K31/506 A61K31/513 A61K31/5377 A61P25/00 A61P25/08 A61P25/14 A61P25/16 A61P25/28 A61P43/00 A61P9/10 C07D C07D231/00 C07D239/24 C07D239/28 C07D239/30 C07D239/36 C07D239/54 C07D247/00 C07D249/08 C07D257/04 C07D273/02 C07D401/04 C07D403/04 C07D413/04 C07D413/14 C07D417/04 (Advanced/Invention)

CPC: C07D403/04 A61K31/41 A61K31/4155 A61K31/4178 A61K31/4245 C07D401/04 C07D413/04 C07D417/04

European: C07D401/04 C07D403/04 C07D413/04 C07D417/04

US: 514/235.8 514/236.2 514/252.14 514/256 514/269 514/274 544/122 544/242 544/295 544/296 544/326 544/328 544/333

Family:

Publication number	Publication date	Application number	Application date
AU2011207229 AA	20110728	AU20110207229	20110120
AU2011207229 BB	20150212	AU20110207229	20110120
CA2787365 AA	20110728	CA20112787365	20110120
CN102811620 A	20121205	CN201180015784	20110120
CN102811620 B	20150325	CN201180015784	20110120
EP2528441 A1	20121205	EP20110735184	20110120
EP2528441 A4	20130710	EP20110735184	20110120
IL220957 A0	20120924	IL20120220957	20120715
IN01905KN2012 A	20130315	IN2012KN01905	20120726
JP2013518046 T2	20130520	JP20120550116T	20110120
KR20120131161 A	20121204	KR20127021570	20110120
MX2012008346 A1	20121112	MX20120008346	20120718
NZ601547 A	20140430	NZ20110601547	20110120
RU2012133475 A	20140310	RU20120133475	20110120
SG182534 A1	20120830	SG20120005218	20110120
US2013029988 AA	20130131	US20110575019	20110120
US8883785 BB	20141111	US20110575019	20110120
WO11091153 A1	20110728	WO2011US21890	20110120

Priority:
US20100298095P 20100125 US20110575019 20110120 WO2011US21890 20110120

Probable Assignee: CHDI FOUNDATION INC

Assignee(s): (std): BROOKFIELD FREDERICK ; CHDI FOUNDATION INC ; CHDI INC ; DE AGUIAR PENA PAULA C ; DOMINGUEZ CELIA ; TOLEDO SHERMAN LETICIA M ; WINKLER DIRK

Assignee(s): EVOTEC AG ; EVOTEC UK LTD

Inventor(s): (std): BROOKFIELD FREDERICK ; DE AGUIAR PENA PAULA C ; DOMINGUEZ CELIA ; PENA PAULA C DE AGUILAR ; TOLEDO SHERMAN LETICIA M ; WINKLER DIRK

Inventor(s): TOLEDO SHERMAN LETICIA ; FREDERICK BROOKFIELD ; LETICIA M TOLEDO SHERMAN ; PAULA C DE AGUILAR PENA ; DIRK WINKLER ; CELIA DOMINGUEZ ; DE AGUIAR PENA PAULA

Agent(s): HOWARD PAUL NICHOLAS; STEVENS LAUREN L ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: CERTAIN KYNURENINE-3-MONOOXYGENASE **INHIBITORS**, PHARMACEUTICAL COMPOSITIONS, AND METHODS OF USE THEREOF

Abstract: Source: US2014329816A Certain chemical entities are provided herein. Also provided are pharmaceutical compositions comprising at least one chemical entity and one or more pharmaceutically acceptable vehicle. Methods of treating patients suffering from certain diseases and disorders responsive to the inhibition of **KMO** activity are described, which comprise administering to such patients an amount of at least one chemical entity effective to reduce signs or symptoms of the disease or disorder are disclosed. These diseases include neurodegenerative disorders such as Huntington's disease. Also described are methods of treatment include administering at least one chemical entity as a single active agent or administering at least one chemical entity in combination with one or more other therapeutic agents. Also provided are methods for screening compounds capable of inhibiting **KMO** activity.

Classifications:

International (IPC 8-9): A01N A01N43/54 A61K31/505 A61K31/506 A61K31/517 A61K31/519 A61K31/5377 A61P21/02 A61P25/14 A61P25/16 A61P25/28 A61P43/00 A61P9/10 C07D239/28 C07D239/36 C07D239/42 C07D239/47 C07D239/52 C07D401/04 C07D401/14 C07D403/04 C07D403/14 C07D405/14 C07D413/04 C07D413/14 C07D417/04 C07D417/14 C07D471/04 C07D491/052 (Advanced/Invention); A61P25/14 (Advanced/Non-invention); A01N C07D (Subclass/Invention)

CPC: C07D239/42 C07D239/26 C07D239/28 C07D413/14 C07D417/04 C07D401/04 C07D403/04 C07D413/04

US: 514/236.2 514/252.14 514/256 514/269 514/272 514/274 544/122 544/242 544/295 544/296 544/333

Family:

Publication number	Publication date	Application number	Application date
AU2012286851 AA	20130131	AU20120286851	20120726
AU2012286851 AH	20140403	AU20120286851	20120726
CA2841981 AA	20140114	CA20122841981	20120726
CN103841829 A	20140604	CN201280037734	20120726
EA201490163 A1	20140630	EA20140090163	20120726
EP2736337 A1	20140604	EP20120817789	20120726
EP2736337 A4	20141217	EP20120817789	20120726
HK1198619 A1	20150522	HK20140112101	20141201
IL230705 A0	20140331	IL20140230705	20140128
JP2014521651 T2	20140828	JP20140522984T	20120726
KR20140082633 A	20140702	KR20147002297	20120726
TW201319056 A	20130516	TW20120127170	20120727
US2014329816 AA	20141106	US20120235253	20120726
WO13016488 A1	20130131	WO2012US48254	20120726

Priority:

US20110512782P 20110728 WO2012US48254 20120726 US20120235253 20120726

Probable Assignee: CDHI FOUNDATION INC

Assignee(s): (std): BROWN CHRISTOPHER JOHN ; CDHI FOUNDATION INC ; CELIA DOMINGUEZ ; CHDI FOUNDATION CORP ; JOHNSON PETER ; DOMINGUEZ CELIA ; COURTNEY STEPHEN MARTIN ; DE AGUIAR PENA PAULA C ; CHDI FOUNDATION INC ; LETICIA M TOLEDO SHERMAN ; CHRISTOPHER JOHN BROWN ; PRIME MICHAEL ; TOLEDO SHERMAN LETICIA M ; MITCHELL WILLIAM ; MICHAEL PRIME ; PAULA C DE AGUIAR PENA ; STEPHEN MARTIN COURTNEY ; WILLIAM MITCHELL ; PETER JOHNSON

Assignee(s): LETICIA MTOLEDO SHERMAN

Inventor(s): (std): COURTNEY STEPHEN MARTIN ; DE AGUIAR PENA PAULA C ; DOMINGUEZ CELIA ; DOMINIGUEZ CELIA ; JOHNSON PETER ; BROWN CHRISTOPHER JOHN ; MITCHELL WILLIAM ; PRIME MICHAEL ; TOLEDO SHERMAN LETICIA M

Inventor(s): WILLIAM MITCHELL ; STEPHEN MARTIN COURTNEY ; PAULA C DE AGUIAR PENA ; PETER JOHNSON ; CELIA DOMINGUEZ ; CHRISTOPHER JOHN BROWN ; LETICIA MTOLEDO SHERMAN ; MICHAEL PRIME

Agent(s): MARSHALL CAMERON JOHN; STEVENS LAUREN L ET AL

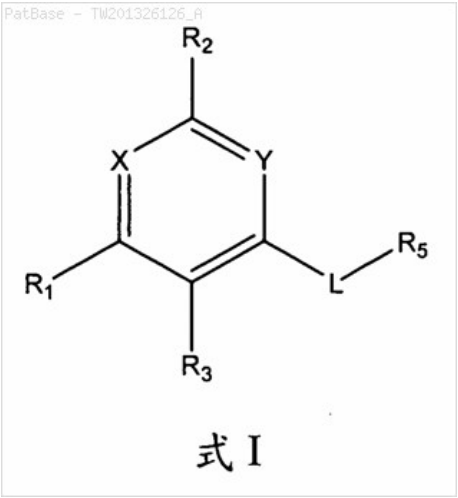
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: KYNURENINE-3-MONOOXYGENASE **INHIBITORS**, PHARMACEUTICAL COMPOSITIONS, AND METHODS OF USE THEREOF

Abstract: Certain chemical entities are provided herein. Also provided are pharmaceutical compositions comprising at least one chemical entity and one or more pharmaceutically acceptable vehicle. Methods of treating patients suffering from certain diseases and disorders responsive to the inhibition of **KMO** activity are described, which comprise administering to such patients an amount of at least one chemical entity effective to reduce signs or symptoms of the disease or disorder are disclosed. These diseases include neurodegenerative disorders such as Huntington's disease. Also described are methods of treatment include administering at least one chemical entity as a single active agent or administering at least one chemical entity in combination with one or more other therapeutic agents. Also provided are methods for screening compounds capable of inhibiting **KMO** activity.

Classifications:

International (IPC 8-9): A61K A61K31/44 A61K31/505 A61K31/506 A61K31/519 A61K31/5377 A61K31/7064 A61P25/00 A61P25/14 A61P25/28 A61P43/00 C07D213/79 C07D239/24 C07D239/26 C07D239/28 C07D239/42 C07D239/69 C07D401/00 C07D401/04 C07D401/10 C07D401/12 C07D403/04 C07D403/10 C07D403/12 C07D405/04 C07D405/10 C07D405/12 C07D405/14 C07D409/04 C07D413/04 C07D413/10 C07D417/04 C07D471/04 C07D491/044 C07D491/048 C07D491/052 C07H13/10 C07H15/26 C7D401/00 (Advanced/Invention); A61K (Subclass/Invention)
CPC: C07D239/42 C07D403/04 C07D403/10 C07D405/04 C07D405/10 C07D405/14 C07D409/04 C07D413/04 C07D417/04 C07D471/04 C07D491/048 C07D491/052 C07H13/10 C07D239/28



Family:

Publication number	Publication date	Application number	Application date
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CA2844128 AA	20140203	CA20122844128	20120828
CL2014000447 A1	20141121	CL20140000447	20140225
CN103957913 A	20140730	CN201280042338	20120828
CO7020907 A2	20140811	CO20140042582	20140228
EA201490277 A1	20140829	EA20140090277	20120828
EP2750677 A1	20140709	EP20120828501	20120828
EP2750677 A4	20150527	EP20120828501	20120828
IL231270 A0	20140430	IL20140231270	20140302
JP2014525445 T2	20140929	JP20140528519T	20120828
KR20140072022 A	20140612	KR20147003968	20120828
MX2014002460 A1	20140801	MX20140002460	20140228
PE20812014 A1	20141218	PE20140000264	20120828
TW201326126 A	20130701	TW20120131294	20120829
WO13033085 A1	20130307	WO2012US52648	20120828

Priority:

US20110528998P 20110830 WO2012US52648 20120828

Probable Assignee: CHDI FOUNDATION INC

Assignee(s): (std): BROWN CHRISTOPHER JOHN ; CELIA DOMINGUEZ ; CHDI FOUNDATION INC ; CHRISTOPHER JOHN BROWN ; JOHNSON PETER ; DOMINGUEZ CELIA ; COURTNEY STEPHEN MARTIN ; DE AGUIAR PENA PAULA C ; LETICIA M TOLEDO SHERMAN ; IGNACIO MUNOZ SANJUAN ; PRIME MICHAEL ; MUNOZ IGNACIO ; TOLEDO SHERMAN LETICIA M ; MITCHELL WILLIAM ; MICHAEL PRIME ; PAULA C DE AGUIAR PENA ; WILLIAM MITCHELL ; STEPHEN MARTIN COURTNEY ; PETER JOHNSON

Assignee(s): LETICIA MTOLEDO SHERMAN ; IGNACIO MUNOZ

Inventor(s): (std): COURNEY STEPHEN MARTIN ; COURTNEY STEPHEN MARTIN ; DE AGUIAR PENA PAULA C ; DOMINGUEZ CELIA ; IGNACIO SANJUAN MUNOZ ; JOHNSON PETER ; MITCHEL WILLIAM ; MITCHELL WILLIAM ; MUNOZ IGNACIO ; BROWN CHRISTOPHER JOHN ; PENA PAULA C DE AGUIAR ; PRIME MICHAEL ; TOLEDO SHERMAN LETICIA M

Inventor(s): WILLIAM MITCHELL ; STEPHEN MARTIN COURTNEY ; PETER JOHNSON ; CELIA DOMINGUEZ ; CHRISTOPHER JOHN BROWN ; PAULA C DE AGUIAR PENA ; LETICIA M TOLEDO SHERMAN ; LETICIA MTOLEDO SHERMAN ; MICHAEL PRIME ; IGNACIO MUNOZ

Agent(s): CARPMAELS AND RANSFORD LLP; STEVENS LAUREN L ET AL

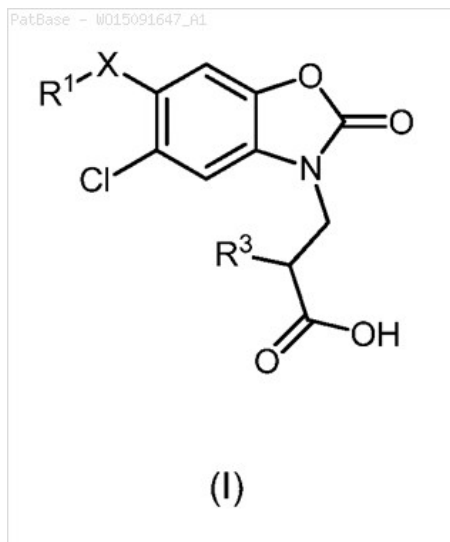
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Title: 3-(5-CHLORO-2-OXOBENZO[D]OXAZOL-3(2H)-YL)PROPANOIC ACID DERIVATIVES AS **KMO INHIBITORS**

Abstract: A compound of formula (I) or a salt thereof are provided wherein R¹, X and R³ are defined in the specification, useful in the treatment of disorders mediated by **KMO** such as acute pancreatitis, chronic kidney disease, other conditions associated with systemic inflammatory response syndrome (SIRS), Huntington's disease, Alzheimer's disease, spinocerebellar ataxias, Parkinson's disease, AIDS-dementia complex, amyotrophic lateral sclerosis (ALS), depression, schizophrenia, sepsis, cardiovascular shock, severe trauma, acute lung injury, acute respiratory distress syndrome, acute cholecystitis, severe burns, pneumonia, extensive surgical procedures, ischemic bowel, severe acute hepatic disease, severe acute hepatic encephalopathy or acute renal failure.

Classifications:

International (IPC 8-9): A61K31/423 A61K31/4439 A61K31/501 A61K31/506
A61P25/00 C07D263/58 C07D413/12 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
GB201322512 A0	20140205	GB20130022512	20131219
WO15091647 A1	20150625	WO2014EP78221	20141217

Priority:

GB20130022512 20131219

Probable Assignee: GLAXOSMITHKLINE IP DEV LTD

Assignee(s): (std): GLAXOSMITHKLINE IP DEV LTD

Assignee(s): GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LTD ; GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED

Inventor(s): BOUILLOT ANNE MARIE JEANNE ; LIDDLE JOHN ; MIRGUET OLIVIER ; WALKER ANN LOUISE

Agent(s): HILLIER MARK

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Ruth Rodriguez

Search history

Search 1: PN=(wo2013028590) (Results 1)

Search 2: [SP]: 1. a compound selected from the group consisting of 2-methyl-6-{2-(5-methylpyridin-2-yl)cyclopropyl}methoxy}-n-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidin-4-amine, 2-methyl-6-{[(1s,2s)-2-(5-methylpyridin-2-yl)cyclopropyl]methoxy}-n-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidin-4-amine, s,s-2-methyl-n-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]-6-{[2-(1,5-naphthridin-2-yl)cyclopropyl]methoxy}pyrimidin-4-amine, 6-{[(1s,2 s)-2-(5-methoxypyridin-2-yl)cyclopropyl]methoxy}-n-4-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidine-2,4-diamine, 5-fluoro-6-{[(1s,2s)-2-(5-methoxypyridin-2-yl)cyclopropyl]methoxy}-n-4-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidine-2,4-diamine, 6-{[2-(3,3'-bipyridin-6-yl)cyclopropyl]methoxy}-2-methyl-n-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidin-4-amine, 6-{[2-(5-cyclopropylpyridin-2-yl)cyclopropyl]methoxy}-2-methyl-n-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidin-4-amine, and 2-amino-4-{[(1s,2s)-2-(5-methylpyridin-2-yl)cyclopropyl]methoxy}-6-{[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]amino}pyrimidine-5-carbonitrile, or a pharmaceutically acceptable salt thereof. 2. a compound of structural formula: [ftimg=69464273] or a pharmaceutically acceptable salt thereof. 3. the compound according to claim 2 which is. [ftimg=69464274]4. the compound according to claim 2 which is [ftimg=69464275] in the form of a pharmaceutically acceptable salt. 5. a compound which is [ftimg=69464276] or a pharmaceutically acceptable salt thereof. 6. the compound according to claim 5 which is [ftimg=69464277]7. the compound according to claim 5 which is [ftimg=69464278] in the form of a pharmaceutically acceptable salt. 8. a compound which is [ftimg=69464279] or a pharmaceutically acceptable salt thereof. 9. the compound according to claim 8 which is [ftimg=69464280]10. the compound according to claim 8 which is [ftimg=69464281] in the form of a pharmaceutically acceptable salt. 11. a compound which is [ftimg=69464282] or a pharmaceutically acceptable salt thereof. 12. the compound according to claim 11 which is [ftimg=69464283]13. the compound according to claim 11 which is [ftimg=69464284] in the form of a pharmaceutically acceptable salt. 14. a compound which is [ftimg=69464285] or a pharmaceutically acceptable salt thereof. 15. the compound according to claim 14 which is [ftimg=69464286]16. the compound according to claim 14 which is [ftimg=69464287] in the form of a pharmaceutically acceptable salt. 17. a compound which is [ftimg=69464288] or a pharmaceutically acceptable salt thereof. 18. the compound according to claim 17 which is [ftimg=69464289]19. the compound according to claim 17 which is [ftimg=69464290] in the form of a pharmaceutically acceptable salt. 20. a compound which is [ftimg=69464291] or a pharmaceutically acceptable salt thereof. 21. the compound according to claim 20 which is [ftimg=69464292]22. the compound according to claim 20 which is [ftimg=69464293] in the form of a pharmaceutically acceptable salt. 23. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and a compound of claim 1 or a pharmaceutically acceptable salt thereof. 24. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 3. 25. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound according to claim 4. 26. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 6. 27. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 9. 29. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound according to claim 10. 30. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 12. 31. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound according to claim 13. 32. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 15. 33. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound according to claim 16. 34. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 18. 35. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound according to claim 19. 36. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of 21. 37. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound according to claim 22. (Results -1)

Search 3: [SP]: 1. a compound selected from the group consisting of 2-methyl-6-{2-(5-methylpyridin-2-yl)cyclopropyl}methoxy}-n-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidin-4-amine, 2-methyl-6-{[(1s,2s)-2-(5-methylpyridin-2-yl)cyclopropyl]methoxy}-n-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidin-4-amine, s,s-2-methyl-n-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]-6-{[2-(1,5-naphthridin-2-yl)cyclopropyl]methoxy}pyrimidin-4-amine, 6-{[(1s,2 s)-2-(5-methoxypyridin-2-yl)cyclopropyl]methoxy}-n-4-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidine-2,4-diamine, 5-fluoro-6-{[(1s,2s)-2-(5-methoxypyridin-2-yl)cyclopropyl]methoxy}-n-4-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidine-2,4-diamine, 6-{[2-(3,3'-bipyridin-6-yl)cyclopropyl]methoxy}-2-methyl-n-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidin-4-amine, 6-{[2-(5-cyclopropylpyridin-2-yl)cyclopropyl]methoxy}-2-methyl-n-[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]pyrimidin-4-amine, and 2-amino-4-{[(1s,2s)-2-(5-methylpyridin-2-yl)cyclopropyl]methoxy}-6-{[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]amino}pyrimidine-5-carbonitrile, or a pharmaceutically acceptable salt thereof. 2. a compound of structural formula: [ftimg=69464273] or a pharmaceutically acceptable salt thereof. 3. the compound according to claim 2 which is. [ftimg=69464274]4. the compound according to claim 2 which is [ftimg=69464275] in the form of a pharmaceutically acceptable salt. 5. a compound which is [ftimg=69464276] or a pharmaceutically acceptable salt thereof. 6. the compound according to claim 5 which is [ftimg=69464277]7. the compound according to claim 5 which is [ftimg=69464278] in the form of a pharmaceutically acceptable salt. 8. a compound which is [ftimg=69464279] or a pharmaceutically acceptable salt thereof. 9. the compound according to claim 8 which is [ftimg=69464280]10. the compound according to claim 8 which is [ftimg=69464281] in the form of a pharmaceutically acceptable salt. 11. a compound which is [ftimg=69464282] or a pharmaceutically acceptable salt thereof. 12. the compound according to claim 11 which is [ftimg=69464283]13. the compound according to claim 11 which is [ftimg=69464284] in the form of a pharmaceutically acceptable salt. 14. a compound which is [ftimg=69464285] or a pharmaceutically acceptable salt thereof. 15. the compound according to claim 14 which is [ftimg=69464286]16. the compound according to claim 14 which is [ftimg=69464287] in the form of a pharmaceutically acceptable salt. 17. a compound which is [ftimg=69464288] or a pharmaceutically acceptable salt thereof. 18. the compound according to claim 17 which is [ftimg=69464289]19. the compound according to claim 17 which is [ftimg=69464290] in the form of a pharmaceutically acceptable salt. 20. a compound which is [ftimg=69464291] or a pharmaceutically acceptable salt thereof. 21. the compound according to claim 20 which is [ftimg=69464292]22. the compound according to claim 20 which is [ftimg=69464293] in the form of a pharmaceutically acceptable salt. 23. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and a compound of claim 1 or a pharmaceutically acceptable salt thereof. 24. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 3. 25. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound according to claim 4. 26. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 6. 27. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 9. 29. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound according to claim 10. 30. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 12. 31. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound according to claim 13. 32. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 15. 33. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of claim 18. 35. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound according to claim 19. 36. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound of 21. 37. a pharmaceutical composition which comprises a pharmaceutically acceptable carrier and the compound according to claim 22. (Results 99)

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Search 5: TAC=(PDE10 and inhibitors) and CPC=(C07D239/47) (Results 1)

Search 6: TAC=(PDE10) and CPC=(C07D239/47) (Results 1)

Search 7: TAC=(pde10 and inhibitors) (Results 168)

Search 8: TAC=(pde10 and inhibitors AND pyrimidine) (Results 26)

Search 9: TAC=(phosphodiesterase and inhibitors AND pyrimidine and cyclopropyl) (Results 67)

Search 10: TAC=(KMO and inhibitors AND (pyrimidine or pyridine)) (Results 7)

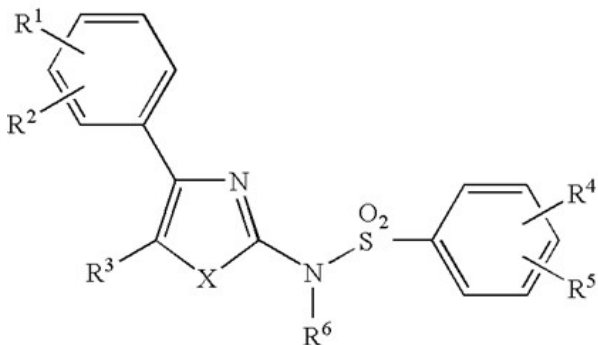
Search 11: PN=(wo2013033085) (Results 1)

Search 12: [SP]: kynurenine-3-monooxygenase inhibitors, pharmaceutical compositions, and methods of use thereof inhibiteurs de kynurenine-3-monooxygenase, compositions pharmaceutiques et procedes d'utilisation de ces compositions certain chemical entities are provided herein. also provided are pharmaceutical compositions comprising at least one chemical entity and one or more pharmaceutically acceptable vehicle. methods of treating patients suffering from certain diseases and disorders responsive to the inhibition of kmo activity are described, which comprise administering to such patients an amount of at least one chemical entity effective to reduce signs or symptoms of the disease or disorder are disclosed. these diseases include neurodegenerative disorders such as huntington's disease. also described are methods of treatment include administering at least one chemical entity as a single active agent or administering at least one chemical entity in combination with one or more other therapeutic agents. also provided are methods for screening compounds capable of inhibiting kmo activity. la presente invention concerne certaines entites chimiques. la presente invention concerne egalement des compositions pharmaceutiques comprenant au moins une entite chimique et un ou plusieurs vehicules pharmaceutiquement acceptables. la presente invention concerne des methodes de traitement de patients atteints de maladies et de troubles particuliers en reponse a l'inhibition de l'activeite kmo, qui comprennent l'administration a des tels patients d'une quantite d'au moins une entite chimique efficace pour attenuer les signes ou les symptomes de la maladie ou du trouble. ces maladies comprennent des troubles neurodegeneratifs tels que la maladie de huntington. la presente invention concerne en outre des methodes de traitement qui comprennent l'administration d'au moins une entite chimique en tant qu'agent actif unique ou l'administration d'au moins une entite chimique en combinaison avec un ou plusieurs autres agents therapeutiques. la presente invention concerne en outre des procedes utilises pour cribler des composés capables d'inhiber l'activeite kmo. (Results 0)

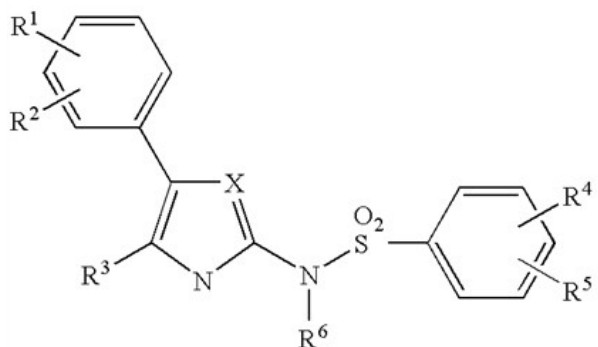
Title: SMALL MOLECULE INHIBITORS OF KYNURENINE-3-MONOOXYGENASE

Abstract: Source: US2008070905A The present invention relates to compounds of formula Ia or Ib below and their tautomers and/or pharmaceutically acceptable salts and compositions and methods of uses thereof.

Ia



Ib



Classifications:

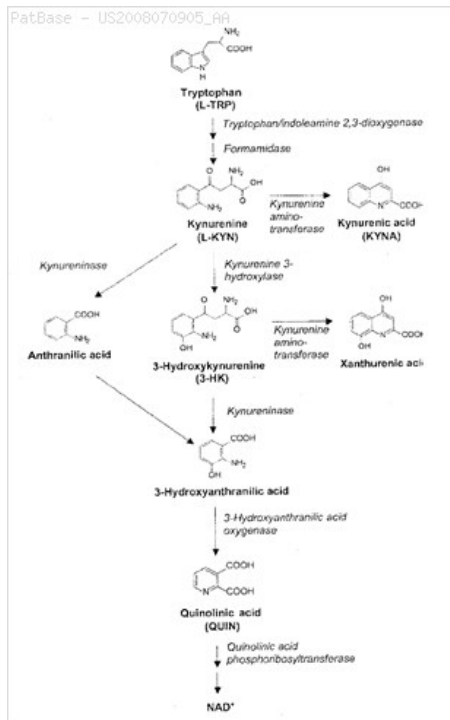
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A61K31/425 A61P25/00 C07D277/00 (Core/Invention)

CPC: C07C311/29 C07D285/08 C07D285/12 C07D277/52

European: C07C311/29 C07D277/52 C07D285/08 C07D285/12

US: 435/184 435/184S 514/227.8 514/227.800P 514/236.8 514/236.800S 514/254.02 514/254.020S 514/254.04 514/275 514/326 514/326S 514/352 514/352S 514/361 514/361S 514/363 514/364 514/370 514/370S 514/372 514/377 514/378 514/380 514/380S 514/383 514/383S 514/407 514/407S 514/426 514/604 514/604S 544/133 544/133S 544/297 544/297S 544/367 544/367S 544/369 544/369S 544/60 544/60S 546/209 546/209S 546/312 546/312S 548/128 548/128S 548/131 548/136 548/197 548/197S 548/214 548/233 548/246 548/246S 548/264.8 548/264.800S 548/331.1 548/372.1 548/372.100S 548/557 564/92 564/92S



Family:

Publication number	Publication date	Application number	Application date
DK2420494 T3	20150112	DK20070189793T	20070816
EP2054056 A2	20090506	EP20070800132	20070816
EP2054056 A4	20100825	EP20070800132	20070816
EP2054397 A1	20090506	EP20070814178	20070816
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Priority:

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Probable Assignee: J DAVID GLADSTONE INTITUTES A TESTAMENTARY TRUST ESTABLISHED UNDER WILL OF J DAVID GLADSTONE

Assignee(s): (std): DAVID GLADSTONE INST ; DAVID GLADSTONE INST J ; GUIDETTI PAOLO ; J DAVID GLADSTONE INST A TESTA ; MUCHOWSKI PAUL J ; SCHWARCZ ROBERT ; MUCHOWSKI JOSEPH M ; UNIV MARYLAND ; UNDER WILL OF J DAVID GLADSTONE ; UNDER THE WILL OF J DAVID GLADSTONE ; J DAVID GLADSTONE INST A TESTAMENTARY TRUST ESTABLISHED UNDER THE WILL OF J DAVID GLADSTONE ; J DAVID GLADSTONE INST A TESTAMENTARY TRUST ESTABLISHED UNDER ; J DAVID GLADSTONE INST A TESTAMENTARY TRUST ESTABLISHED ; J DAVID GLADSTONE INST A TESTAMENTARY TRUST ESTABLISHED UNDER WILL OF J DAVID GLADSTONE ; WILL OF J DAVID GLADSTONE

Assignee(s): MARYLAND UNIV ; J DAVID GLADSTONE INSTITUTES A TESTAMENTARY TRUST ESTABLISHED ; J DAVID GLADSTONE INSTITUTES A TESTAMENTARY TRUST ESTABLISHED UNDER WILL OF J DAVID GLADSTONE ; J DAVID GLADSTONE INSTITUTES A TESTAMENTARY TRUST ESTABLISHED UNDER ; THE J DAVID GLADSTONE INSTITUTES A TESTAMENTARYTRUST ESTABLISHED UNDER THE WILL OF J DAVID GLADSTONE ; THE J DAVID GLADSTONE INSTITUTES A TESTAMENTARY TRUST ESTABLISHED UNDER THE WILL OF J DAVID GLADSTONE ; THE J DAVID GLADSTONE INSTITUTES A TESTAMENTARYTRUST ESTABLISHED ; J DAVID GLADSTONE INITUTES A TESTAMENTARY TRUST ESTABLISHED UNDER WILL OF J DAVID GLADSTONE ; J DAVID GLADSTONE INSTITUTES A TESTAMENTARYTRUST ESTABLISHED UNDER WILL OF J DAVID GLADSTONE ; J DAVID GLADSTONE INSTITUTES A TESTAMENTARYTRUST ESTABLISHED UNDER ; J DAVID GLADSTONE INSTITUTES A TESTAMENTARYTRUST ESTABLISHED ; OF MARYLAND UNIV ; UNIVERSITY OF MARYLAND ; UNIVERSITY OF MARYLAND BALTIMORE ; MARYLAND BALTIMORE UNIV ; OF MARYLAND BALTIMORE UNIV ; THE J DAVID GLADSTONE INSTITUTES ; THE WILL OF J DAVID GLADSTONE ; J DAVID GLADSTONE INSTITUTES ; J DAVID GLADSTONE INSTITUTES A TESTAMENTARY TRUST ; J DAVID GLADSTONE INST

Inventor(s): (std): SCHWARCZ ROBERT ; MUCHOWSKI PAUL J ; MUCHOWSKI JOSEPH M ; GUIDETTI PAOLO

Inventor(s): MUCHOWSKI JOSEPH ; MUCHOWSKI PAUL

Agent(s): SEXTON JANE HELEN; FOLEY AND LARDNER LLP; SWISS GERALD F ET AL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: CERTAIN KYNURENINE-3-MONOOXYGENASE INHIBITORS, PHARMACEUTICAL COMPOSITIONS, AND METHODS OF USE THEREOF

Abstract: Source: US2011183957A Certain chemical entities are provided herein. Also provided are pharmaceutical compositions comprising at least one chemical entity and one or more pharmaceutically acceptable vehicle. Methods of treating patients suffering from certain diseases and disorders responsive to the inhibition of KMO activity are described, which comprise administering to such patients an amount of at least one chemical entity effective to reduce signs or symptoms of the disease or disorder are disclosed. These diseases include neurodegenerative disorders such as Huntington's disease. Also described are methods of treatment include administering at least one chemical entity as a single active agent or administering at least one chemical entity in combination with one or more other therapeutic agents. Also provided are methods for screening compounds capable of inhibiting KMO activity.

Classifications:

International (IPC 8-9): A01N43/54 A61K31/426 A61K31/4418 A61K31/4439 A61K31/444 A61K31/4453 A61K31/505 A61K31/506 A61K31/5377 A61P25/00 A61P25/08 A61P25/14 A61P25/16 A61P25/28 A61P43/00 C07D213/79 C07D213/81 C07D239/24 C07D239/28 C07D239/30 C07D239/38 C07D239/42 C07D239/52 C07D239/69 C07D401/04 C07D401/06 C07D401/12 C07D403/06 C07D403/12 C07D405/12 C07D413/04 C07D413/06 C07D413/12 C07D417/12 C07D471/04 (Advanced/Invention); A61K31/426 A61K31/4453 A61K31/505 A61P25/28 (Advanced/Non-invention); A61K31/426 A61K31/4453 (Core/Invention); A61K (Subclass/Invention)
CPC: C07D239/52 C07D239/38 C07D403/12 C07D239/69 C07D401/12 A61K31/505 A61K31/506 C07D213/79 C07D213/81 C07D239/28 C07D239/42 C07D401/04 C07D401/06 C07D403/06 C07D405/12 C07D413/12 C07D417/12 C07D471/04
European: C07D213/79 C07D213/81 C07D239/28 C07D239/42 C07D239/69 C07D401/04 C07D401/06 C07D401/12 C07D403/06 C07D405/12 C07D413/12 C07D417/12 C07D471/04
US: 514/210.2 514/210.200P 514/235.8 514/235.800S 514/252.02 514/252.020S 514/252.14 514/252.140S 514/256 514/256S 514/269 514/269S 514/332 514/332S 514/339 514/339S 514/354 514/354S 544/122 544/122S 544/238 544/238S 544/319 544/319S 544/327 544/327S 544/328 544/328S 544/333 544/333S 544/334 544/335 544/335S 546/263 546/263S 546/278.1 546/278.100S 546/326 546/326S

Family:

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AU2009279787 AA	20100211	AU20090279787	20090804
AU2009279787 BB	20140529	AU20090279787	20090804
CA2732806 AA	20100211	CA20092732806	20090804
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WO10017179 A1	20100211	WO2009US52667	20090804

Priority:

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