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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/874,513	12/06/2016	9512124	10624-368-999	4468

84802 7590 11/16/2016
JONES DAY for Celgene Corporation
250 Vesey Street
NEW YORK, NY 10281-1047

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

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NOTICE OF ALLOWANCE AND FEE(S) DUE

84802 7590 08/01/2016
JONES DAY for Celgene Corporation
250 Vesey Street
NEW YORK, NY 10281-1047

EXAMINER

HABTE, KAHSAI

ART UNIT

PAPER NUMBER

1624

DATE MAILED: 08/01/2016

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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14/874,513

10/05/2015

Matthew Alexander

10624-368-999

4468

TITLE OF INVENTION: SUBSTITUTED AMINOPURINE COMPOUNDS, COMPOSITIONS THEREOF, AND METHODS OF TREATMENT THEREWITH

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	11/01/2016

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

84802 7590 08/01/2016
JONES DAY for Celgene Corporation
250 Vesey Street
NEW YORK, NY 10281-1047

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/874,513	10/05/2015	Matthew Alexander	10624-368-999	4468

TITLE OF INVENTION: SUBSTITUTED AMINOPURINE COMPOUNDS, COMPOSITIONS THEREOF, AND METHODS OF TREATMENT THEREWITH

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	11/01/2016

EXAMINER	ART UNIT	CLASS-SUBCLASS
HABTE, KAHSAY	1624	514-263220

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) The names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (**Please first reapply any previously paid issue fee shown above**)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
- ☐ Applicant asserting small entity status. See 37 CFR 1.27
- ☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____



UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/874,513	10/05/2015	Matthew Alexander	10624-368-999	4468
84802 7590 08/01/2016 JONES DAY for Celgene Corporation 250 Vesey Street NEW YORK, NY 10281-1047			EXAMINER HABTE, KAHSAI	
			ART UNIT 1624	PAPER NUMBER
DATE MAILED: 08/01/2016				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of AllowabilityApplication No.
14/874,513Examiner
KAHSAY HABTEApplicant(s)
ALEXANDER ET AL.Art Unit
1624AIA (First Inventor to
File) Status
Yes**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/25/2016.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 1-39 and 41-61. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some *c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
- ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
- ☐ Examiner's Amendment/Comment
- ☐ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

/KAHSAY HABTE/
Primary Examiner, Art Unit 1624

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Alexander *et al.*

Confirmation No.: 4468

Application No.: 14/874,513

Group Art Unit: 1624

Filed: October 5, 2015

Examiner: HABTE, KAHSAY

For: SUBSTITUTED AMINOPURINE
COMPOUNDS, COMPOSITIONS
THEREOF, AND METHODS OF
TREATMENT THEREWITH

Attorney Docket No.: 10624-368-999
(CAM: 700755-999368)

REPLY TO OFFICE COMMUNICATION UNDER 37 C.F.R. § 1.111

Mail Stop Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This responds to the Office Action mailed April 25, 2016 in connection with the above-identified application.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 64 of this paper.

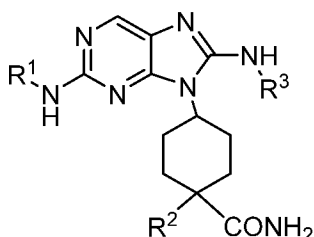
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

What is claimed is:

1. (Currently Amended) A compound of formula (I):



(I)

or a pharmaceutically acceptable salt, tautomer, stereoisomer or enantiomer
~~and pharmaceutically acceptable salts, tautomers, stereoisomers, enantiomers, and~~
isotopologues thereof,

wherein:

R^1 is substituted or unsubstituted C_{1-8} alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkylalkyl, or substituted or unsubstituted non-aromatic heterocyclyl;

R^2 is H or substituted or unsubstituted C_{1-3} alkyl;

R^3 is phenyl, substituted with one or more halogen, optionally further substituted with one or more substituents independently selected from substituted or unsubstituted C_{1-3} alkyl, CN, and $-OR'$, wherein each R' is independently substituted or unsubstituted C_{1-3} alkyl;

wherein when an alkyl group is substituted, it is substituted with a substituent selected from the group consisting of chloro; iodo; bromo; fluoro; alkyl; hydroxyl; alkoxy; alkoxyalkyl; amino; alkylamino; carboxy; nitro; cyano; thiol; thioether; imine; imide; amidine; guanidine; enamine; aminocarbonyl; acylamino; phosphonate; phosphine; thiocarbonyl; sulfinyl; sulfone; sulfonamide; acyl; ester; urea; urethane; oxime; hydroxyl amine; alkoxyamine;

aryloxyamine, aralkoxyamine; N-oxide; hydrazine; hydrazide; hydrazone; azide; isocyanate; isothiocyanate; cyanate; thiocyanate; B(OH)₂; and O(alkyl)aminocarbonyl;

wherein when a group other than alkyl is substituted, it is substituted with a substituent selected from the group consisting of chloro; iodo; bromo; fluoro; alkyl; hydroxyl; alkoxy; alkoxyalkyl; amino; alkylamino; carboxy; nitro; cyano; thiol; thioether; imine; imide; amidine; guanidine; enamine; aminocarbonyl; acylamino; phosphonate; phosphine; thiocarbonyl; sulfinyl; sulfone; sulfonamide; acyl; ester; urea; urethane; oxime; hydroxylamine; alkoxyamine; aryloxyamine; aralkoxyamine; N-oxide; hydrazine; hydrazide; hydrazone; azide; isocyanate; isothiocyanate; cyanate; thiocyanate; oxo; B(OH)₂; O(alkyl)aminocarbonyl; cycloalkyl, which may be monocyclic or fused or non-fused polycyclic, or a heterocyclyl, which may be monocyclic or fused or non-fused polycyclic; monocyclic or fused or non-fused polycyclic aryl or heteroaryl; aryloxy; aralkyloxy; heterocyclxyloxy; and heterocyclylalkoxy; and

provided the compound is not

4-[2-[(1-methylethyl)amino]-8-[(2,4,6-trifluorophenyl)amino]-9*H*-purin-9-yl]-*cis*-cyclohexanecarboxamide, or

4-[8-[(2,4-difluorophenyl)amino]-2-[(*trans*-4-hydroxycyclohexyl)amino]-9*H*-purin-9-yl]-*cis*-cyclohexanecarboxamide

2. (Original) The compound of claim 1, wherein R¹ is substituted or unsubstituted C₁₋₈ alkyl.

3. (Original) The compound of claim 2, wherein R¹ is substituted or unsubstituted methyl, ethyl, n-propyl, isopropyl, n-butyl, sec-butyl, isobutyl, tert-butyl, n-pentyl, 2-methylpentyl, 3-methylpentyl, isopentyl, or neopentyl.

4. (Original) The compound of claim 2, wherein R¹ is substituted with one or more substituents independently selected from halogen and OR, wherein each R is independently H or substituted or unsubstituted C₁₋₃ alkyl.

5. (Original) The compound of claim 2, wherein R¹ is substituted with one or more substituents independently selected from F, OH, and OCH₃.

6. (Original) The compound of claim 2, wherein R¹ is ethyl, isopropyl, isobutyl, tert-butyl, CH₂CH₂F, CH₂CHF₂, CH₂CF₃, CH₂CH(CH₃)OH, CH₂CH(CH₃)OCH₃, CH(CH₃)CH₂OH, CH(CH₃)CH₂OCH₃, CH₂C(F₂)CH₂OH, CH₂C(F₂)CH₂OCH₃, CH(CF₃)CH₂OH, CH(CF₃)CH₂OCH₃, CH(CH₂OH)CH₂CH₃, CH(CH₂OCH₃)CH₂CH₃, CH₂C(CH₃)₂CH₂OH, or CH₂C(CH₃)₂CH₂OCH₃.

7. (Original) The compound of claim 2, wherein R¹ is isopropyl, isobutyl, tert-butyl, CH₂CF₃, CH₂CH(CH₃)OH, CH(CH₃)CH₂OH, CH(CH₃)CH₂OCH₃, CH₂C(F₂)CH₂OH, CH(CF₃)CH₂OH, CH(CH₂OH)CH₂CH₃, or CH₂C(CH₃)₂CH₂OH.

8. (Original) The compound of claim 1, wherein R¹ is substituted or unsubstituted cycloalkyl.

9. (Original) The compound of claim 8, wherein R¹ is substituted or unsubstituted cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, or cycloheptyl.

10. (Original) The compound of claim 8, wherein R¹ is substituted with one or more substituents independently selected from halogen, OR, SO₂R', substituted or unsubstituted C₁₋₃ alkyl, and substituted or unsubstituted heterocyclyl, wherein each R is independently H or substituted or unsubstituted C₁₋₃ alkyl, and each R' is independently substituted or unsubstituted C₁₋₃ alkyl.

11. (Original) The compound of claim 8, wherein R¹ is substituted with one or more substituents independently selected from F, OH, OCH₃, SO₂CH₃, methyl, and a substituted or unsubstituted 5-membered heterocyclyl.

12. (Original) The compound of claim 11, wherein the 5-membered heterocyclyl is pyrrolidinedionyl, or oxadiazolyl.

13. (Original) The compound of claim 8, wherein R¹ is cyclobutyl, cyclopentyl, cyclohexyl, or cycloheptyl, optionally substituted with one or more substituents independently selected from F, OH, OCH₃, SO₂CH₃, methyl, pyrrolidinedionyl, and oxadiazolyl.

14. (Original) The compound of claim 1, wherein R^1 is substituted or unsubstituted cycloalkylalkyl.
15. (Original) The compound of claim 14, wherein R^1 is substituted or unsubstituted $(C_{1-3} \text{ alkyl})-(C_{1-8} \text{ cycloalkyl})$.
16. (Original) The compound of claim 14, wherein R^1 is substituted or unsubstituted CH_2 -cyclopropyl, CH_2 -cyclobutyl, CH_2 -cyclopentyl, CH_2 -cyclohexyl, or CH_2 -cycloheptyl.
17. (Original) The compound of claim 14, wherein R^1 is substituted with one or more substituents independently selected from $(C_{1-3} \text{ alkyl})OR$ or OR , wherein each R is independently H or substituted or unsubstituted $C_{1-3} \text{ alkyl}$.
18. (Original) The compound of claim 14, wherein R^1 is CH_2 -cyclopropyl, CH_2 -cyclobutyl, CH_2 -cyclopentyl, or CH_2 -cyclohexyl, optionally substituted with one or more CH_2OH or OH .
19. (Original) The compound of claim 1, wherein R^1 is substituted or unsubstituted non-aromatic heterocyclyl.
20. (Original) The compound of claim 19 wherein R^1 is substituted or unsubstituted oxetanyl, tetrahydrofuranyl, tetrahydropyranyl, tetrahydro-thiopyrandioxide, piperidyl, oxepanyl, or oxaspiroheptyl.
21. (Original) The compound of claim 19 wherein R^1 is substituted with one or more substituents independently selected from halogen, OR , SO_2R^4 , $C(=O)R^5$, $C(=O)OR^6$, $C(=O)NRR^7$, substituted or unsubstituted $C_{1-3} \text{ alkyl}$, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted alkylaryl, wherein each R is independently H or substituted or unsubstituted $C_{1-3} \text{ alkyl}$; R^4 is substituted or unsubstituted $C_{1-3} \text{ alkyl}$, or substituted or unsubstituted aryl; R^5 is substituted or unsubstituted $C_{1-3} \text{ alkyl}$; R^6 is substituted or unsubstituted $C_{1-6} \text{ alkyl}$; and R^7 is substituted or unsubstituted $C_{1-3} \text{ alkyl}$, or substituted or unsubstituted aryl.

22. (Original) The compound of claim 19 wherein R^1 is oxetanyl, tetrahydrofuranyl, tetrahydropyranyl, tetrahydro-thiopyrandioxide, piperidyl, oxepanyl, or oxaspiroheptyl, optionally substituted with one or more substituents independently selected from F, OH, SO_2CH_3 , SO_2 -tosyl, $C(=O)CH_3$, $C(=O)OCH_3$, $C(=O)O$ -tert-butyl, $C(=O)O$ -isopropyl, $C(=O)NHCH_3$, $C(=O)NH$ -phenyl, methyl, ethyl, isopropyl, CH_2OH , phenyl, pyridyl, or benzyl.

23. (Original) The compound of claim 1, wherein R^2 is H.

24. (Original) The compound of claim 1, wherein R^2 is CH_3 .

25. (Original) The compound of claim 1, wherein R^3 is ortho-halogen substituted phenyl.

26. (Original) The compound of claim 1, wherein R^3 is para-halogen substituted phenyl.

27. (Original) The compound of claim 1, wherein R^3 is para-CN substituted phenyl.

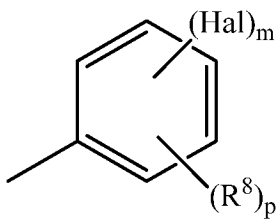
28. (Original) The compound of claim 1, wherein R^3 is ortho, ortho-dihalogen substituted phenyl.

29. (Original) The compound of claim 1, wherein R^3 is ortho, para-dihalogen substituted phenyl.

30. (Original) The compound of claim 1, wherein R^3 is 2,4,6-trihalogen substituted phenyl.

31. (Original) The compound of claim 1, wherein R^3 is ortho-halogen, para-CN substituted phenyl.

32. (Original) The compound of claim 1, wherein R^3 is



wherein

each Hal is independently halogen;

each R^8 is independently substituted or unsubstituted C_{1-3} alkyl, CN,

or OR' ;

each R' is independently substituted or unsubstituted C_{1-3} alkyl;

m is 1-3;

and p is 0-2.

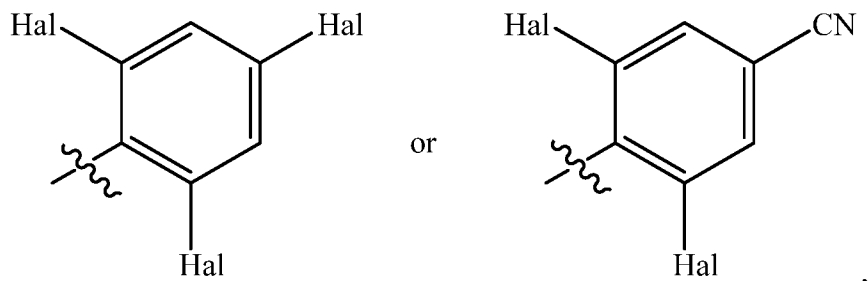
33. (Original) The compound of claim 32, wherein each Hal is independently Cl or F.

34. (Original) The compound of claim 32, wherein each R^8 is independently CH_3 , CF_3 , CN, or OCH_3 .

35. (Original) The compound of claim 32, wherein m is 2 or 3.

36. (Original) The compound of claim 32, wherein p is 0 or 1.

37. (Original) The compound of claim 32, wherein R^3 is



and each Hal is independently halogen.

38. (Original) The compound of claim 37, wherein each Hal is independently F or Cl.

39. (Currently Amended) ~~The compound of claim 1~~ A compound, wherein the compound is ~~selected from Table 1~~

(1s,4s)-4-(8-(3-chlorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chlorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,4-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chlorophenylamino)-2-(4-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-difluorophenylamino)-2-(3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-difluorophenylamino)-2-(1-methylcyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(tert-butylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-difluorophenylamino)-2-((3R,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(4-methyltetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chloro-2-fluorophenylamino)-2-(4-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(tetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((3R,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-difluorophenylamino)-2-((3R,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-6-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichlorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chlorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3,4-dichlorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(5-chloro-2-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chloro-2-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,5-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chloro-2-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(tetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,3-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichlorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-5-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-fluoro-2-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-bromo-2-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-fluoro-4-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-(trifluoromethyl)phenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-fluoro-2-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(tetrahydro-2H-pyran-4-ylamino)-8-(2,3,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-1-methyl-4-(2-(tetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-(cyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2,6-difluorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(cyclobutylamino)-8-(2,6-dichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2,6-dichlorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(cyclopentylamino)-8-(2,6-dichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(oxetan-3-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2,6-dichlorophenylamino)-2-(oxetan-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-(oxetan-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(tetrahydro-2H-pyran-4-ylamino)-8-(2,4,5-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(isopropylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-3-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2,3-dichlorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2-fluoro-6-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(5-chloro-2,4-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(tetrahydro-2H-pyran-4-ylamino)-8-(2,4,5-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(tetrahydro-2H-pyran-4-ylamino)-8-(2,3,4-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(cyclopentylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-3-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(4-chloro-2,5-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(4-chloro-2-fluoro-5-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(tetrahydro-2H-pyran-4-ylamino)-8-(2,3,4-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-4-fluoro-6-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2-fluoro-6-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-tetrahydrofuran-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-((1r,4r)-4-methoxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-((1r,4r)-4-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chloro-6-fluoro-2-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,5-dichloro-4-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,3-dichloro-4-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-3-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,3-difluoro-4-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-3-fluoro-4-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,3-dichloro-4-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-difluoro-6-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((S)-tetrahydrofuran-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(4,4-difluorocyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-3-fluoro-2-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-3,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-6-fluoro-3-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-((1,1-dioxidotetrahydro-2H-thiopyran-4-yl)amino)-8-((2,4,6-trichlorophenyl)amino)-9H-purin-9-yl)cyclohexane-1-carboxamide;

(1s,4s)-4-(8-(2-chlorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,4-dichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2-fluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichlorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-fluorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(isopropylamino)-8-(2,3,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,5-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,5-dimethylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2-fluoro-3-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,3-dichloro-6-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-5-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,5-difluoro-4-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-(1-(pyridin-3-yl)piperidin-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-(1-phenylpiperidin-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4,6-trichlorophenylamino)-2-(2,2,2-trifluoroethylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylmethylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-((R)-tetrahydro-2H-pyran-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3,4-dichloro-2-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(6-chloro-2,3-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-(1-(methylsulfonyl)piperidin-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-difluoro-4-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-methylphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(cyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((R)-1-hydroxybutan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(3R,4S)-tert-butyl 4-(9-((1s,4R)-4-carbamoylcyclohexyl)-8-(2,4,6-trifluorophenylamino)-9H-purin-2-ylamino)-3-fluoropiperidine-1-carboxylate;

(3R,4S)-tert-butyl 4-(9-((1s,4R)-4-carbamoylcyclohexyl)-8-(2,6-difluorophenylamino)-9H-purin-2-ylamino)-3-fluoropiperidine-1-carboxylate;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(cyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((R)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((R)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((R)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((R)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-hydroxybutan-2-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((3R,4S)-3-fluoropiperidin-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,3-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chloro-2-fluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,3,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((S)-1-methoxypropan-2-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((S)-1-hydroxybutan-2-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-((S)-1-hydroxybutan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((S)-1-hydroxybutan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((S)-1-hydroxybutan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((S)-1-hydroxybutan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((S)-1-hydroxybutan-2-ylamino)-8-(2,3,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichlorophenylamino)-2-((S)-1-hydroxybutan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(3-chloro-2-fluorophenylamino)-2-((S)-1-hydroxybutan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((S)-1-hydroxybutan-2-ylamino)-8-(2,3,4-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-2-hydroxypropylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichlorophenylamino)-2-((S)-1-hydroxybutan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((S)-1-hydroxybutan-2-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(3R,4S)-tert-butyl 4-(9-((1s,4R)-4-carbamoylcyclohexyl)-8-(4-chloro-2,6-difluorophenylamino)-9H-purin-2-ylamino)-3-fluoropiperidine-1-carboxylate;

(1s,4s)-4-(8-((4-chloro-2,6-difluorophenyl)amino)-2-((1,1-dioxidotetrahydro-2H-thiopyran-4-yl)amino)-9H-purin-9-yl)cyclohexane-1-carboxamide;

(1s,4s)-4-(8-((2,4-dichloro-6-fluorophenyl)amino)-2-((1,1-dioxidotetrahydro-2H-thiopyran-4-yl)amino)-9H-purin-9-yl)cyclohexane-1-carboxamide;

(R)-tert-butyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,4,6-trifluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-tert-butyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,6-difluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-tert-butyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,6-dichlorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-tert-butyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2-chloro-4,6-difluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-tert-butyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(4-chloro-2,6-difluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-tert-butyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,4,6-trichlorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(1R,4s)-4-(2-((S)-1-hydroxypropan-2-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((S)-1-hydroxypropan-2-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-difluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichlorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichlorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(5-chloro-2-fluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(3-chloro-2-fluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(2,6-dichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(2-chloro-4,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(4-chloro-2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(4-hydroxytetrahydrofuran-3-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichlorophenylamino)-2-(4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(4-hydroxytetrahydrofuran-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((R)-tetrahydro-2H-pyran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((R)-tetrahydro-2H-pyran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((R)-tetrahydro-2H-pyran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((R)-tetrahydro-2H-pyran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichlorophenylamino)-2-(4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chloro-2-fluorophenylamino)-2-(4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(4-chloro-2,3-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(3-chloro-2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(1-acetylpiperidin-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(1-acetylpiperidin-4-ylamino)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((R)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((S)-tetrahydro-2H-pyran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((S)-tetrahydro-2H-pyran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((S)-tetrahydro-2H-pyran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-((1-(hydroxymethyl)cyclopropyl)methylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1-(hydroxymethyl)cyclopropyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R)-3-hydroxycyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R)-3-hydroxycyclopentylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R)-3-hydroxycyclopentylamino)-8-(2,3,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichlorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R)-3-hydroxycyclopentylamino)-8-(2,3,4-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((R)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((R)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((R)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(3,3-difluorocyclobutylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(3,3-difluorocyclobutylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(3,3-difluorocyclobutylamino)-8-(2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(3,3-difluorocyclobutylamino)-8-(2,3,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2,6-dichlorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(3-chloro-2-fluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(4-chloro-2,5-difluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(4,4-difluorocyclohexylamino)-8-(2,3,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichlorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((S)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((S)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((S)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((S)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((S)-tetrahydro-2H-pyran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((3R,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-difluorophenylamino)-2-((3R,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-cyanophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,2R)-2-hydroxycyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-difluorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,2R)-2-hydroxycyclopentylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,2R)-2-hydroxycyclopentylamino)-8-(2,3,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichlorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(5-chloro-2-fluorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(3-chloro-2-fluorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,2R)-2-hydroxycyclopentylamino)-8-(2,3,4-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,5-difluorophenylamino)-2-((1R,2R)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,2S)-2-hydroxycyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-difluorophenylamino)-2-((1S,2S)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1S,2S)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1S,2S)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,2S)-2-hydroxycyclopentylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1S,2S)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1S,2S)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-((1S,2S)-2-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-difluorophenylamino)-2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((3R,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-((1r,3r)-3-hydroxycyclobutylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1r,3r)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-((1r,3r)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1r,3r)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1r,3r)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1r,3r)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-((1r,3r)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-((1r,3r)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chloro-2,5-difluorophenylamino)-2-((1r,3r)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(4,4-difluorocyclohexylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(4,4-difluorocyclohexylamino)-8-(2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(1-(methylsulfonyl)piperidin-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichlorophenylamino)-2-(1-(methylsulfonyl)piperidin-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(1-(methylsulfonyl)piperidin-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(1-(methylsulfonyl)piperidin-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(1-(methylsulfonyl)piperidin-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(1-(methylsulfonyl)piperidin-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-(1-(methylsulfonyl)piperidin-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichlorophenylamino)-2-(1-(methylsulfonyl)piperidin-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-((1r,3r)-3-hydroxycyclobutylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1r,3r)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((3R,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-difluorophenylamino)-2-((3R,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-difluorophenylamino)-2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((3R,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-((1s,3s)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((3S,4R)-4-hydroxytetrahydrofuran-3-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((3S,4R)-4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((3S,4R)-4-hydroxytetrahydrofuran-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((3R,4S)-4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((3R,4S)-4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((3R,4S)-4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-((3S,4R)-4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-((3S,4R)-4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichlorophenylamino)-2-((3S,4R)-4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(5-chloro-2-fluorophenylamino)-2-((3S,4R)-4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,5-difluorophenylamino)-2-((3R,4S)-4-hydroxytetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1s,3s)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-((1s,3s)-3-hydroxycyclobutylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1s,3s)-3-hydroxycyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-((1S,3S)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-difluorophenylamino)-2-((1S,3S)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1S,3S)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,3S)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1S,3S)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,3S)-3-hydroxycyclopentylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,3S)-3-hydroxycyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3S)-3-hydroxycyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3S)-3-hydroxycyclopentylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-(sec-butylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-(sec-butylamino)-8-(2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-(sec-butylamino)-8-(2,6-dichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-(sec-butylamino)-8-(2-chloro-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-(sec-butylamino)-8-(2-chloro-4,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-(sec-butylamino)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-(sec-butylamino)-8-(3-chloro-2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-difluorophenylamino)-2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3S)-3-hydroxycyclohexylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-difluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3S)-3-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-8-(2,3,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,5-difluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3S)-3-hydroxycyclohexylamino)-8-(2,3,4-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-(trifluoromethoxy)phenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-(cyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,3R)-3-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-cyano-2,3-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,3-difluoro-4-methoxyphenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R)-3-hydroxy-4,4-dimethylcyclohexylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-difluorophenylamino)-2-((1R,3R)-3-hydroxy-4,4-dimethylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1R,3R)-3-hydroxy-4,4-dimethylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-((1R,3R)-3-hydroxy-4,4-dimethylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,3R)-3-hydroxy-4,4-dimethylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,3R)-3-hydroxy-4,4-dimethylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R)-3-hydroxy-4,4-dimethylcyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1R,3R)-3-hydroxy-4,4-dimethylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,3R)-3-hydroxy-4,4-dimethylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(3-chloro-2,6-difluorophenylamino)-2-((1R,3R)-3-hydroxy-4,4-dimethylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichlorophenylamino)-2-((1R,3R,4R)-3-hydroxy-4-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(cyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-6-fluoro-4-(trifluoromethyl)phenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-((S)-1-hydroxybutan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,4,6-trifluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,6-difluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,6-dichlorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2-chloro-6-fluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2-chloro-4,6-difluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(4-chloro-2,6-difluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,4,6-trichlorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(4-chloro-2,3-difluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(3-chloro-2,6-difluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,3,4-trifluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(1S,4s)-4-(2-((1R,3R)-3-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R)-3-hydroxycyclohexylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1R,3S)-3-hydroxy-3-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,3S)-3-hydroxy-3-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,3S)-3-hydroxy-3-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,3S)-3-hydroxy-3-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1R,3S)-3-hydroxy-3-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-fluorophenylamino)-2-((1R,3S)-3-hydroxy-3-methylcyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((S)-1-hydroxybutan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((S)-1-hydroxybutan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3S)-3-hydroxycycloheptylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichlorophenylamino)-2-((1R,3S)-3-hydroxycycloheptylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-6-fluorophenylamino)-2-((1R,3S)-3-hydroxycycloheptylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,3S)-3-hydroxycycloheptylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,3S)-3-hydroxycycloheptylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3S)-3-hydroxycycloheptylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-((1R,3S)-3-hydroxycycloheptylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-(isopropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-3-cyanophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,3R)-3-hydroxycycloheptylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((2S,4R)-2-(hydroxymethyl)tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((2S,4R)-2-(hydroxymethyl)tetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(3-cyano-2,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1S,3S)-3-hydroxycycloheptylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((1S,3S)-3-hydroxycycloheptylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(2,2-difluoro-3-hydroxypropylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(2,2-difluoro-3-hydroxypropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(2,2-difluoro-3-hydroxypropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(2,2-difluoro-3-hydroxypropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,3S)-3-hydroxycyclohexylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,3S)-3-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,3-difluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,5-difluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,2R)-2-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,2R)-2-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,2R)-2-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1R,2R)-2-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,2R)-2-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((R)-1,1,1-trifluoro-3-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((R)-1,1,1-trifluoro-3-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1r,4r)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-1-methyl-4-(2-(tetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1r,4r)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4r)-4-(8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4r)-4-(2-((S)-1-hydroxypropan-2-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(3-hydroxy-2,2-dimethylpropylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,2S)-2-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4r)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(2-(cyclopentylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(2-(cyclopentylamino)-8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(2-(cyclopentylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(2-(cyclopentylamino)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(2-(cyclopentylamino)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1r,4r)-4-(2-(cyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((3S,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((3R,4S)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((3R,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((3S,4S)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((3S,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((3R,4S)-3-methyltetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((3R,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((3S,4S)-3-methyltetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((3S,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((3R,4S)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((3R,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((3S,4S)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((3R,4S)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((3R,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((3S,4S)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((3R,4S)-3-methyltetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((3S,4S)-3-methyltetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,2R)-2-hydroxycyclohexylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1S,2R)-2-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,2R)-2-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1S,2R)-2-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1S,2R)-2-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1S,2R)-2-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((R)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((1S,2R)-2-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((R)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-1-methyl-4-(2-(tetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-2-((R)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-((R)-tetrahydrofuran-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-tetrahydrofuran-3-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(1-morpholinopropan-2-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((3S,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((3S,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(oxepan-4-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(oxepan-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(oxepan-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(oxepan-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(oxepan-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(oxepan-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-(oxepan-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(oxepan-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-2-(oxepan-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-3,3-difluorocyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((S)-1-hydroxypropan-2-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(2-((S)-1-hydroxypropan-2-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(oxepan-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3S)-3-hydroxycyclohexylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3S)-3-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(2-chloro-4-cyano-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(2-oxaspiro[3.3]heptan-6-ylamino)-8-(4-cyano-2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(2-(cyclopentylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(cyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1S,4s)-4-(8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1s,4s)-4-(2-(3,3-difluorocyclobutylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1s,4s)-4-(2-(3,3-difluorocyclobutylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1s,4s)-4-(8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((S)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((R)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((S)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((R)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((S)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((R)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((S)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((R)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((S)-3,3-difluorocyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-((S)-3,3-difluorocyclopentylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-(trifluoromethoxy)phenylamino)-2-((1R,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-(trifluoromethoxy)phenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,6-dichloro-4-(trifluoromethoxy)phenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,6-dichloro-4-(trifluoromethoxy)phenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(cyclobutylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-(cyclobutylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(cyclobutylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclobutylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(cyclobutylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,3S)-3-hydroxycyclohexylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,3S)-3-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R)-3-hydroxycyclohexylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R)-3-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,3R)-3-hydroxycyclohexylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,3R)-3-hydroxycyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R)-3-hydroxycyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(2-((1R,3R)-3-hydroxycyclopentylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(2-((1S,3S)-3-hydroxycyclopentylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((1S,3S)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(2-(((1S,3S)-3-hydroxycyclopentylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(((1S,3S)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(((1S,3S)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(((1S,3S)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(((1S,3S)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(((1S,3S)-3-hydroxycyclopentylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(2-(((1S,2S)-2-hydroxycyclohexyl)methylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(((1S,2S)-2-hydroxycyclohexyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(2-(((1S,2S)-2-hydroxycyclohexyl)methylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(((1S,2S)-2-hydroxycyclohexyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(((1S,2S)-2-hydroxycyclohexyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(((1S,2S)-2-hydroxycyclohexyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(((1S,2S)-2-hydroxycyclohexyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(((1S,2S)-2-hydroxycyclohexyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(((1S,2R)-2-hydroxycyclohexyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1R,4s)-4-(2-(((1S,2R)-2-hydroxycyclohexyl)methylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(((1S,2R)-2-hydroxycyclohexyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(((1S,2R)-2-hydroxycyclohexyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-(((1S,2R)-2-hydroxycyclohexyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(((1S,2R)-2-hydroxycyclohexyl)methylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(3,3-difluorocyclobutylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(4-(2,5-dioxopyrrolidin-1-yl)cyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(4-(2,5-dioxopyrrolidin-1-yl)cyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1R,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;
(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1s,4s)-4-(2-(4-(1,2,4-oxadiazol-5-yl)cyclohexylamino)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(4-(1,2,4-oxadiazol-5-yl)cyclohexylamino)-8-(2-chloro-4,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(4-(1,2,4-oxadiazol-5-yl)cyclohexylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(4-(1,2,4-oxadiazol-5-yl)cyclohexylamino)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(4-(1,2,4-oxadiazol-5-yl)cyclohexylamino)-8-(2-chloro-4-cyano-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(4-(1,2,4-oxadiazol-5-yl)cyclohexylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((1R,3R)-3-hydroxycyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1R,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((1S,3S)-3-hydroxycyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-bromo-2,6-dichlorophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(4-bromo-2,6-dichlorophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(cyclopentylamino)-8-(2,3-dichloro-4-cyanophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,3-dichloro-4-cyanophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,3-dichloro-4-cyanophenylamino)-2-(4,4-difluorocyclohexylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,3-dichloro-4-cyanophenylamino)-2-(tetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-((R)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((R)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((R)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-(methylsulfonyl)piperidin-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((R)-1-(methylsulfonyl)piperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((R)-1-(methylsulfonyl)piperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((R)-1-(methylsulfonyl)piperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((R)-1-(methylsulfonyl)piperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(R)-3-(9-((1S,4S)-4-carbamoylcyclohexyl)-8-(2,4,6-trichlorophenylamino)-9H-purin-2-ylamino)-N-methylpiperidine-1-carboxamide;

(R)-3-(9-((1S,4S)-4-carbamoylcyclohexyl)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-2-ylamino)-N-methylpiperidine-1-carboxamide;

(R)-3-(9-((1S,4S)-4-carbamoylcyclohexyl)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-2-ylamino)-N-methylpiperidine-1-carboxamide;

(R)-methyl 3-(9-((1S,4S)-4-carbamoylcyclohexyl)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-methyl 3-(9-((1S,4S)-4-carbamoylcyclohexyl)-8-(2-chloro-4-cyano-6-fluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(1S,4s)-4-(2-((R)-1-acetylpiperidin-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-acetylpiperidin-3-ylamino)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-acetylpiperidin-3-ylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-acetylpiperidin-3-ylamino)-8-(4-chloro-2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((3S,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((3S,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((3S,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((3S,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-1-methyl-4-(2-((3S,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(2-(3-(methylsulfonyl)cyclobutylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-(3-(methylsulfonyl)cyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-(3-(methylsulfonyl)cyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-ethylpiperidin-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((R)-1-ethylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((R)-1-ethylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1s,4s)-4-(8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-2-(3-(methylsulfonyl)cyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1s,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-(3-(methylsulfonyl)cyclobutylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-2-((R)-1-ethylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(2-((R)-1-isopropylpiperidin-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((R)-1-isopropylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((R)-1-isopropylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((R)-1-isopropylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((R)-1-phenylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(2-((R)-1-phenylpiperidin-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((R)-1-phenylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-((R)-1-phenylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(2-((R)-1-phenylpiperidin-3-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((R)-1-phenylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((R)-1-phenylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((R)-1-phenylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((R)-1-phenylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-benzylpiperidin-3-ylamino)-8-(2-chloro-4,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-benzylpiperidin-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-benzylpiperidin-3-ylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-benzylpiperidin-3-ylamino)-8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-benzylpiperidin-3-ylamino)-8-(4-cyano-2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-benzylpiperidin-3-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-benzylpiperidin-3-ylamino)-8-(4-chloro-2,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-benzylpiperidin-3-ylamino)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-benzylpiperidin-3-ylamino)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((3S,4R)-3-methyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((R)-3,3-dimethyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((3S,4S)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-3,3-dimethyltetrahydro-2H-pyran-4-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(R)-isopropyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2-chloro-4,6-difluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-isopropyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,4,6-trichlorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-isopropyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-isopropyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-isopropyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(4-cyano-2,6-difluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-isopropyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,4,6-trifluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-isopropyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(4-chloro-2,6-difluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-isopropyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-isopropyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(R)-isopropyl 3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2-chloro-4-cyano-6-fluorophenylamino)-9H-purin-2-ylamino)piperidine-1-carboxylate;

(1S,4s)-4-(2-((R)-1-benzylpiperidin-3-ylamino)-8-(2-chloro-4-cyano-6-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(R)-3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2-chloro-4,6-difluorophenylamino)-9H-purin-2-ylamino)-N-phenylpiperidine-1-carboxamide;

(R)-3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,4,6-trichlorophenylamino)-9H-purin-2-ylamino)-N-phenylpiperidine-1-carboxamide;

(R)-3-(9-((1S,4S)-4-carbamoylcyclohexyl)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-2-ylamino)-N-phenylpiperidine-1-carboxamide;

(R)-3-(9-((1S,4S)-4-carbamoylcyclohexyl)-8-(2,4,6-trifluorophenylamino)-9H-purin-2-ylamino)-N-phenylpiperidine-1-carboxamide;

(R)-3-(9-((1S,4S)-4-carbamoylcyclohexyl)-8-(4-chloro-2,6-difluorophenylamino)-9H-purin-2-ylamino)-N-phenylpiperidine-1-carboxamide;

(R)-3-(9-((1S,4S)-4-carbamoylcyclohexyl)-8-(2,4-dichloro-6-fluorophenylamino)-9H-purin-2-ylamino)-N-phenylpiperidine-1-carboxamide;

(R)-3-(9-((1S,4S)-4-carbamoylcyclohexyl)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-2-ylamino)-N-phenylpiperidine-1-carboxamide;

(R)-3-(9-((1S,4S)-4-carbamoylcyclohexyl)-8-(2-chloro-4-cyano-6-fluorophenylamino)-9H-purin-2-ylamino)-N-phenylpiperidine-1-carboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((R)-3,3-dimethyltetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4,6-difluorophenylamino)-2-((R)-1-tosylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-tosylpiperidin-3-ylamino)-8-(2,4,6-trichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((R)-1-tosylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-((R)-1-tosylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(2-((R)-1-tosylpiperidin-3-ylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(4-chloro-2,6-difluorophenylamino)-2-((R)-1-tosylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((R)-1-tosylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((R)-1-tosylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;

(1S,4s)-4-(8-(2-chloro-4-cyano-6-fluorophenylamino)-2-((R)-1-tosylpiperidin-3-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(R)-3-(9-((1s,4S)-4-carbamoylcyclohexyl)-8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-9H-purin-2-ylamino)-N-methylpiperidine-1-carboxamide;
(1S,4s)-4-(2-((R)-1-acetylpiperidin-3-ylamino)-8-(2-chloro-4,6-difluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(2-((R)-1-acetylpiperidin-3-ylamino)-8-(2,6-dichloro-4-(trifluoromethyl)phenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(2-((R)-1-acetylpiperidin-3-ylamino)-8-(2,6-dichloro-4-fluorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(2-((R)-1-acetylpiperidin-3-ylamino)-8-(2,6-dichlorophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide;
(1S,4s)-4-(8-(4-cyano-2,6-difluorophenylamino)-2-((3S,4R)-3-fluorotetrahydro-2H-pyran-4-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide; or
(1R,4s)-4-(2-(((3R,4S)-3-fluorotetrahydro-2H-pyran-4-yl)amino)-8-((2,4,6-trichlorophenyl)amino)-9H-purin-9-yl)-1-methylcyclohexane-1-carboxamide, or a pharmaceutically acceptable salt, tautomer, stereoisomer or enantiomer and pharmaceutically acceptable salts, tautomers, stereoisomers, enantiomers, and isotopologues thereof.

40. (Canceled)

41. (Currently Amended) A pharmaceutical composition comprising an effective amount of a compound of claim 1 ~~or claim 39~~, and a pharmaceutically acceptable carrier, excipient or vehicle.

42. (Currently Amended) A method of inhibiting a kinase in a cell expressing said kinase, comprising contacting said cell with an effective amount of a compound of claim 1 ~~or claim 39~~.

43. (Currently Amended) An *in vitro* method of inhibiting a kinase in a cell expressing said kinase, comprising contacting said cell with an effective amount of a compound of claim 1 ~~or claim 39~~.

44. (Currently Amended) An *ex vivo* method of inhibiting a kinase in a cell expressing said kinase, comprising contacting said cell with an effective amount of a compound of claim 1 ~~or claim 39~~.
45. (New) A pharmaceutical composition comprising an effective amount of a compound of claim 39, and a pharmaceutically acceptable carrier, excipient or vehicle.
46. (New) A method of inhibiting a kinase in a cell expressing said kinase, comprising contacting said cell with an effective amount of a compound of claim 39.
47. (New) An *in vitro* method of inhibiting a kinase in a cell expressing said kinase, comprising contacting said cell with an effective amount of a compound of claim 39.
48. (New) An *ex vivo* method of inhibiting a kinase in a cell expressing said kinase, comprising contacting said cell with an effective amount of a compound of claim 39.
49. (New) The compound of claim 1, wherein the compound is (1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide.
50. (New) The compound of claim 1, wherein the compound is (1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide.
51. (New) The compound of claim 1, wherein the compound is (1R,4s)-4-(8-(2,6-dichloro-4-cyanophenylamino)-2-((S)-1-hydroxypropan-2-ylamino)-9H-purin-9-yl)cyclohexanecarboxamide.
52. (New) The compound of claim 1, wherein the compound is (1s,4s)-4-(2-(cyclobutylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide.

53. (New) The compound of claim 1, wherein the compound is (1s,4s)-4-(2-(cyclobutylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide.

54. (New) The compound of claim 1, wherein the compound is (1s,4s)-4-(2-(3,3-difluorocyclobutylamino)-8-(2,4,6-trifluorophenylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide

55. (New) The compound of claim 1, wherein the compound is (1s,4s)-4-(2-(cyclopentylamino)-8-(2,6-dichloro-4-cyanophenylamino)-9H-purin-9-yl)cyclohexanecarboxamide.

56. (New) The compound of claim 1, wherein the compound is (1S,4s)-4-(8-(2,6-dichloro-4-fluorophenylamino)-2-((R)-3,3-difluorocyclopentylamino)-9H-purin-9-yl)cyclohexanecarboxamide.

57. (New) The compound of claim 1, wherein the compound is (1R,4s)-4-(2-(((3R,4S)-3-fluorotetrahydro-2H-pyran-4-yl)amino)-8-((2,4,6-trichlorophenyl)amino)-9H-purin-9-yl)-1-methylcyclohexane-1-carboxamide.

58. (New) The compound of claim 1, wherein the compound is (1R,4s)-4-(8-(2,4-dichloro-6-fluorophenylamino)-2-((1S,3R)-3-hydroxycyclohexylamino)-9H-purin-9-yl)-1-methylcyclohexanecarboxamide.

59. (New) The compound of claim 1, wherein the compound is (1S,4s)-4-(2-(((3S,4R)-3-fluorotetrahydro-2H-pyran-4-yl)amino)-8-((2,4,6-trichlorophenyl)amino)-9H-purin-9-yl)-1-methylcyclohexane-1-carboxamide.

60. (New) The compound of claim 1, wherein the compound is (1S,4s)-4-(8-((4-chloro-2,6-difluorophenyl)amino)-2-(((3S,4R)-3-methyltetrahydro-2H-pyran-4-yl)amino)-9H-purin-9-yl)cyclohexane-1-carboxamide.

61. (New) The compound of claim 1, wherein the compound is (1s,4s)-4-(8-((4-chloro-2,6-difluorophenyl)amino)-2-((tetrahydro-2H-pyran-4-yl)amino)-9H-purin-9-yl)cyclohexane-1-carboxamide.

REMARKS

Upon entry of the presently made amendments, claims 1-39 and 41-61 will be pending.

Claims 1 and 39 have been amended, without prejudice, to no longer recite the term “isotopologues” and replace the phrase “and pharmaceutically acceptable salts, tautomers, stereoisomers, enantiomers and” with “or a pharmaceutically acceptable salt, tautomer, stereoisomer or enantiomer.”

Claim 1 has been amended, without prejudice, to insert the definition of “substituted.” Support for such an amendment can be found throughout the specification as filed, at least at paragraphs [0015] and [0065] on pages 4-5 and 11 of the specification as filed.

Claim 39 has been amended, without prejudice, to replace the term “Table 1” with the compound names listed in Table 1 and to be in independent form. Support for such an amendment can be found throughout the specification as filed, at least at paragraph [00369] on pages 133-294 of the specification as filed.

Claim 40 is canceled, without prejudice.

Claims 41-44 have been amended, without prejudice, to no longer depend from claim 39.

New claims 45-48 have been added. Support for new claims 45-48 can be found throughout the specification as filed, at least at paragraphs [0010] and [0012] on pages 3-4 of the specification as filed.

New claims 49-61 have been added. Support for new claims 49-61 can be found throughout the specification as filed, at least at paragraphs [00168], [00325], [00356], [00369], compounds 135, 366, 367, 392, 547, 578, 586, 599, 628 and 802 in Table 1, and Examples 1, 44 and 53 on pages 45-47, 113, 128-129, 133-294 of the specification as filed.

No new matter has been added. Applicant reserves the right to pursue the subject matter of any canceled, amended or withdrawn claim or any other unclaimed subject matter in one or more continuations, divisionals or continuations-in-part.

I. The Rejection Under 35 U.S.C. § 112

a) Claim 1 and its dependent claims are rejected under 35 U.S.C. § 112(b) as allegedly being indefinite. In particular, the Examiner asserts that the term “isotopologues” is not clear.

Without acquiescing in the rejection and solely to expedite prosecution of the present application, Applicant has amended claim 1, without prejudice, to no longer recite the term “isotopologues.”

Applicant respectfully submits that in view of the amendment to claim 1, the rejection of claim 1 and its dependent claims under 35 U.S.C. § 112(b) has been overcome and should be withdrawn.

b) Claim 1 and its dependent claims are rejected under 35 U.S.C. § 112(b) as allegedly being indefinite. In particular, the Examiner asserts that the term “substituted” is not clear.

Without acquiescing in the rejection and solely to expedite prosecution of the present application, Applicant has amended claim 1, without prejudice, to further clarify the term “substituted.”

Applicant respectfully submits that in view of the amendment to claim 1, the rejection of claim 1 and its dependent claims under 35 U.S.C. § 112(b) has been overcome and should be withdrawn.

c) Claim 39 is rejected under 35 U.S.C. § 112(b) as allegedly being indefinite. In particular, the Examiner asserts that the term “Table 1” is not clear.

Without acquiescing in the rejection and solely to expedite prosecution of the present application, Applicant has amended claim 39, without prejudice, to replace the term “Table 1” with the compound names listed in the Table 1.

Applicant respectfully submits that in view of the amendment to claim 39, the rejection of claim 39 under 35 U.S.C. § 112(b) has been overcome and should be withdrawn.

d) Claim 40 is rejected under 35 U.S.C. § 112(b) as allegedly being indefinite.

Without acquiescing in the rejection and solely to expedite prosecution of the present application, Applicant has canceled claim 40, without prejudice.

Applicant respectfully submits that in view of the cancellation of claim 40, the rejection of claim 40 under 35 U.S.C. § 112(b) is moot and should be withdrawn.

Conclusion

Applicant respectfully requests that the above remarks and amendments be entered in the present application file. If the Examiner has any comments or concerns or otherwise believes a telephone call could help resolve any remaining issues, the Examiner is invited to call the undersigned attorney at (404) 581-8614. No fee is estimated to be due in connection with this Response; however, in the event that any fee is due, please charge the required fee to Jones Day Deposit Account No. 50-3013.

Respectfully submitted,

Date: July 25, 2016

/Michael J. Bruner/

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/874,513	10/05/2015	Matthew Alexander	10624-368-999	4468
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 14/874,513	Applicant(s) ALEXANDER ET AL.	
	Examiner KAHSAY HABTE	Art Unit 1624	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) ☒ Claim(s) 1-44 is/are pending in the application.
5a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) _____ is/are allowed.
- 7) ☒ Claim(s) 1-44 is/are rejected.
- 8) ☐ Claim(s) _____ is/are objected to.
- 9) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) ☐ Notice of References Cited (PTO-892) | 3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date <u>4/8/16, 2/17/16 and 11/4/15</u> . | 4) ☐ Other: _____ |

DETAILED ACTION

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA. Claims 1-44 are pending in this application.

Information Disclosure Statement

2. Applicant's Information Disclosure Statement, filed on 04/08/2016, 02/17/2016 and 11/04/2015 has been acknowledged. Please refer to Applicant's copies of the 1449 submitted herewith.

Claim Rejections - 35 USC § 112

3. The following is a quotation of 35 U.S.C. 112(b):
(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-44 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention:

a. Claim 1 and claims dependent thereon are rejected because the term "istopologues" is not clear. What is covered and what is not? What atoms in formula (I) are isotopically enriched? The examiner recommends that applicants delete said term.

b. Claim 1 and claims dependent thereon are rejected because the term “substituted” is indefinite. In the absence of the specific moieties intended to effectuate modification by the “substitution” or attachment to the chemical core claimed, the term “substituted” renders the claims in which it appears indefinite in all occurrences wherein applicants fails to articulate by chemical name, structural formula or sufficiently distinct functional language, the particular moieties applicants regards as those which will facilitate substitution, requisite to identifying the composition of matter claimed.

c. In claim 39, the term “Table 1” is not clear. What is it? Do applicants intend Table 1 in the specification? If so, applicants have to recite the compounds in the claim.

d. In claim 40, the phrase “the compound at a concentration of 10 μ M inhibits melanoma..” is not clear. The claim starts as a compound claim, but ends up as a method of use or a composition claim. It appears as a composition claim since it recites the concentration of 10 μ M that is accomplished by the addition of a pharmaceutically acceptable salt. It appears as a method claim since it recites inhibition of melanoma. The examiner recommends that applicants delete this claim.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kahsay Habte Ph.D. whose telephone number is (571) 272-0667. The examiner can normally be reached on M-F (7:00 AM- 3:30PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached at (571) 272-0661. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kahsay Habte/
Primary Examiner, Art Unit 1624

April 21, 2016