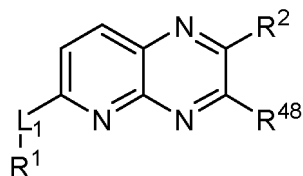


Claims

1. A compound selected from Formula IIa:



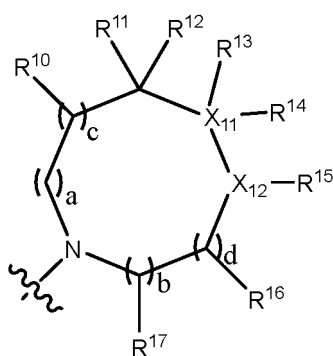
IIa

or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, wherein:

L_1 is S;

R^1 is selected from phenyl, heteroaryl, bicyclic aryl, bicyclic heterocyclyl, and bicyclic heteroaryl, wherein the phenyl, heteroaryl, bicyclic aryl, bicyclic heterocyclyl and bicyclic heteroaryl are optionally substituted with one or more groups selected from the group consisting of halogen, OH, oxo, cyano, alkyl optionally substituted with halogen, cyano or OH, -O(alkyl) optionally substituted with halogen, cyano or OH, NHR^a , and a heterocycle optionally substituted with halogen, cyano, OH or alkyl optionally substituted with OH or oxo;

R^2 is:



X_{11} is selected from $CR^{13}R^{14}$, $SiR^{13}R^{14}$, NH and O;

X_{12} is selected from CHR^{15} and NH, wherein one or both of X_{11} and X_{12} must be carbon;

R^{10} is selected from hydrogen and alkyl;

R^{11} is selected from hydrogen, OH and CH_2NH_2 ;

R¹², R¹⁶ and R¹⁷ are hydrogen;
 R¹³ is selected from hydrogen, OH, and (C₀-C₃ alkyl)NR^bR^c;
 R¹⁴ is selected from hydrogen, OH, alkyl optionally substituted with halogen, OH, methyl, OCH₃ and a heteroaryl;
 R¹⁵ is selected from hydrogen or NH₂;
 or one of the following groups may join together:

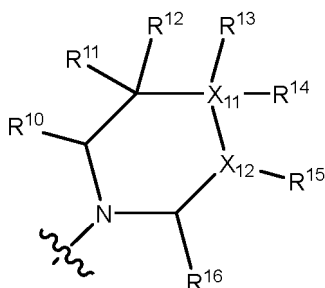
R¹⁰ and R¹¹ may join together as CH₂NHCH₂ to form a fused bicyclic,
 R¹⁰ and R¹⁵ may join together as alkyl to form a bridged bicyclic,
 R¹¹ and R¹² may join together as alkyl substituted with NH₂ to form a spirocycle,
 R¹³ and R¹⁴ may join together as a group selected from cycloalkyl, heterocycle, bicyclic carbocycle, and bicyclic heterocycle, wherein the cycloalkyl, heterocycle, carbocycle and heterocycle are optionally substituted with F, Cl, OH, OCH₃, CN, methyl or NH₂ to form a spirocycle,
 R¹⁰ and R¹⁶ may join together as alkyl, O or NH to form a bridged bicyclic,
 R¹¹ and R¹⁵ may join together as alkyl to form a bridged bicyclic,
 R¹¹ and R¹⁶ may join together as alkyl or O to form a bridged bicyclic,
 R¹¹ and R¹⁷ may join together as alkyl to form a bridged bicyclic, or
 R¹³ and R¹⁵ may join together as NHCH₂, or cycloalkyl wherein the cycloalkyl is substituted with NH₂ to form a fused bicyclic;

R⁴⁸ is selected from hydrogen and methyl;
 R^a is hydrogen, alkyl optionally substituted with OH, methoxy, halogen or cyano, or cyclopropyl;
 R^b and R^c are independently selected from hydrogen, alkyl and a Boc group; and
 a, b, c and d are selected from 0 and 1.

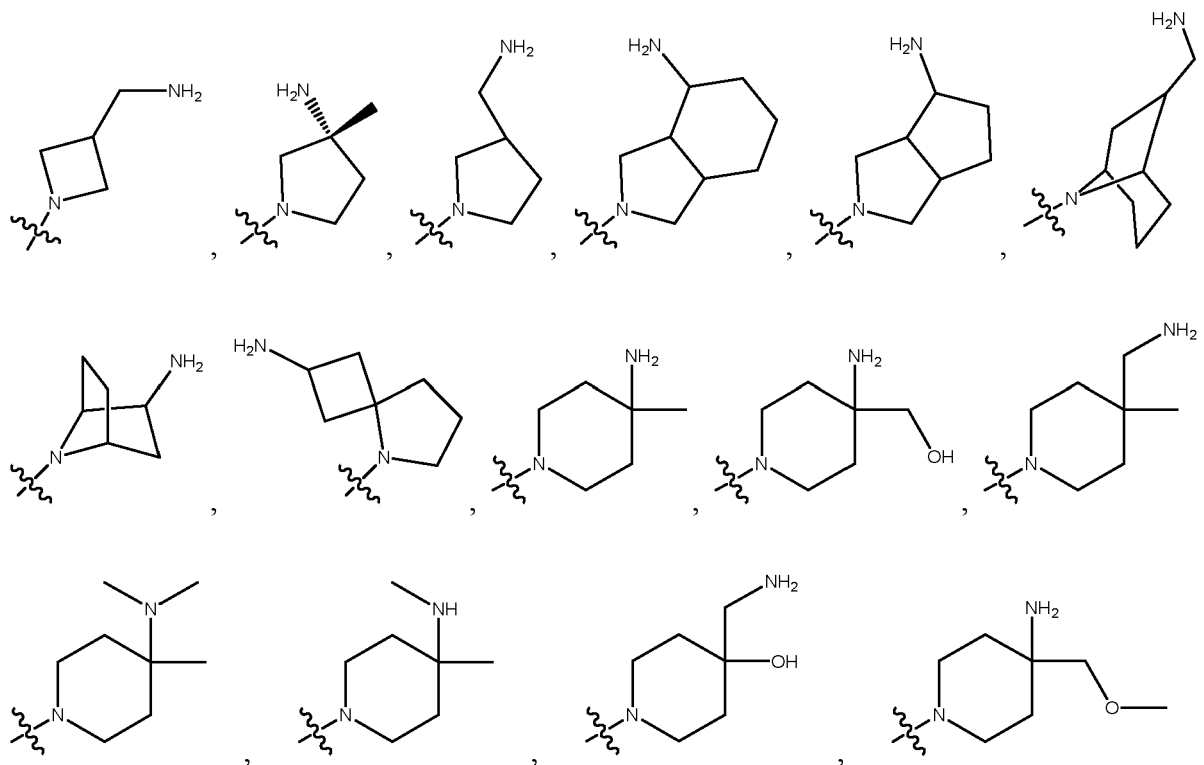
- The compound of Claim 1, or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, wherein R¹ is phenyl optionally substituted with one to three groups selected from the group consisting of halogen, cyano, C₁-C₃ alkyl optionally substituted with halogen, cyano or OH, -O(C₁-C₃ alkyl) optionally substituted with halogen, cyano, or OH, NHR^a; and 3 to 6 membered heterocycle optionally substituted with halogen, cyano, or OH, wherein the heterocycle contains one or two heteroatoms selected from nitrogen, oxygen and sulfur.
- The compound of Claim 1, or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, wherein R¹ is a 6 membered heteroaryl, optionally substituted with one to three groups selected from halogen; C₁-C₃ alkyl optionally substituted with halogen or OH; methoxy; NHR^a; and 3 to 6 membered heterocycle optionally substituted with OH or C₁-C₃ alkyl optionally substituted with OH or oxo, wherein the heterocycle contains one or two heteroatoms selected from nitrogen, oxygen and SO₂; wherein the heteroaryl contains one or two nitrogen heteroatoms.
- The compound of Claim 1, or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, wherein R¹ is selected from the group consisting of phenyl, 2,3-dichlorophenyl, 3-chlorophenyl, 4-fluorophenyl, 3-chloro-2-trifluoromethylphenyl, 2-chloro-3-methoxyphenyl, 3-chloro-2-fluorophenyl, 2-chloro-6-fluoro-3-methoxyphenyl, 2,3-dichloro-4-methoxyphenyl, 2-chloro-3-cyanophenyl, 2-chloro-3-fluorophenyl, 2-amino-3-chloropyridin-4-yl, 3-chloro-2-(pyrrolidin-1-yl)pyridin-4-yl, 3-chloro-2-methoxypyridin-4-yl, 3-chloro-2-(methylamino)pyridin-4-yl, 3-chloro-2-(3-hydroxypyrrolidin-1-yl)pyridin-4-yl, 3-chloro-2-((2-hydroxyethyl)amino)pyridin-4-yl, 3-chloro-2-methylpyridin-4-yl, 6-amino-2,3-dichloropyridin-4-yl, 3-chloro-2-(2-(hydroxymethyl)pyrrolidin-1-yl)pyridin-4-yl, 2-amino-3-methylpyridin-4-yl, 3-chloro-2-(1,1-dioxidothiomorpholino)pyridin-4-yl, 3-chloro-2-(4-hydroxypiperidin-1-yl)pyridin-4-yl, 3-chloro-2-morpholinopyridin-4-yl, 2-(4-acetylpiperazin-1-yl)-3-chloropyridin-4-yl, 3-chloro-2-((S)-3-(hydroxymethyl)pyrrolidin-1-yl)pyridin-4-yl, 3-chloro-2-((S)-3-hydroxypyrrolidin-1-yl)pyridin-4-yl, 3-chloro-2-(3-hydroxypyrrolidin-1-yl)pyridin-4-yl, 3-chloro-2-(hydroxymethyl)pyridin-4-yl, 3-chloro-2-methylpyridin-4-yl, 2-aminopyridin-3-yl, 6-chloro-2-methylpyridin-3-yl, 6-amino-2-chloropyridin-3-yl, 2-chloro-6-methylpyridin-3-yl, 3-chloro-2-((R)-3-(hydroxymethyl)pyrrolidin-1-yl)pyridin-4-yl, 2,3-dimethylpyridin-4-yl, 2-amino-3-fluoropyridin-4-yl, 6-amino-2-(trifluoromethyl)pyridin-3-yl, 2-amino-5-chloropyridin-4-yl, 6-amino-4,5-dichloropyridin-3-yl, 6-amino-3-chloro-2-methoxypyridin-4-yl, 2-amino-3-methoxypyridin-4-yl, 6-amino-5-chloropyrimidin-4-yl, 2-(trifluoromethyl)pyridin-3-yl, 3-chloro-2-((2-methoxyethyl)amino)pyridin-4-yl, 3-chloro-2-(cyclopropylamino)pyridin-4-yl, 3-fluoropyridin-4-yl, 3-chloropyridin-4-yl, 3-(trifluoromethyl)pyridin-4-yl, 3-chloro-2-((2-cyano-2-methylpropyl)amino)pyridin-4-yl, 3-chloro-2-((3-methoxypropyl)amino)pyridin-4-yl, 2-amino-3-(trifluoromethyl)pyridin-4-yl, 2-(trifluoromethyl)pyridin-4-yl, 3,4-dihydroquinolin-1(2H)-yl, 3,4-dihydroquinoxalin-1(2H)-yl, 2,3-dihydro-1H-pyrrolo[2,3-b]pyridin-4-yl, 3,4-dihydro-1,5-naphthyridin-1(2H)-yl, 3,3-difluoro-2-oxo-2,3-dihydro-1H-pyrrolo[2,3-b]pyridin-4-yl, 7-hydroxy-6,7-dihydro-5H-cyclopenta[b]pyridin-4-yl, naphthalen-1-yl, 1-methyl-1H-indazol-7-yl, pyrazolo[1,5-a]pyridine-4-yl, pyrazolo[1,5-a]pyrazin-4-yl, isoquinolin-8-yl, 3H-imidazo[4,5-b]pyridin-7-yl, 6-chloroimidazo[1,2-a]pyridin-3-yl, 6-cyanoimida-

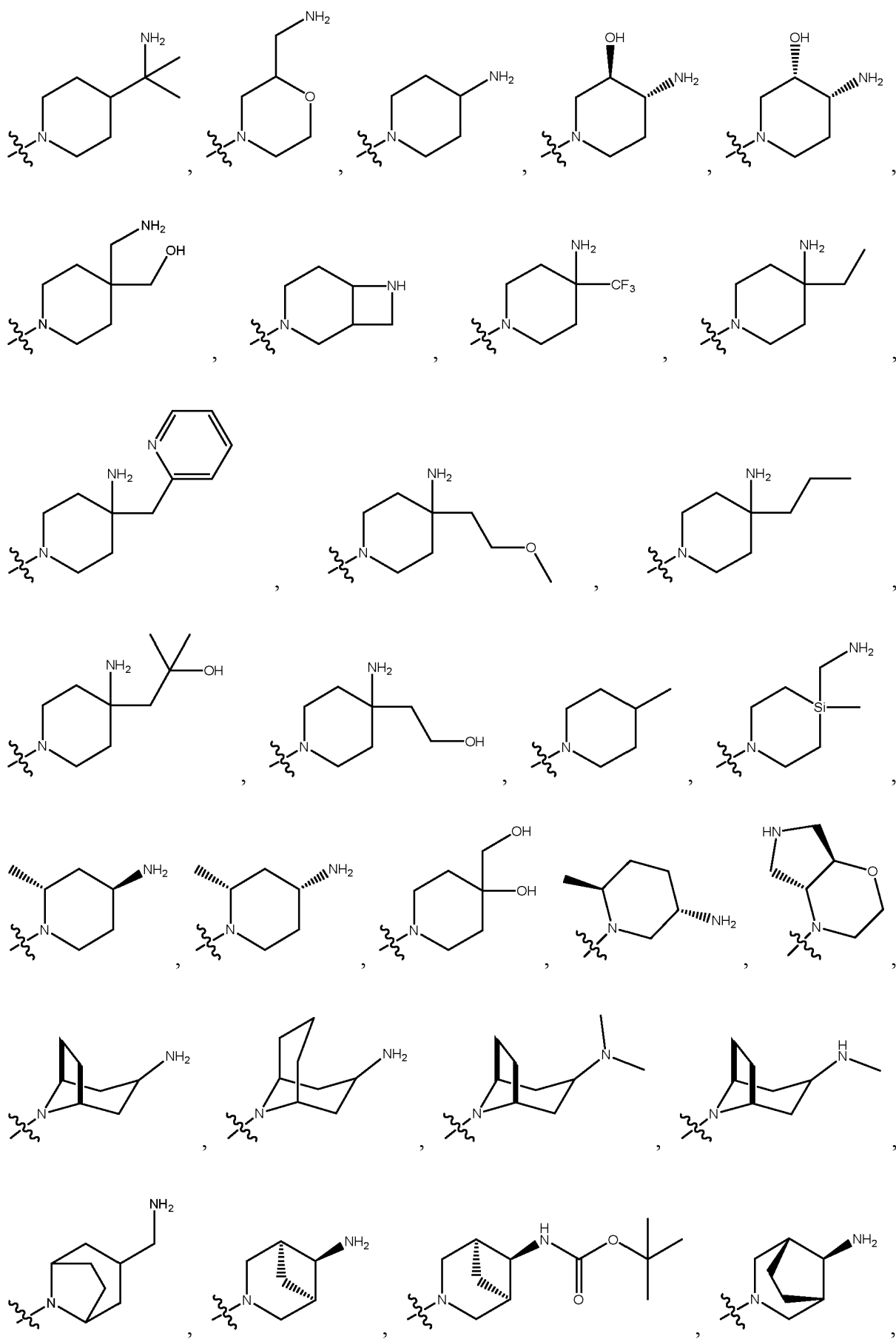
zo[1,2-*a*]pyridin-3-yl, 1*H*-pyrazolo[3,4-*b*]pyridin-4-yl, 1,8-naphthyridin-4-yl, 1*H*-pyrrolo[2,3-*b*]pyridin-4-yl, 1-methyl-1*H*-pyrrolo[2,3-*b*]pyridin-4-yl, 5-chloro-1*H*-pyrrolo[2,3-*b*]pyridin-4-yl, 5-(trifluoromethyl)-1*H*-pyrrolo[2,3-*b*]pyridin-4-yl, 3-methyl-1*H*-pyrrolo[2,3-*b*]pyridin-4-yl, 6-amino-1*H*-pyrrolo[2,3-*b*]pyridin-4-yl and 5-fluoro-1*H*-pyrrolo[2,3-*b*]pyridin-4-yl.

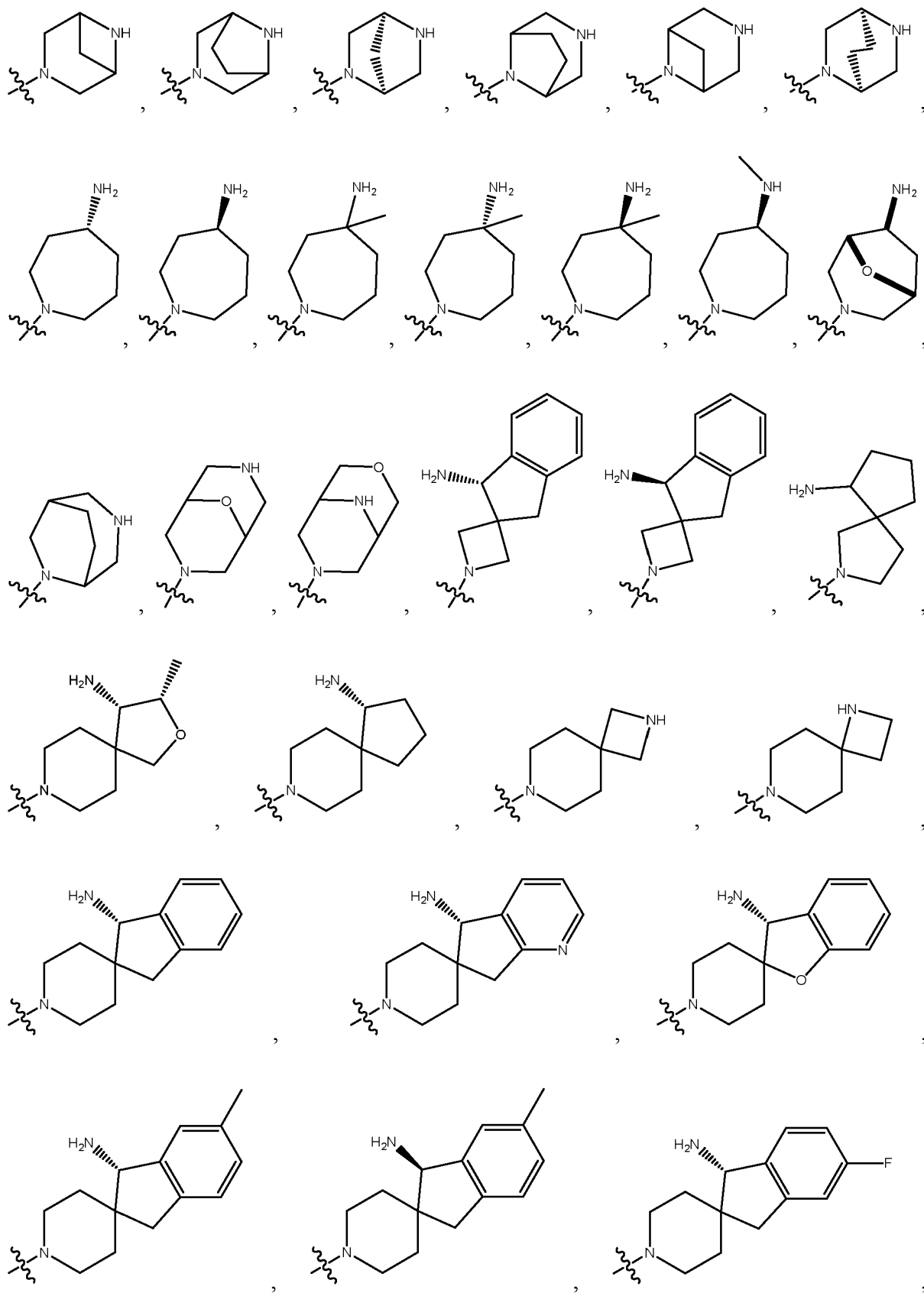
5. The compound of Claim 1, or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, wherein a and b are 0 and c and d are 1, such that R² is

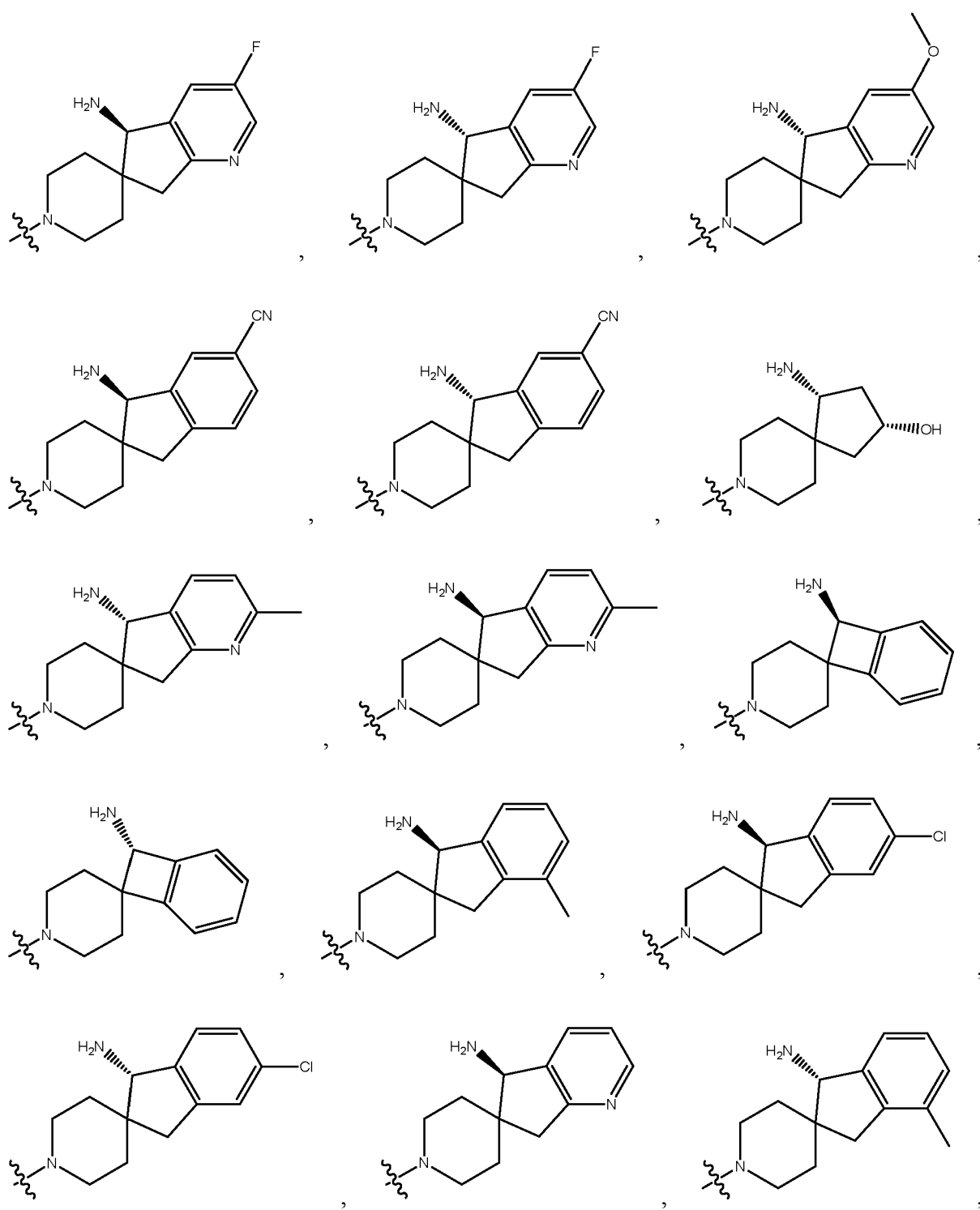


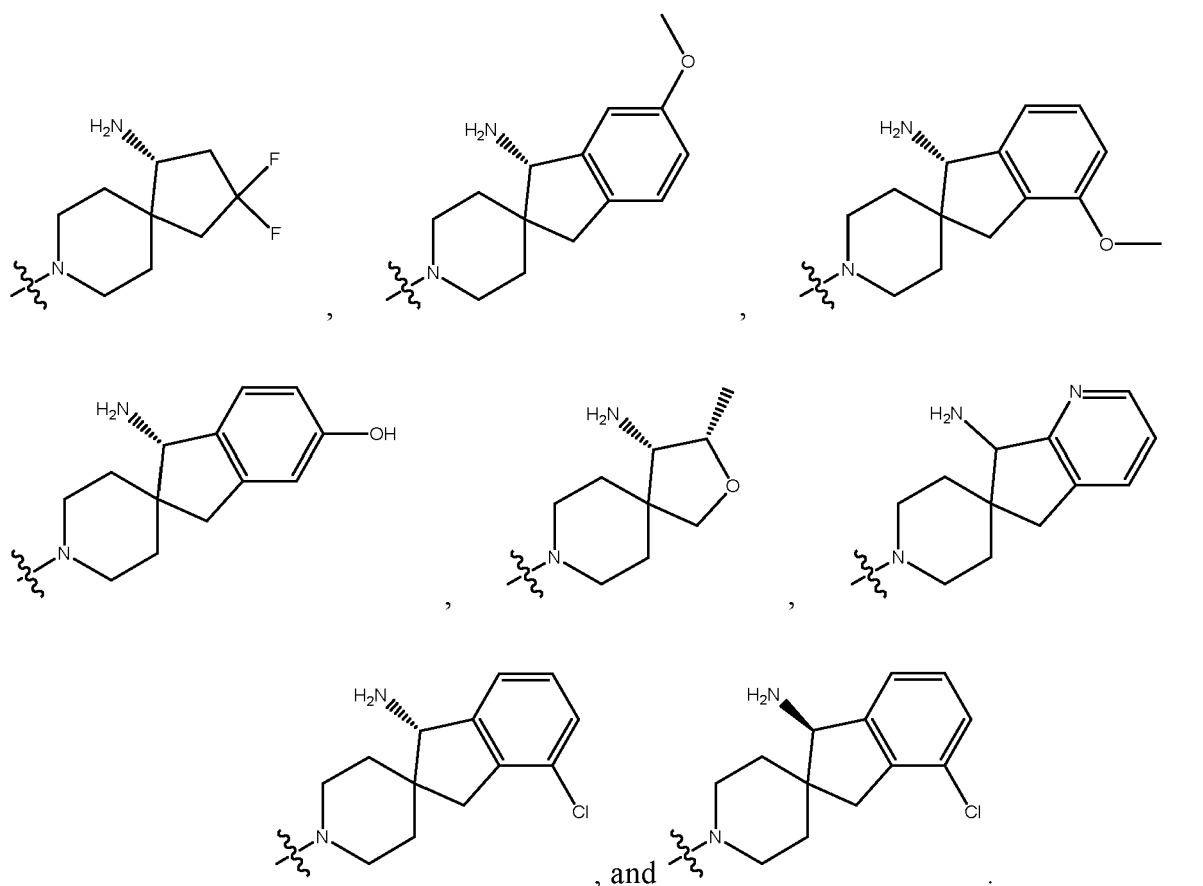
6. The compound of Claim 1, or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, wherein R¹³ and R¹⁴ join together to form a group selected from C₃-C₆ cycloalkyl, 4 to 6 membered heterocycle wherein the heterocycle contains one heteroatom selected from the group consisting of nitrogen and oxygen, saturated or partially unsaturated 8 to 10 membered bicyclic carbocycle and a saturated or partially unsaturated 8 to 10 membered bicyclic heterocycle wherein the heterocycle contains one heteroatom selected from the group consisting of nitrogen and oxygen, wherein the cycloalkyl, heterocycle, bicyclic carbocycle and bicyclic heterocycle are optionally substituted with F, Cl, OH, OCH₃, CN, methyl or NH₂.
7. The compound of Claim 1, or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, wherein R² is selected from the group consisting of:











8. The compound of Claim 1, or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, wherein R⁴⁸ is hydrogen.

9. The compound of Claim 1 wherein the compound is selected from the group consisting of:

4-((2-(4-amino-4-methylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 (3*S*,4*S*)-8-(6-((2,3-dichlorophenyl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 1-(6-((2,3-dichlorophenyl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylpiperidin-4-amine;
 (*R*)-8-(6-((2,3-dichlorophenyl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-8-azaspiro[4.5]decan-1-amine;
 (4-amino-1-(6-((2,3-dichlorophenyl)thio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-4-yl)methanol;
 4-((2-(4-(aminomethyl)-4-methylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 (3*S*,4*S*)-8-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 1-(6-((2-chloro-3-methoxyphenyl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylpiperidin-4-amine;
 1-(6-((3-chloro-2-methoxypyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylpiperidin-4-amine;
 (*R*)-4-((2-(3-amino-3-methylpyrrolidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 (3*S*,4*S*)-8-(6-((3-chloro-2-(pyrrolidin-1-yl)pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 3-chloro-4-((2-(4-methyl-4-(methylamino)piperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)pyridin-2-amine;
 (3*S*,4*S*)-8-(6-((3-chloro-2-(methylamino)pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 4-methyl-1-(6-((1-methyl-1*H*-indazol-7-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-4-amine;
 3-((2-(4-amino-4-methylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-2-chlorobenzonitrile;
 4-methyl-1-(6-(pyrazolo[1,5-*a*]pyridin-4-ylthio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-4-amine;
 4-methyl-1-(6-(pyrazolo[1,5-*a*]pyrazin-4-ylthio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-4-amine;
 (*R*)-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)azepan-4-amine;
 1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-(aminomethyl)piperidin-4-ol;

(4-amino-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-4-yl)methanol;
 (4-amino-1-(6-((3-chloro-2-methoxypyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-4-yl)methanol;
 (4-amino-1-(6-((3-chloro-2-(pyrrolidin-1-yl)pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-4-yl)methanol;
 1-(6-(isoquinolin-8-ylthio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylpiperidin-4-amine;
 1-(6-((3-chloro-2-(pyrrolidin-1-yl)pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylpiperidin-4-amine;
 (S)-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)azepan-4-amine;
 (1*R*,3*S*,5*S*)-8-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-8-azabicyclo[3.2.1]octan-3-amine;
 4-((2-(4-amino-4-(methoxymethyl)piperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 4-((2-(2,7-diazaspiro[3.5]nonan-7-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 4-((2-(1,7-diazaspiro[3.5]nonan-7-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 (1*R*,5*S*)-9-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-9-azabicyclo[3.3.1]nonan-3-amine;
 (4-amino-1-(6-((3-chloro-2-methylpyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-4-yl)methanol;
 (1*R*,5*R*,6*S*)-3-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-8-oxa-3-azabicyclo[3.2.1]octan-6-amine;
 (1*R*,5*R*,6*S*)-3-(6-((2,3-dichlorophenyl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-8-oxa-3-azabicyclo[3.2.1]octan-6-amine;
 4-((2-(4-(2-aminopropan-2-yl)piperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 2-(1-(6-((2,3-dichlorophenyl)thio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-4-yl)propan-2-amine;
 4-((2-(2-(aminomethyl)morpholino)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 (4-(6-((2,3-dichlorophenyl)thio)pyrido[2,3-*b*]pyrazin-2-yl)morpholin-2-yl)methanamine;
 (1*R*,3*S*,5*S*)-8-(6-((3-chloro-2-methylpyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-8-azabicyclo[3.2.1]octan-3-amine dihydrochloride;
 (3*S*,4*S*)-8-(6-((6-amino-2,3-dichloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 ((S)-1-(4-((2-((3*S*,4*S*)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)pyrrolidin-2-yl)methanol;
 (3*S*,4*S*)-8-(6-((2-amino-3-methylpyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylazepan-4-amine;
 (*R*)-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylazepan-4-amine;
 (S)-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylazepan-4-amine;
 (S)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
 4-(4-((2-((3*S*,4*S*)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)thiomorpholine 1, 1-dioxide;
 1-(4-((2-((3*S*,4*S*)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)piperidin-4-ol;
 (3*S*,4*S*)-8-(6-((3-chloro-2-morpholinopyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 1-(4-(4-((2-((3*S*,4*S*)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)piperazin-1-yl)ethan-1-one;
 4-((2-(4-aminopiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 (3*R*,4*R*)-4-amino-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-3-ol;
 2-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-2-azaspiro[4.4]nonan-6-amine;
 (3*S*,4*R*)-4-amino-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-3-ol;
 4-((2-(3-(aminomethyl)azetidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 (1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-(aminomethyl)piperidin-4-yl)methanol;
 ((S)-1-(4-((2-((3*S*,4*S*)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)pyrrolidin-3-yl)methanol;
 (S)-1-(4-((2-((3*S*,4*S*)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)pyrrolidin-3-ol;
 1-(4-((2-((3*S*,4*S*)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)pyrrolidin-3-ol;
 (4-((2-((3*S*,4*S*)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)methanol;
 (S)-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-*N*-methylazepan-4-amine;
 (1*R*,3*S*,5*S*)-8-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-*N,N*-dimethyl-8-azabicyclo[3.2.1]octan-3-amine;

(1*R*,3*s*,5*S*)-8-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-*N*-methyl-8-azabicyclo[3.2.1]octan-3-amine;

1-(6-((3-chloro-2-methylpyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylpiperidin-4-amine;

3-((2-(4-amino-4-methylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)pyridin-2-amine;

1-(6-((6-chloro-2-methylpyridin-3-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylpiperidin-4-amine;

5-((2-(4-amino-4-methylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-6-chloropyridin-2-amine;

1-(6-((2-chloro-6-methylpyridin-3-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylpiperidin-4-amine;

2-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)octahydro-1*H*-isoindol-4-amine;

2-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)octahydrocyclopenta [c]pyrrol-4-amine;

4-((2-(3-(aminomethyl)-9-azabicyclo[3.3.1]nonan-9-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;

4-((2-(3-(aminomethyl)-8-azabicyclo[3.2.1]octan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;

4-((2-(3,7-diazabicyclo[4.2.0]octan-3-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;

4-((2-(4-amino-4-(trifluoromethyl)piperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;

(3*S*,4*S*)-8-(6-((6-amino-2-chloropyridin-3-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;

((*R*)-1-(4-((2-((3*S*,4*S*)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)pyrrolidin-3-yl)methanol;

(*R*)-1-(4-((2-((3*S*,4*S*)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)pyrrolidin-3-ol;

(*S*)-2-((4-((2-(5-amino-5,7-dihydrospiro[cyclopenta[b]pyridine-6,4'-piperidin]-1'-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)amino)ethan-1-ol;

4-((2-(4-(Aminomethyl)-4-methyl-1,4-azasilinan-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;

(*S*)-2-((4-((2-(1-amino-1,3-dihydrospiro[indene-2,4'-piperidin]-1'-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)amino)ethan-1-ol;

(*R*)-1-amino-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-1,3-dihydrospiro[indene-2,4'-piperidine]-6-carbonitrile;

(*S*)-1-amino-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-1,3-dihydro spiro [indene-2,4'-piperidine]-6-carbonitrile;

(*R*)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-2-methyl-5,7-dihydrospiro[cyclopenta[b]pyridine-6,4'-piperidin]-5-amine;

(*S*)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-2-methyl-5,7-dihydrospiro[cyclopenta[b]pyridine-6,4'-piperidin]-5-amine;

(*S*)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methoxy-5,7-dihydrospiro[cyclopenta[b]pyridine-6,4'-piperidin]-5-amine;

(*R*)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-2-methoxy-5,7-dihydrospiro[cyclopenta[b]pyridine-6,4'-piperidin]-5-amine;

(*S*)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-fluoro-5,7-dihydrospiro[cyclopenta[b]pyridine-6,4'-piperidin]-5-amine;

(*R*)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-fluoro-5,7-dihydrospiro[cyclopenta[b]pyridine-6,4'-piperidin]-5-amine;

(*S*)-1'-(6-((6-amino-4,5-dichloropyridin-3-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;

1-(6-((2,3-dichlorophenyl)thio)-3-methylpyrido[2,3-*b*]pyrazin-2-yl)-4-methylpiperidin-4-amine;

4-((2-((2*R*,4*R*)-4-amino-2-methylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;

4-((2-((2*R*,4*S*)-4-amino-2-methylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine dihydrochloride;

(*R*)-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-1',3'-dihydrospiro[azetidine-3,2'-inden]-1'-amine;

(*S*)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-5,7-dihydrospiro[cyclopenta[b]pyridine-6,4'-piperidin]-5-amine;

(*S*)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methyl-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;

(*S*)-1'-(6-((6-chloroimidazo[1,2-*a*]pyridin-3-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;

2-(4-amino-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-4-yl)ethan-1-ol;

1-(4-amino-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)piperidin-4-yl)-2-methylpropan-2-ol;

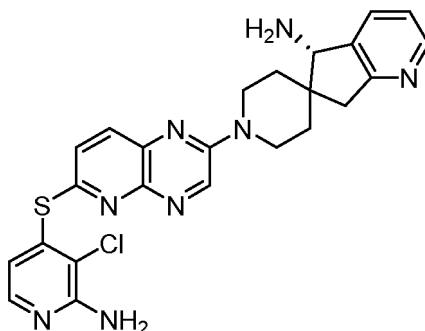
4-((2-(4-amino-4-ethylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;

(3S,4S)-8-(6-((3H-imidazo[4,5-b]pyridin-7-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 (R)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-3H-spiro[benzofuran-2,4'-piperidin]-3-amine;
 (S)-1'-(6-((2-amino-5-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-5,7-dihydrospiro[cyclopenta[b]pyridine-6,4'-piperidin]-5-amine;
 3-((4-((2-(4-amino-4-methylpiperidin-1-yl)pyrido[2,3-b]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)amino)-2,2-dimethylpropanenitrile;
 (3S,4S)-8-(6-((2-amino-3-(trifluoromethyl)pyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 ((1R,5S,6r)-3-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-3-azabicyclo[3.1.1]heptan-6-amine;
 (tert-butyl ((1R,5S,6r)-3-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-3-azabicyclo[3.1.1]heptan-6-yl)carbamate;
 (3S,4S)-3-methyl-8-(6-((3-methyl-1H-pyrrolo[2,3-b]pyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-2-oxa-8-azaspiro[4.5]decan-4-amine;
 (3S,4S)-8-(6-((6-amino-1H-pyrrolo[2,3-b]pyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 (3S,4S)-8-(6-((5-fluoro-1H-pyrrolo[2,3-b]pyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 (S)-4-((2-(1-amino-1,3-dihydrospiro[indene-2,4'-piperidin]-1'-yl)pyrido[2,3-b]pyrazin-6-yl)thio)-3,3-difluoro-1,3-dihydro-2H-pyrrolo[2,3-b]pyridin-2-one;
 3-chloro-4-((2-(4-methylpiperidin-1-yl)pyrido[2,3-b]pyrazin-6-yl)thio)pyridin-2-amine;
 (3S,4S)-8-(6-((2-amino-5-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 (S)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-5-fluoro-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
 1-(6-((3-chloro-2-(methylamino)pyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-4-methylazepan-4-amine;
 1-(6-((3-chloro-2-methylpyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-4-methylazepan-4-amine;
 (R)-1-(6-((3-chloro-2-(methylamino)pyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-4-methylazepan-4-amine;
 (S)-1-(6-((3-chloro-2-(methylamino)pyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-4-methylazepan-4-amine;
 (R)-1-(6-((3-chloro-2-methylpyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-4-methylazepan-4-amine;
 (S)-1-(6-((3-chloro-2-methylpyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-4-methylazepan-4-amine;
 (3S,4S)-8-(6-((2-amino-3-methoxypyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 5-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-5-azaspiro[3.4]octan-2-amine;
 6-((2-amino-3-chloropyridin-4-yl)thio)-N-(3-(aminomethyl)tetrahydrofuran-3-yl)pyrido[2,3-b]pyrazin-2-amine;
 (S)-1-amino-1'-(6-((3-chloro-2-methylpyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-1,3-dihydrospiro[indene-2,4'-piperidin]-5-ol;
 4-((2-((3S,4S)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-b]pyrazin-6-yl)thio)-6,7-dihydro-SH-cyclopenta[b]pyridin-7-ol;
 1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-5,7-dihydrospiro[cyclopenta[b]pyridine-6,4'-piperidin]-7-amine;
 (S)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-4-chloro-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
 (2R,4R)-4-amino-8-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-8-azaspiro[4.5]decan-2-ol;
 4-((2-(4-amino-4-methylpiperidin-1-yl)pyrido[2,3-b]pyrazin-6-yl)thio)-3-chloro-N-methylpyridin-2-amine;
 (S)-1'-(6-((2-(trifluoromethyl)pyridin-3-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
 (S)-1'-(6-((2-(trifluoromethyl)pyridin-3-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-5,7-dihydrospiro[cyclopenta[b]pyridine-6,4'-piperidin]-5-amine;
 (S)-1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)-1',3'-dihydrospiro[azetidine-3,2'-inden]-1'-amine;
 (S)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)spiro[bicyclo[4.2.0]octane-7,4'-piperidine]-1(6),2,4-trien-8-amine;
 (R)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-b]pyrazin-2-yl)spiro[bicyclo[4.2.0]octane-7,4'-piperidine]-1(6),2,4-trien-8-amine;

(R)-1'-6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-5,7-dihydrospiro[cyclopenta[*b*]pyridine-6,4'-piperidin]-5-amine;
(R)-1'-6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methyl-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
(S)-1'-6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-5-chloro-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
(R)-1'-6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-5-chloro-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
(S)-1'-6-((6-amino-3-chloro-2-methoxypyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
(S)-3-((2-(1-amino-1,3-dihydrospiro[indene-2,4'-piperidin]-1'-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)imidazo[1,2-*a*]pyridine-6-carbonitrile;
4-((2-(4-amino-4-propylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
(3*S*,4*S*)-8-(6-((2,3-dimethylpyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
(3*S*,4*S*)-8-(6-((2-amino-3-fluoropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
(3*S*,4*S*)-8-(6-((6-amino-2-(trifluoromethyl)pyridin-3-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
(3*S*,4*S*)-8-(6-((2,3-dichloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
(S)-1'-6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-6-methyl-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
(R)-1'-6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-6-methyl-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
4-((2-(4-amino-4-(pyridin-2-yl)methyl)piperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
4-((2-(4-amino-4-(2-methoxyethyl)piperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
(3*S*,4*S*)-8-(6-((3-chloro-2-((2-methoxyethyl)amino)pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
(3*S*,4*S*)-8-(6-((3-chloro-2-(cyclopropylamino)pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
2-((4-((2-((3*S*,4*S*)-4-amino-3-methyl-2-oxa-8-azaspiro[4.5]decan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)amino)ethan-1-ol;
(3*S*,4*S*)-8-(6-((3-fluoropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
(3*S*,4*S*)-8-(6-((3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
(3*S*,4*S*)-3-methyl-8-(6-((3-(trifluoromethyl)pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-2-oxa-8-azaspiro[4.5]decan-4-amine;
(3*S*,4*S*)-8-(6-((1*H*-pyrrolo[2,3-*b*]pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
(3*S*,4*S*)-3-methyl-8-(6-((2-(trifluoromethyl)pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-2-oxa-8-azaspiro[4.5]decan-4-amine;
(3*S*,4*S*)-3-methyl-8-(6-((1-methyl-1*H*-pyrrolo[2,3-*b*]pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-2-oxa-8-azaspiro[4.5]decan-4-amine;
(3*S*,4*S*)-8-(6-((5-chloro-1*H*-pyrrolo[2,3-*b*]pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
(3*S*,4*S*)-3-methyl-8-(6-((5-(trifluoromethyl)-1*H*-pyrrolo[2,3-*b*]pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-2-oxa-8-azaspiro[4.5]decan-4-amine;
4-((2-(4-amino-4-methylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloro-*N*-(2-methoxyethyl)pyridin-2-amine;
4-((2-(4-amino-4-methylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloro-*N*-(3-methoxypropyl)pyridin-2-amine;
1-(6-((2,3-dihydro-1*H*-pyrrolo[2,3-*b*]pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylpiperidin-4-amine;
1-(6-((1,8-naphthyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-methylpiperidin-4-amine;
1-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-(hydroxymethyl)piperidin-4-ol;
(1*R*,5*S*,8*S*)-3-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-azabicyclo[3.2.1]octan-8-amine;

4-((2-(3,6-diazabicyclo[3.1.1]heptan-3-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 4-((2-(3,8-diazabicyclo[3.2.1]octan-3-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 4-((2-(3,6-diazabicyclo[3.2.2]nonan-6-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 4-((2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.1]heptan-2-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 4-((2-(3,8-diazabicyclo[3.2.1]octan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 4-((2-(3,8-diazabicyclo[3.2.1]octan-8-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 4-((2-(9-oxa-3,7-diazabicyclo[3.3.1]nonan-3-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 4-((2-(3-oxa-7,9-diazabicyclo[3.3.1]nonan-7-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 4-((2-((1*S*,4*S*)-2,5-diazabicyclo[2.2.2]octan-2-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 (S)-1-(4-((2-(5-amino-5,7-dihydrospiro[cyclopenta[*b*]pyridine-6,4'-piperidin]-1'-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)piperidin-4-ol;
 ((S)-1-(4-((2-((S)-5-amino-5,7-dihydrospiro[cyclopenta[*b*]pyridine-6,4'-piperidin]-1'-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-yl)pyrrolidin-3-yl)methanol;
 4-((2-(4-(aminomethyl)-4-fluoropiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 (1-(6-((2,3-dichlorophenyl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-fluoropiperidin-4-yl)methanamine;
 (1*S*,2*S*,4*R*)-7-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-7-azabicyclo[2.2.1]heptan-2-amine;
 (3*S*,4*S*)-8-(6-((1*H*-pyrazolo[3,4-*b*]pyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 3-chloro-4-((2-((4*aR*,7*aR*)-hexahydropyrrolo[3,4-*b*][1,4]oxazin-4(4*aH*)-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)pyridine-2-amine;
 4-((2-((2*S*,5*S*)-5-amino-2-methylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 (3*S*,4*S*)-8-(6-((6-amino-5-chloropyrimidin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3-methyl-2-oxa-8-azaspiro[4.5]decan-4-amine;
 8-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-3,3-difluoro-8-azaspiro[4.5]decan-1-amine;
 (S)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-6-methoxy-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
 (R)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-4-chloro-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine;
 (3*S*,4*S*)-3-methyl-8-(6-((2-(trifluoromethyl)pyridin-3-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-2-oxa-8-azaspiro[4.5]decan-4-amine; and
 4-((2-(4-amino-4-benzylpiperidin-1-yl)pyrido[2,3-*b*]pyrazin-6-yl)thio)-3-chloropyridin-2-amine;
 or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof.

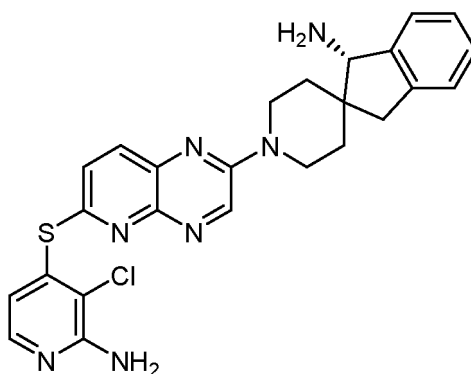
10. The compound of Claim 1 which is:



or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof.

11. The compound of Claim 1 which is (S)-1'-(6-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-5,7-dihydrospiro[cyclopenta[*b*]pyridine-6,4'-piperidin]-5-amine.

12. The compound of Claim 1 which is:



or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof.

13. The compound of Claim 1 which is (S)-1'-((2-amino-3-chloropyridin-4-yl)thio)pyrido[2,3-*b*]pyrazin-2-yl)-1,3-dihydrospiro[indene-2,4'-piperidin]-1-amine.
14. A pharmaceutical composition comprising a compound of any one of Claims 1 to 13, or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof.
15. A pharmaceutical composition comprising a compound of any one of Claims 1 to 13, or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, and at least one pharmaceutically acceptable carrier, excipient or diluent.
16. A compound of any one of Claims 1 to 13 or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, for use as a medicament.
17. A compound of any one of Claims 1 to 13 or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, for use in therapy.
18. A compound of any one of Claims 1 to 13 or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, for use in the treatment of a hyperproliferative disease.
19. The compound for use according to Claim 18, wherein the hyperproliferative disease is cancer.
20. The compound for use according to Claim 18, wherein the hyperproliferative disease is selected from the group consisting of melanoma, juvenile myelomonocytic leukemias, neuroblastoma, Philadelphia chromosome positive chronic myeloid, Philadelphia chromosome positive acute lymphoblastic leukemias, acute myeloid leukemias, myeloproliferative neoplasms (such as Polycythemia Vera, Essential Thrombocythemia and Primary Myelofibrosis), breast cancer, lung cancer, liver cancer, colorectal cancer, esophageal cancer, gastric cancer, squamous-cell carcinoma of the head and neck, glioblastoma, anaplastic large-cell lymphoma, thyroid carcinoma, and spitzoid neoplasms.
21. The compound for use according to Claim 18, wherein the hyperproliferative disease is selected from the group consisting of Neurofibromatosis and Noonan Syndrome.
22. The compound for use according to any one of Claims 18 to 20, wherein said compound, or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, is co-administered with at least one other chemotherapeutic agent used to treat or ameliorate a hyperproliferative disorder.
23. The compound for use according to Claim 22, wherein the at least one other chemotherapeutic agent is an inhibitor of the RAS pathway.
24. The compound for use according to Claim 23, wherein the at least one other chemotherapeutic agent is selected from one or more of trametinib, binimetinib, selumetinib, cobimetinib, LErafAON, ISIS 5132, vemurafenib, pimaserib, TAK733, R04987655, CI-1040, PD-0325901, CH5126766, MAP855, AZD6244, refametinib, GDC-0973/XI,581, AZD8330, R05126766, ARS-853, LY3214996, BVD523, GSK1 120212, ulixertinib and abemaciclib.