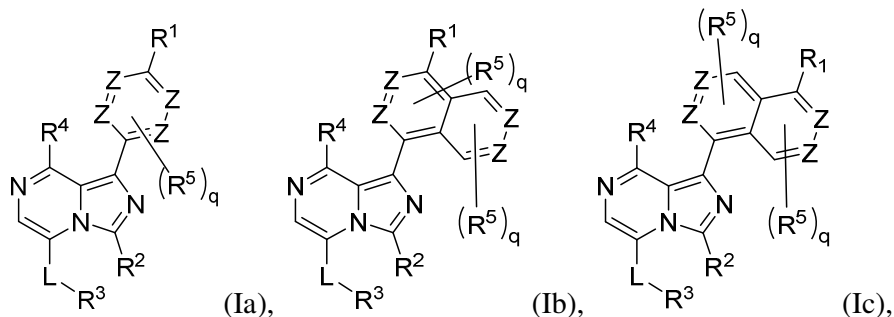


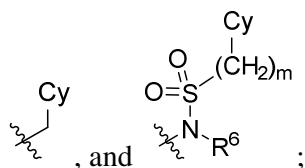
CLAIMS

1. A compound of formula (Ia), formula (Ib), or formula (Ic), or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof:



wherein:

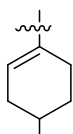
R^1 is selected from the group consisting of



R^2 is selected from the group consisting of H, methyl, ethyl, propyl, CF_3 , CHF_2 , 1-methylcyclopropyl, isopropyl, tert-butyl, and C_3 - C_8 cycloalkyl, wherein each non-H substituent is independently optionally substituted with a single instance of R^7 , with the proviso that, if R^7 is present, R^3 is H;

L is selected from the group consisting of a bond, $-CH_2-$, and $-C(=O)-$;

R^3 is selected from the group consisting of H, optionally substituted C_1 - C_8 alkyl, optionally substituted C_3 - C_8 cycloalkyl, optionally substituted C_2 - C_8 alkenyl, optionally substituted C_2 - C_8 alkynyl, optionally substituted C_1 - C_8 heteroalkyl, optionally substituted C_3 - C_8 heterocycloalkyl, optionally substituted C_2 - C_8 heteroalkenyl, optionally substituted benzyl, optionally substituted C_2 - C_8 cycloheteroalkenyl, optionally substituted heterocyclyl, optionally substituted aryl, and optionally



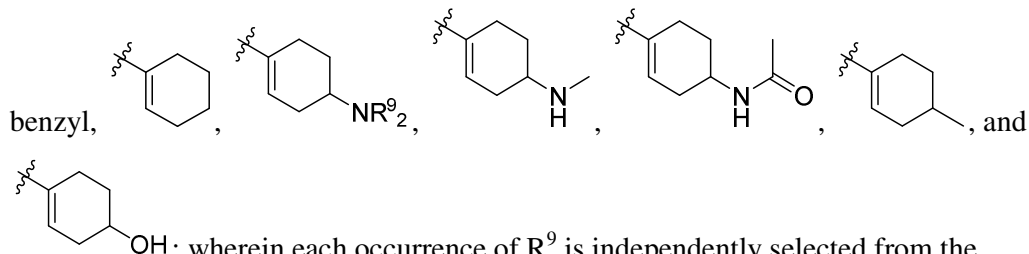
substituted heteroaryl, or $-L-R^3$ is R''' , wherein R''' is selected from the group

consisting of -OH, C₁-C₆ alkoxy, -NH₂, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)(C₁-C₆ alkyl), and -NH(oxetanyl), wherein each C₁-C₆ alkyl is optionally substituted with at least one independently selected from the group consisting of halogen, -C(=O)NH₂, -C(=O)N(C₁-C₆ alkyl), -C(=O)N(C₁-C₆ alkyl)(C₁-C₆ alkyl), -OH, and -C₁-C₆ alkoxy; R⁴ is selected from the group consisting of -H, -OH, C₁-C₆ alkoxy, halogen, -NH₂, and -NHR⁸;

each instance of R⁵ is independently selected from the group consisting of halide, -OH, C₁-C₆ alkoxy, optionally substituted phenyl, optionally substituted C₁-C₆ alkyl, optionally substituted C₁-C₆ alkoxy, and optionally substituted heterocycloalkyl;

R⁶ is selected from the group consisting of H and optionally substituted C₁-C₆ alkyl;

R⁷ is selected from the group consisting of optionally substituted C₁-C₈ alkyl, optionally substituted C₃-C₈ cycloalkyl, optionally substituted C₂-C₈ alkenyl, optionally substituted C₂-C₈ alkynyl, optionally substituted C₁-C₈ heteroalkyl, optionally substituted C₃-C₈ heterocycloalkyl, optionally substituted C₂-C₈ heteroalkenyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted

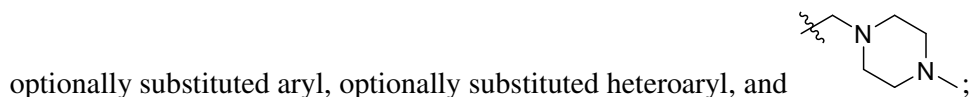


group consisting of H, C₁-C₈ alkyl, oxetanyl, C₁-C₆ hydroxyalkyl, C₁-C₆ haloalkyl, C₁-C₆ carboxamido alkyl, C₁-C₆ carboxy alkyl, C₁-C₆ (C(O)O(C₁-C₆)alkyl) alkyl, and C₁-C₆ cyano alkyl;;

R⁸ is optionally substituted C₁-C₃ alkyl;

Cy is selected from the group consisting of aryl, heteroaryl, C₃-C₁₀ cycloalkyl, C₃-C₁₀ cycloalkenyl, C₃-C₁₀ heterocycloalkyl, C₃-C₁₀ heterocycloalkenyl, polycyclic aryl, polycyclic heteroaryl, polycyclic C₃-C₁₀ cycloalkyl, polycyclic C₃-C₁₀ cycloalkenyl, polycyclic C₃-C₁₀ heterocycloalkyl, and polycyclic C₃-C₁₀ heterocycloalkenyl;

wherein Cy is substituted with 0 to 'n' instances of X, each instance of X being independently selected from the group consisting of H, OH, halide, nitrile, optionally substituted C₁-C₆ alkyl, C₁-C₆ haloalkyl, optionally substituted C₁-C₆ alkoxy,



each instance of Z, if present, is independently selected from the group consisting of CH and N;

m is an integer selected from the group consisting of 0, 1, 2, 3, and 4;

n is an integer selected from the group consisting of 0, 1, 2, 3, 4, and 5; and

q is an integer selected from the group consisting of 0, 1, 2, 3, 4, and 5.

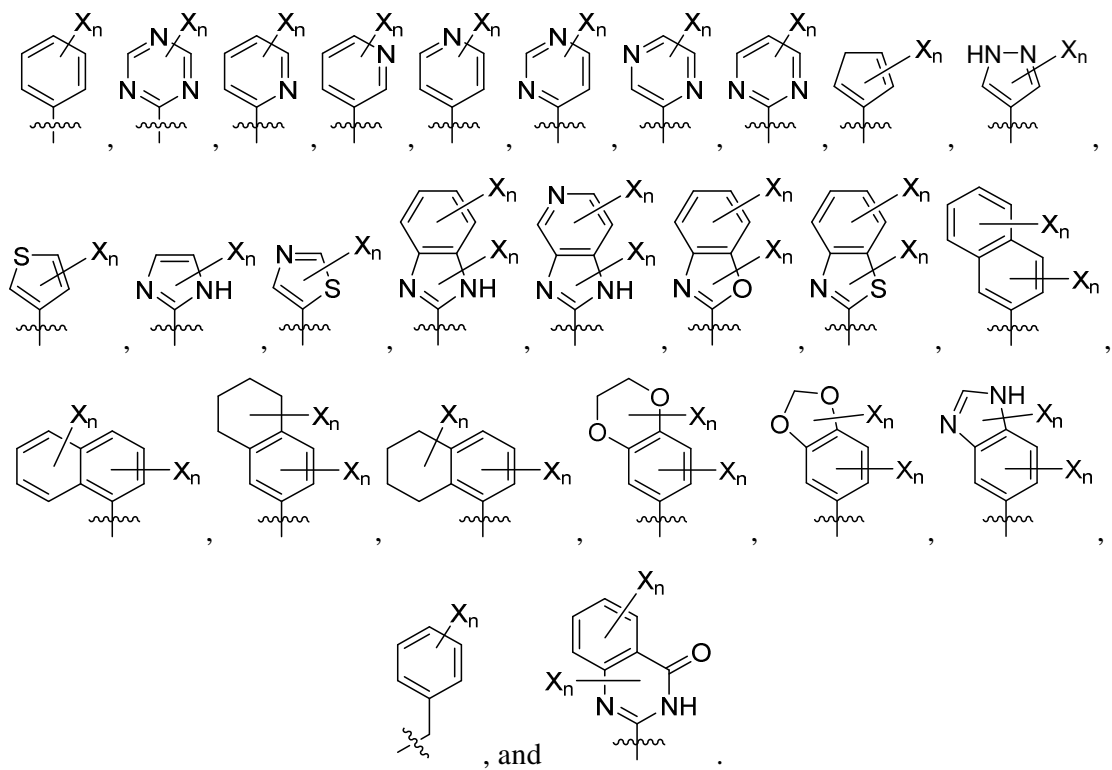
2. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, wherein each occurrence of optionally substituted alkyl, alkenyl, alkynyl, heteroalkyl, heterocycloalkyl, heteroalkenyl, benzyl, heterocyclyl, or cycloalkyl is independently optionally substituted with at least one substituent selected from the group consisting of C₁-C₆ alkyl, halo, -OR^a, optionally substituted phenyl, optionally substituted heteroaryl, optionally substituted heterocyclyl, -N(R^a)C(=O)R^a, -C(=O)NR^aR^a, and -N(R^a)(R^a), wherein each occurrence of R^a is independently H, optionally substituted C₁-C₆ alkyl, optionally substituted C₃-C₈ cycloalkyl, optionally substituted aryl, or optionally substituted heteroaryl, or two R^a groups combine with the N to which they are bound to form a heterocycle.

3. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, wherein each occurrence of optionally substituted aryl or heteroaryl is independently optionally substituted with at least one substituent selected from the group consisting of C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ haloalkoxy, halo, -CN, -OR^b, -N(R^b)(R^b), -NO₂, -S(=O)₂N(R^b)(R^b), acyl, and C₁-C₆ alkoxycarbonyl, wherein each occurrence of R^b is independently H, C₁-C₆ alkyl, or C₃-C₈ cycloalkyl.

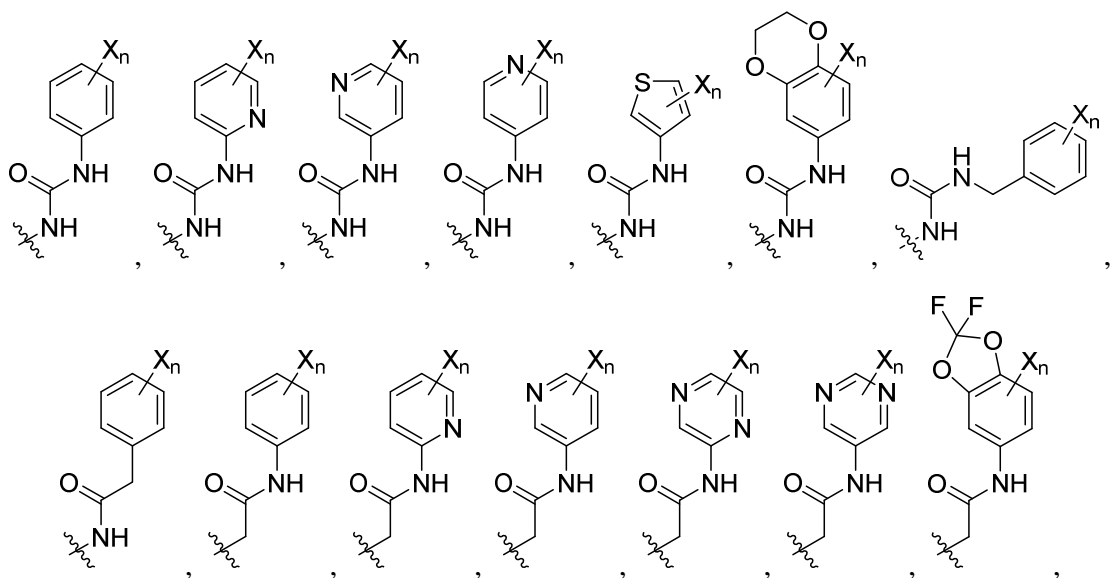
4. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, wherein each occurrence of optionally substituted aryl or heteroaryl is independently optionally substituted with at least one substituent selected from the group consisting of C₁-C₆ alkyl, C₁-C₆ haloalkyl, C₁-C₆ haloalkoxy, halo, -CN, -OR^c, -N(R^c)(R^c), and C₁-C₆ alkoxycarbonyl, wherein each occurrence of R^c is independently H, C₁-C₆ alkyl, or C₃-C₈ cycloalkyl.

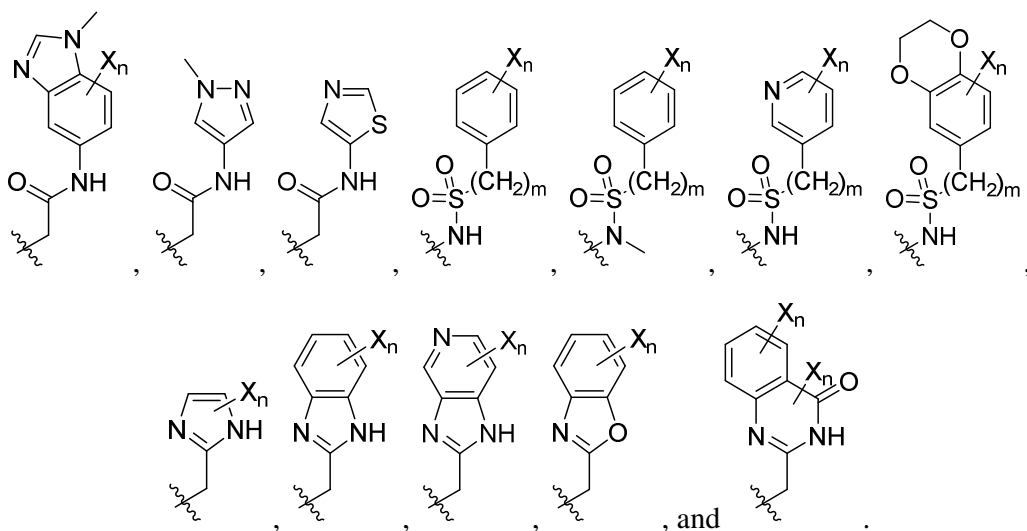
5. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, wherein Cy is selected from

the group consisting of:

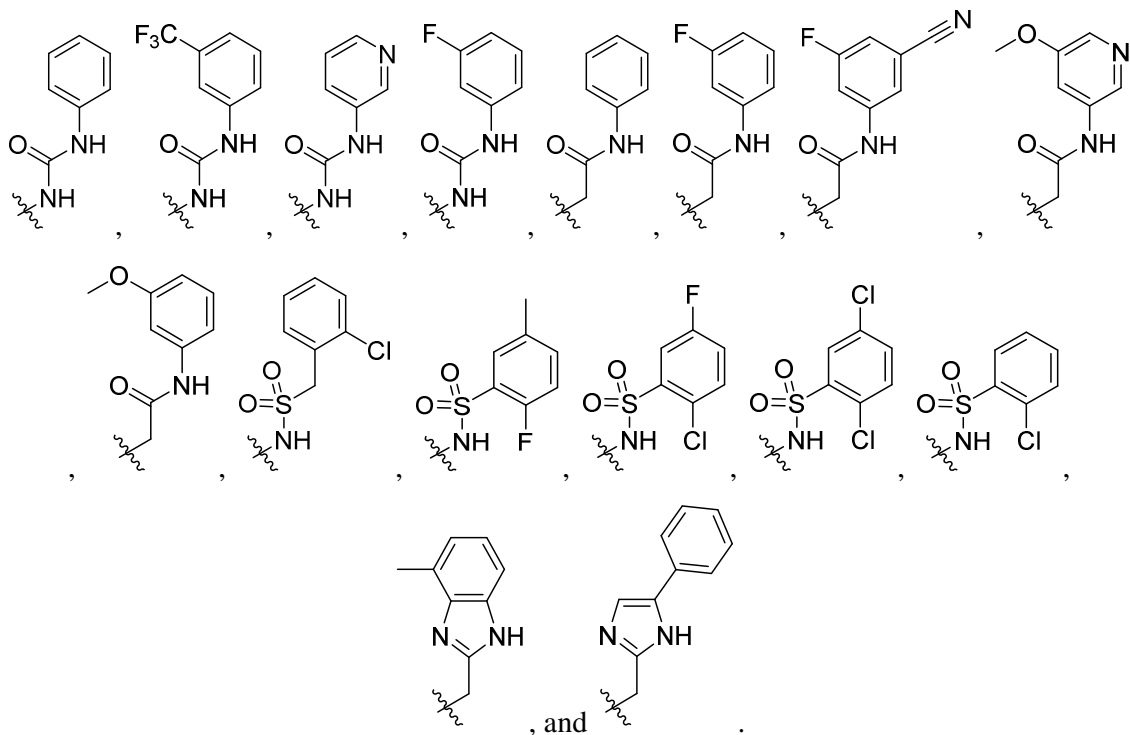


6. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, wherein R¹ is selected from the group consisting of:





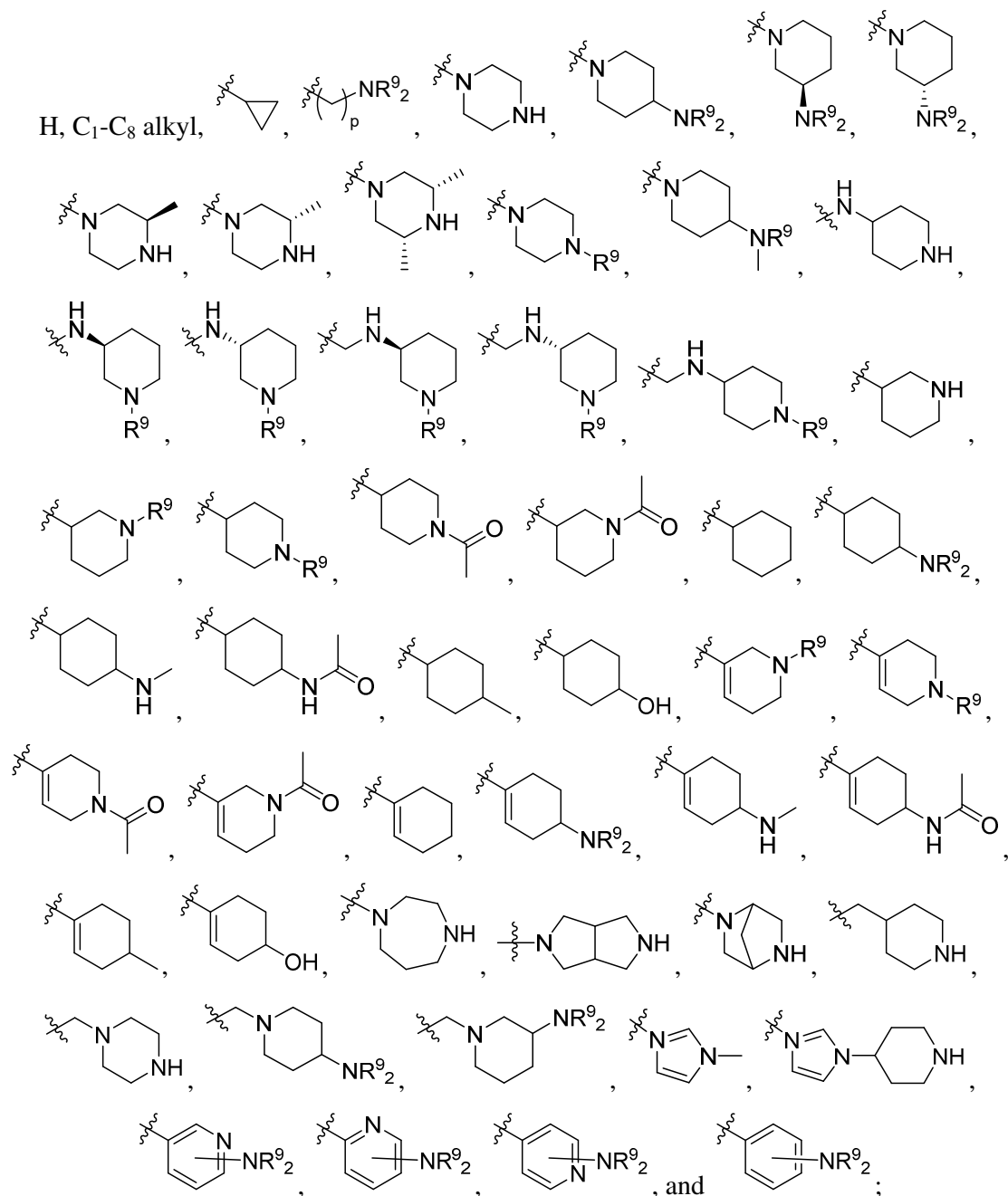
7. The compound of claim 6, wherein R^1 is selected from the group consisting of:



8. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, wherein R^2 is selected from the group consisting of: methyl, ethyl and isopropyl.

9. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, wherein R^3 is selected from the

group consisting of:

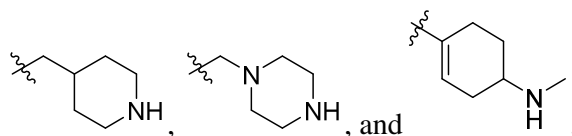


wherein p is an integer from 0-5; and

wherein each occurrence of R⁹ is independently selected from the group consisting of H, C₁-C₈ alkyl, oxetanyl, C₁-C₆ hydroxyalkyl, C₁-C₆ haloalkyl, C₁-C₆ carboxamido alkyl, C₁-C₆ carboxy alkyl, C₁-C₆ (C(O)O(C₁-C₆)alkyl) alkyl, and C₁-C₆ cyano alkyl.

10. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 9, wherein R³ is selected from the

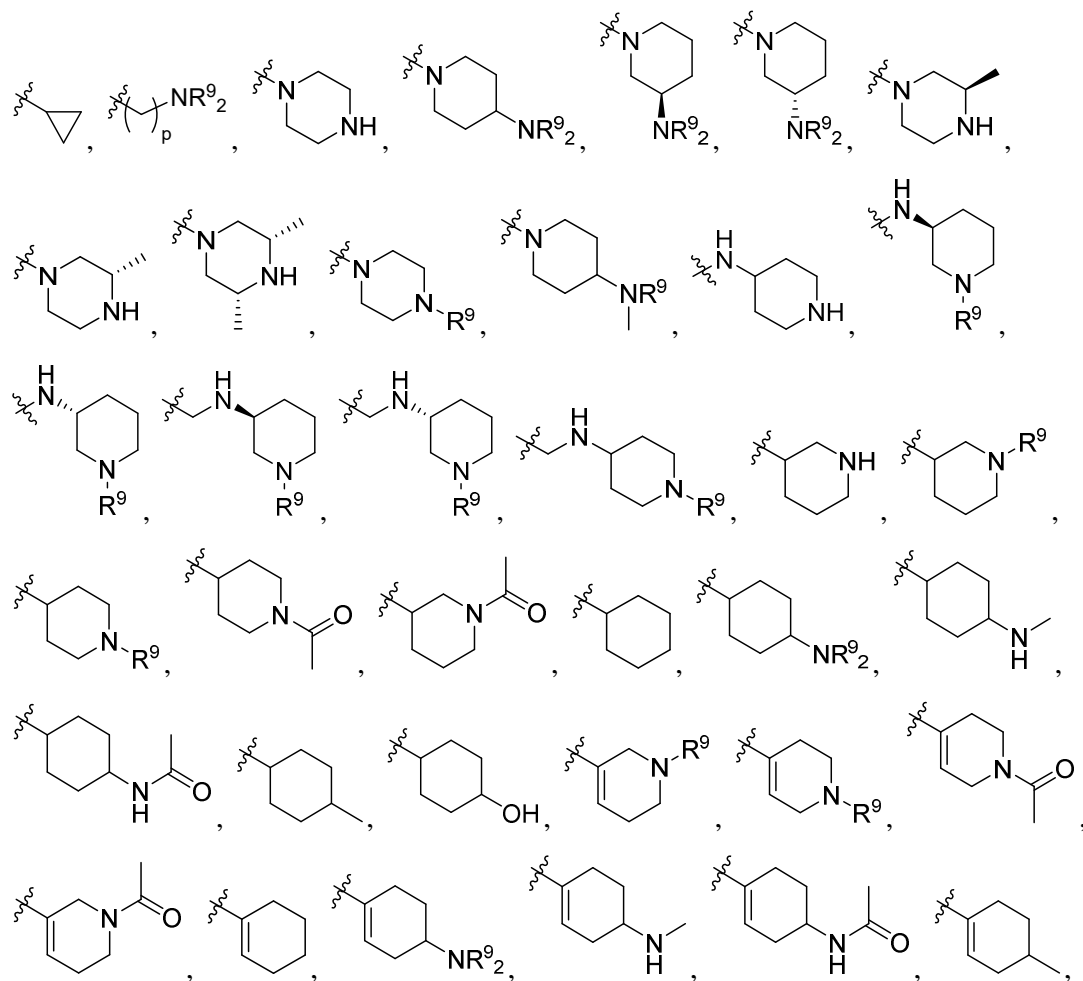
group consisting of:

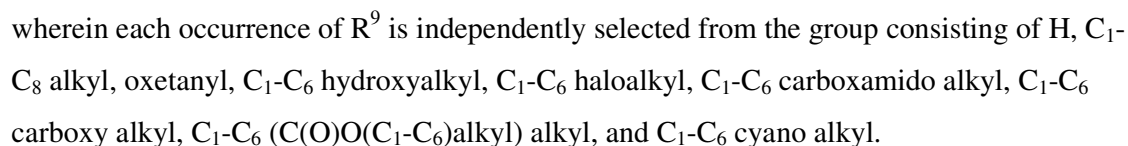


11. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, wherein R^4 is H or $-NH_2$.

12. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, wherein R^5 , if present, is $-F$.

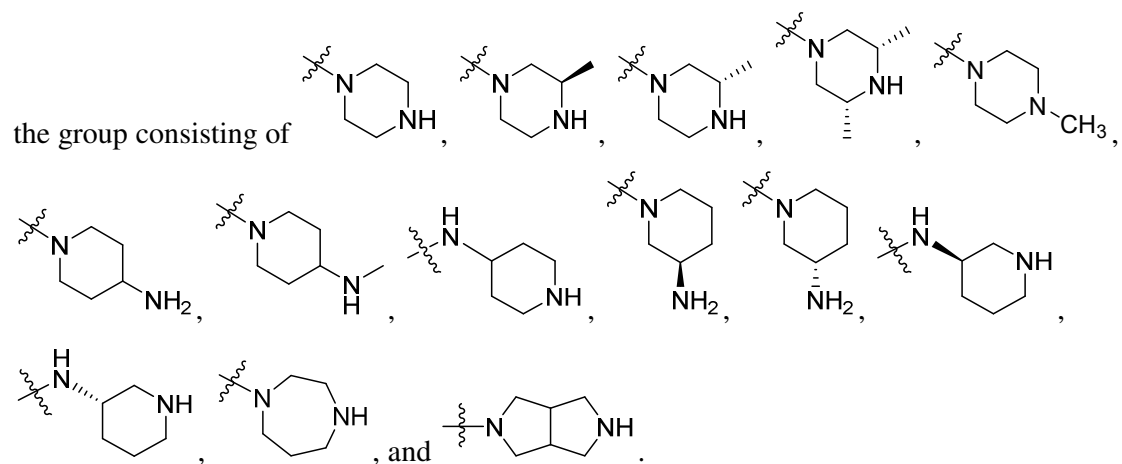
13. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, wherein R^7 , if present, is selected from the group consisting of:



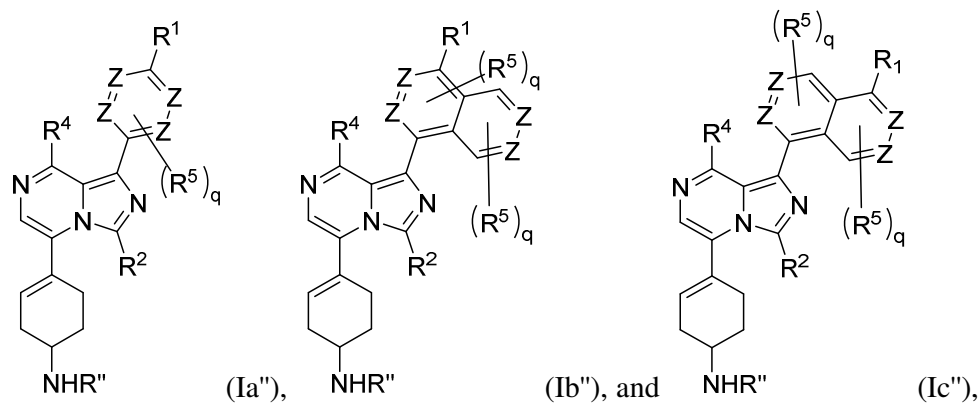


Chemical structures (Ia'), (Ib'), and (Ic') are shown. Each structure features a pyrimidine ring system substituted with various groups: R¹, R⁴, R², R', and (R⁵)_q. The structures are labeled (Ia'), (Ib'), and (Ic') respectively.

16. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 15, wherein R' is selected from

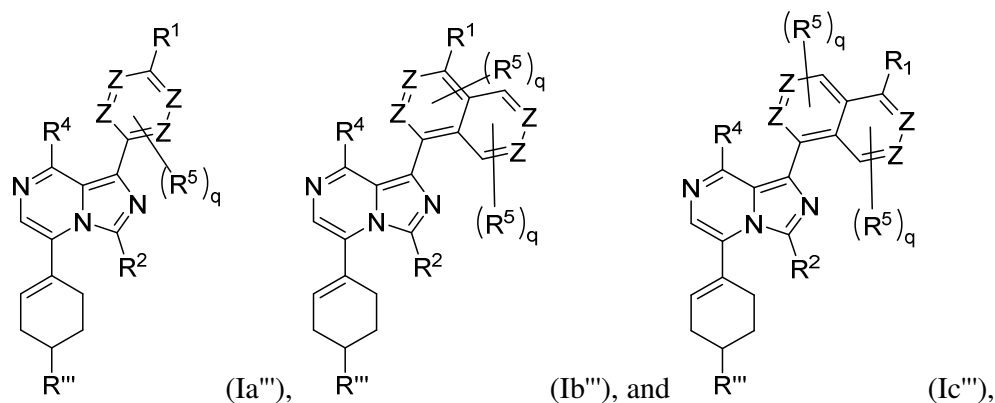


17. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, which is selected from the group consisting of:



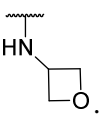
wherein each occurrence of R'' is independently H or C₁-C₆ alkyl.

18. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, which is selected from the group consisting of:



wherein each occurrence of R''' is independently selected from the group consisting of -OH, C₁-C₆ alkoxy, -NH₂, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)(C₁-C₆ alkyl), and -NH(oxetanyl), wherein each C₁-C₆ alkyl is optionally substituted with at least one independently selected from the group consisting of halogen, -C(=O)NH₂, -C(=O)N(C₁-C₆ alkyl), -C(=O)N(C₁-C₆ alkyl)(C₁-C₆ alkyl), -OH, and -C₁-C₆ alkoxy.

19. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 18, wherein R''' is selected from the group consisting of -OH, -NH₂, -NHCH₃, -N(CH₃)₂, -NHCH₂CH₂F, -N(Me)CH₂CH₂F, -NHCH₂CHF₂, -N(Me)CH₂CHF₂, -NHCH₂CF₃, -N(Me)CH₂CF₃, -NHCH₂CH₂CF₃, -N(Me)CH₂CH₂CF₃, -NHCH₂CH₂C(=O)NMe₂, -N(Me)CH₂CH₂C(=O)NMe₂, -NHCH₂CH₂C(=O)NH₂, -N(Me)CH₂CH₂C(=O)NH₂, -NHCH₂CH₂C(=O)NHMe, -

N(Me)CH₂CH₂C(=O)NHMe, and .

20. The compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of claim 1, which is selected from the group consisting of:

3-{4-[8-amino-3-methyl-5-(piperazine-1-carbonyl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

3-{4-[8-amino-5-(4-aminopiperidine-1-carbonyl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

8-amino-3-methyl-N-(piperidin-4-yl)-1-[4-({3-(trifluoromethyl)phenyl}carbonyl)amino]naphthalen-1-yl]imidazo[1,5-a]pyrazine-5-carboxamide;

3-(4-{8-amino-5-[(3R)-3-aminopiperidine-1-carbonyl]-3-methylimidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-[3-(trifluoromethyl)phenyl]urea;

3-(4-{8-amino-5-[(3S)-3-aminopiperidine-1-carbonyl]-3-methylimidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-[3-(trifluoromethyl)phenyl]urea;

8-amino-3-methyl-N-[(3R)-piperidin-3-yl]-1-[4-({3-(trifluoromethyl)phenyl}carbamoyl)amino]naphthalen-1-yl]imidazo[1,5-a]pyrazine-5-carboxamide;

8-amino-3-methyl-N-(piperidin-3-yl)-1-[4-({3-(trifluoromethyl)phenyl}carbamoyl)amino]naphthalen-1-yl]imidazo[1,5-a]pyrazine-5-carboxamide;

8-amino-3-methyl-N-[(3S)-1-methylpiperidin-3-yl]-1-[4-({3-(trifluoromethyl)phenyl}carbamoyl)amino]naphthalen-1-yl]imidazo[1,5-a]pyrazine-5-carboxamide;

8-amino-3-methyl-N-[(3R)-1-methylpiperidin-3-yl]-1-[4-({3-(trifluoromethyl)phenyl}carbamoyl)amino]naphthalen-1-yl]imidazo[1,5-a]pyrazine-5-carboxamide;

3-{4-[8-amino-3-methyl-5-(4-methylpiperazine-1-carbonyl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

3-{4-[8-amino-3-methyl-5-(piperidin-4-ylmethyl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

3-{4-[8-amino-3-methyl-5-(piperazin-1-ylmethyl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

3-(4-{8-amino-5-[(4-aminopiperidin-1-yl)methyl]-3-methylimidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-3-methyl-5-{[(piperidin-4-yl)amino]methyl}imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-5-{[(3R)-3-aminopiperidin-1-yl]methyl}-3-methylimidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-5-{[(3S)-3-aminopiperidin-1-yl]methyl}-3-methylimidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-3-methyl-5-{[(piperidin-3-yl)amino]methyl}imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-{4-[8-amino-3-methyl-5-({[(3S)-piperidin-3-yl]amino}methyl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

3-(4-{8-amino-3-methyl-5-[(4-methylpiperazin-1-yl)methyl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-[3-(trifluoromethyl)phenyl]urea;

3-{4-[8-amino-3-ethyl-5-(piperazin-1-ylmethyl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

3-{4-[8-amino-5-(piperazin-1-ylmethyl)-3-(propan-2-yl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

3-(4-{8-amino-3-ethyl-5-[(4-methylpiperazin-1-yl)methyl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-3-methyl-5-{4-(methylamino)piperidin-1-yl)methyl}imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-3-methyl-5-{[(3R)-3-methylpiperazin-1-yl]methyl}imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-3-methyl-5-{[(3S)-3-methylpiperazin-1-yl]methyl}imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-5-{[(3R,5S)-3,5-dimethylpiperazin-1-yl]methyl}-3-methylimidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-3-ethyl-5-{[(3R)-3-methylpiperazin-1-yl]methyl}imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-3-ethyl-5-{[(3S)-3-methylpiperazin-1-yl]methyl}imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-{4-[8-amino-5-(1,4-diazepan-1-ylmethyl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-5-{2,5-diazabicyclo[2.2.1]heptan-2-ylmethyl}-3-methylimidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-[4-(8-amino-3-methyl-5-{octahydropyrrolo[3,4-c]pyrrol-2-ylmethyl}imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl]-1-[3-(trifluoromethyl)phenyl]urea;

3-{4-[8-amino-3-methyl-5-(piperazin-1-ylmethyl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-(3-fluorophenyl)urea;

3-{4-[8-amino-3-methyl-5-(piperazin-1-ylmethyl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-(3-methylphenyl)urea;

3-{4-[8-amino-3-methyl-5-(piperazin-1-ylmethyl)imidazo[1,5-a]pyrazin-1-yl]-3-fluorophenyl}-1-[3-(trifluoromethyl)phenyl]urea;

3-{4-[8-amino-3-ethyl-5-(piperazin-1-ylmethyl)imidazo[1,5-a]pyrazin-1-yl]-3-fluorophenyl}-1-[3-(trifluoromethyl)phenyl]urea;

N-(4-(8-amino-3-isopropyl-5-(piperazin-1-ylmethyl)imidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;
 3-isopropyl-1-(4-((7-methyl-1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-5-(piperazin-1-ylmethyl)imidazo[1,5-a]pyrazin-8-amine;
 2-{4-[8-amino-3-methyl-5-(piperazin-1-ylmethyl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-N-[3-(trifluoromethyl)phenyl]acetamide;
 3-{4-[8-amino-3-methyl-5-(1,2,5,6-tetrahydropyridin-3-yl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-3-methyl-5-(piperidin-3-yl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-3-methyl-5-(1,2,3,6-tetrahydropyridin-4-yl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-3-methyl-5-(1,2,3,6-tetrahydropyridin-4-yl)imidazo[1,5-a]pyrazin-1-yl]-3-fluorophenyl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[5-(1-acetyl-1,2,5,6-tetrahydropyridin-3-yl)-8-amino-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[5-(1-acetylpiperidin-3-yl)-8-amino-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[5-(1-acetyl-1,2,3,6-tetrahydropyridin-4-yl)-8-amino-3-methylimidazo[1,5-a]pyrazin-1-yl]-3-fluorophenyl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-5-(cyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-3-methyl-5-(1-methyl-1,2,3,6-tetrahydropyridin-4-yl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-3-methyl-5-(pyridin-3-yl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-(4-{8-amino-3-methyl-5-[1-(prop-2-enoyl)-1,2,3,6-tetrahydropyridin-4-yl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-5-(4-aminophenyl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-3-methyl-5-(1-methyl-1H-pyrazol-4-yl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-5-(1,5-dimethyl-1H-pyrazol-4-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

3-{4-[8-amino-5-(1,3-dimethyl-1H-pyrazol-4-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-(4-{8-amino-3-methyl-5-[1-(piperidin-4-yl)-1H-pyrazol-4-yl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-3-methyl-5-(1,2,3,4-tetrahydroisoquinolin-5-yl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-5-(2-aminopyridin-4-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;
 2-(4-(8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(3-(trifluoromethyl)phenyl)acetamide;
 2-(4-{8-amino-3-ethyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-N-[3-(trifluoromethyl)phenyl]acetamide;
 2-(4-{8-amino-5-[4-(methylamino)cyclohex-1-en-1-yl]-3-(propan-2-yl)imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-N-[3-(trifluoromethyl)phenyl]acetamide;
 2-(4-{8-amino-3-methyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-N-[3-(trifluoromethyl)phenyl]acetamide;
 2-(4-{8-amino-3-methyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}-3-fluorophenyl)-N-[3-(trifluoromethyl)phenyl]acetamide;
 2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-phenylacetamide;
 2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-N-(3-fluorophenyl)acetamide;
 2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(3-fluorophenyl)acetamide;
 2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(3-fluoro-5-methoxyphenyl)acetamide;
 2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-N-phenylacetamide;
 2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(3-cyano-5-fluorophenyl)acetamide;
 2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(pyridin-2-yl)acetamide;
 2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(5-methoxypyridin-3-yl)acetamide;

2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(3-cyanophenyl)acetamide;

2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(3-methoxyphenyl)acetamide;

2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(pyridin-3-yl)acetamide;

2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(pyrazin-2-yl)acetamide;

2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(thiazol-5-yl)acetamide;

2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(1-methyl-1H-benzo[d]imidazol-5-yl)acetamide;

2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(2,2-difluorobenzo[d][1,3]dioxol-5-yl)acetamide;

2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(1-methyl-1H-pyrazol-4-yl)acetamide;

2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(3,4-dimethoxyphenyl)acetamide;

2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(pyrimidin-5-yl)acetamide;

2-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(5-fluoropyridin-3-yl)acetamide;

2-(5-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-(3-fluorophenyl)acetamide;

2-(5-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-N-phenylacetamide;

3-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

3-(4-{8-amino-3-methyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-[3-(trifluoromethyl)phenyl]urea;

1-(4-(8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-ethylimidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(3-(trifluoromethyl)phenyl)urea;

3-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-(propan-2-yl)imidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3-(trifluoromethyl)phenyl]urea;

1-(4-(8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-phenylurea;
 3-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[3,5-bis(trifluoromethyl)phenyl]urea;
 3-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-(3,5-dimethylphenyl)urea;
 3-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[4-chloro-3-(trifluoromethyl)phenyl]urea;
 1-(4-(8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-benzylurea;
 3-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[(4-methylphenyl)methyl]urea;
 1-(4-(8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(2-chloro-5-(trifluoromethyl)phenyl)urea;
 1-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-3-(5-chloro-2-methoxyphenyl)urea;
 1-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-3-(2-methoxy-5-methylphenyl)urea;
 3-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-(5-chloro-2-methylphenyl)urea;
 3-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-(3-fluorophenyl)urea;
 1-(4-(8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(m-tolyl)urea;
 1-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-3-(2-methoxyphenyl)urea;
 3-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-[4-(trifluoromethyl)phenyl]urea;
 N-(4-{8-amino-3-methyl-1-[4-({[3-(trifluoromethyl)phenyl]carbonyl}amino)naphthalen-1-yl]imidazo[1,5-a]pyrazin-5-yl}cyclohex-3-en-1-yl)acetamide;
 1-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-3-{4-[(4-methylpiperazin-1-yl)methyl]phenyl}urea;
 3-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]naphthalen-1-yl}-1-(2,3-dihydro-1,4-benzodioxin-6-yl)urea;

3-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]-3-fluorophenyl}-1-(2,3-dihydro-1,4-benzodioxin-6-yl)urea;
 1-{4-[8-amino-5-(4-aminocyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl]-3-fluorophenyl}-3-{4-[(4-methylpiperazin-1-yl)methyl]phenyl}urea;
 3-(4-{8-amino-3-ethyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-[3-(trifluoromethyl)phenyl]urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(3-(trifluoromethyl)phenyl)urea;
 3-(4-{8-amino-3-ethyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}-3-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]urea;
 3-(4-{8-amino-5-[4-(methylamino)cyclohex-1-en-1-yl]-3-(propan-2-yl)imidazo[1,5-a]pyrazin-1-yl}-3-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]urea;
 3-(4-{8-amino-3-methyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}-3-fluorophenyl)-1-[3-(trifluoromethyl)phenyl]urea;
 3-(4-{8-amino-3-methyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}-3-methylphenyl)-1-[3-(trifluoromethyl)phenyl]urea;
 3-(4-{8-amino-3-methyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}-2-methylphenyl)-1-[3-(trifluoromethyl)phenyl]urea;
 3-(4-{8-amino-3-methyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}-5-fluoro-2-methylphenyl)-1-[3-(trifluoromethyl)phenyl]urea;
 3-(4-{8-amino-3-methyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}-5-fluoro-2-methoxyphenyl)-1-[3-(trifluoromethyl)phenyl]urea;
 3-(4-{8-amino-3-methyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-(3-methylphenyl)urea;
 3-(4-{8-amino-3-methyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-(3-fluorophenyl)urea;
 3-(4-{8-amino-3-ethyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-(3-fluorophenyl)urea;
 3-(4-{8-amino-3-ethyl-5-[4-(methylamino)cyclohex-1-en-1-yl]imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-(3-methylphenyl)urea;
 3-(4-{8-amino-5-[4-(methylamino)cyclohex-1-en-1-yl]-3-(propan-2-yl)imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-(3-methylphenyl)urea;
 3-(4-{8-amino-5-[4-(methylamino)cyclohex-1-en-1-yl]-3-(propan-2-yl)imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-1-(3-fluorophenyl)urea;

1-(4-(8-Amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-phenylurea;

1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(pyridin-3-yl)urea;

1-(5-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(3-fluorophenyl)urea;

1-(5-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(3-(trifluoromethyl)phenyl)urea;

1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-3-(2,3-dihydrobenzo[b][1,4]dioxin-6-yl)urea;

1-(4-(8-amino-3-ethyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-3-(3-fluorophenyl)urea;

1-(5-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-phenylurea;

1-(5-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(2,3-dihydrobenzo[b][1,4]dioxin-6-yl)urea;

1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-3-(3-fluorophenyl)urea;

1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-3-phenylurea;

1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(pyridin-2-yl)urea;

1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-methoxyphenyl)-3-(3-fluorophenyl)urea;

1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-3-phenylurea;

1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-3-(3-fluorophenyl)urea;

1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)phenyl)-3-(pyridin-3-yl)urea;

1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(3-cyano-5-fluorophenyl)urea;

1-(5-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)isoquinolin-8-yl)-3-(3-fluorophenyl)urea;

1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-3-(pyridin-3-yl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-benzylurea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(2,3-dihydrobenzo[b][1,4]dioxin-6-yl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(3-methoxyphenyl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(3-cyanophenyl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(3,4-dimethoxyphenyl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(pyridin-4-yl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(4-fluorophenyl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-3-(3-fluoro-5-methoxyphenyl)urea;
 1-(4-(8-amino-3-methyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(pyridin-3-yl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-3-(5-methoxypyridin-3-yl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-3-(5-fluoropyridin-3-yl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(thiophen-3-yl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(3,5-difluorophenyl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(2-fluorophenyl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-methylphenyl)-3-(pyridin-3-yl)urea;
 1-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-chlorophenyl)-3-(pyridin-3-yl)urea;

1-(4-(3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-phenylurea;
 3-Isopropyl-1-(4-((7-methyl-1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 1-(4-((1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-3-methyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 1-(4-((1H-benzo[d]imidazol-2-yl)methyl)-2-fluorophenyl)-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 1-(4-((1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 1-(5-((1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 1-(4-((4,6-difluoro-1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 1-(4-((4,6-dimethyl-1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 3-isopropyl-1-(4-((5-methoxy-1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 2-((4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;
 1-(4-((7-fluoro-1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 1-(4-((1H-imidazo[4,5-c]pyridin-2-yl)methyl)naphthalen-1-yl)-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 1-(4-((7-chloro-1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 3-Isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)-1-(4-((5-phenyl-1H-imidazol-2-yl)methyl)naphthalen-1-yl)imidazo[1,5-a]pyrazin-8-amine;
 N-(4-(8-Amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;
 N-(4-(8-amino-3-methyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-2-chlorobenzenesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)benzenesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-3-fluorobenzenesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(5-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-2-chlorobenzenesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-fluorobenzenesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-2,3-dihydrobenzo[b][1,4]dioxine-6-sulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-2,3-dihydrobenzo[b][1,4]dioxine-6-sulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-2-chlorobenzenesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-1-(3-fluorophenyl)methanesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-1-phenylmethanesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-2,5-difluorobenzenesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-2-fluoro-5-methylbenzenesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-2-chloro-5-fluorobenzenesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-1-(2-fluorophenyl)methanesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-1-(2,5-difluorophenyl)methanesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-1-(2-fluorophenyl)methanesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-1-(2,5-difluorophenyl)methanesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-1-(3,5-difluorophenyl)methanesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-2-fluoro-5-(trifluoromethyl)benzenesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-3-(trifluoromethyl)benzenesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-3-(trifluoromethyl)benzenesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-2,5-dichlorobenzenesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-2,5-difluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-2,3-difluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-1-(pyridin-3-yl)methanesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-1-(pyridin-3-yl)methanesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-1-(3-methoxyphenyl)methanesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-3-fluorophenyl)-1-(3-methoxyphenyl)methanesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-1-(3,5-difluorophenyl)methanesulfonamide;
 N-(4-(8-amino-3-isopropyl-5-(4-(methylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)naphthalen-1-yl)-1-(2-chlorophenyl)-N-methylmethanesulfonamide;
 1-[(8-amino-1-{4-[(4-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)imidazo[1,5-a]pyrazin-5-yl)methyl]piperidin-4-amine;
 (3S)-1-[(8-amino-1-{4-[(4-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)imidazo[1,5-a]pyrazin-5-yl)methyl]piperidin-3-amine;

1-{4-[(1-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-5-[4-(methylamino)cyclohex-1-en-1-yl]-3-(propan-2-yl)imidazo[1,5-a]pyrazin-8-amine;
 4-(8-amino-1-{4-[(4-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)imidazo[1,5-a]pyrazin-5-yl)cyclohex-3-en-1-ol;
 5-[4-(dimethylamino)cyclohex-1-en-1-yl]-1-{4-[(1-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)imidazo[1,5-a]pyrazin-8-amine;
 5-{4-[(2,2-difluoroethyl)(methyl)amino]cyclohex-1-en-1-yl}-1-{4-[(4-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)imidazo[1,5-a]pyrazin-8-amine;
 5-(4-aminocyclohex-1-en-1-yl)-1-{4-[(4-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)imidazo[1,5-a]pyrazin-8-amine;
 5-{4-[methyl(2,2,2-trifluoroethyl)amino]cyclohex-1-en-1-yl}-1-{4-[(4-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)imidazo[1,5-a]pyrazin-8-amine;
 5-{4-[(2,2-difluoroethyl)amino]cyclohex-1-en-1-yl}-1-{4-[(4-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)imidazo[1,5-a]pyrazin-8-amine;
 5-{4-[(2-fluoroethyl)amino]cyclohex-1-en-1-yl}-1-{4-[(4-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)imidazo[1,5-a]pyrazin-8-amine;
 1-{4-[(4-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)-5-{4-[(2,2,2-trifluoroethyl)amino]cyclohex-1-en-1-yl}imidazo[1,5-a]pyrazin-8-amine;
 5-{4-[(2-fluoroethyl)(methyl)amino]cyclohex-1-en-1-yl}-1-{4-[(4-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)imidazo[1,5-a]pyrazin-8-amine;
 5-{4-[methyl(3,3,3-trifluoropropyl)amino]cyclohex-1-en-1-yl}-1-{4-[(4-methyl-1H-1,3-benzodiazol-2-yl)methyl]naphthalen-1-yl}-3-(propan-2-yl)imidazo[1,5-a]pyrazin-8-amine;
 3-((4-(8-amino-3-isopropyl-1-(4-((7-methyl-1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)imidazo[1,5-a]pyrazin-5-yl)cyclohex-3-en-1-yl)amino)-N,N-dimethylpropanamide;
 N-(4-{8-amino-5-[4-(methylamino)cyclohex-1-en-1-yl]-3-(propan-2-yl)imidazo[1,5-a]pyrazin-1-yl}-2-fluorophenyl)-2-fluoro-5-methylbenzene-1-sulfonamide;
 N-(4-{8-amino-5-[4-(methylamino)cyclohex-1-en-1-yl]-3-(propan-2-yl)imidazo[1,5-a]pyrazin-1-yl}naphthalen-1-yl)-2-chloro-5-methylbenzene-1-sulfonamide;
 N-(4-(8-amino-5-(4-((2-fluoroethyl)amino)cyclohex-1-en-1-yl)-3-isopropylimidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-1-(2-chlorophenyl) methanesulfonamide;
 1-(4-((1H-Benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-8-chloro-3-(piperazin-1-yl)methyl)imidazo[1,5-a]pyrazine;
 1-(4-((1H-benzo[d]imidazol-2-yl)methyl)naphthalen-1-yl)-8-chloro-3-((4-methylpiperazin-1-yl)methyl)imidazo[1,5-a]pyrazine;

N-(4-(8-amino-5-(4-((2-fluoroethyl)amino)cyclohex-1-en-1-yl)-3-isopropylimidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(8-amino-5-(4-hydroxycyclohex-1-en-1-yl)-3-isopropylimidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(8-amino-5-(4-hydroxycyclohex-1-en-1-yl)-3-isopropylimidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(8-amino-5-(4-((2,2-difluoroethyl)amino)cyclohex-1-en-1-yl)-3-isopropylimidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(8-amino-3-isopropyl-5-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(8-amino-5-(4-((2-fluoroethyl)amino)cyclohex-1-en-1-yl)-3-isopropylimidazo[1,5-a]pyrazin-1-yl)-2,5-difluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(8-amino-5-(4-((2-fluoroethyl)amino)cyclohex-1-en-1-yl)-3-isopropylimidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(8-amino-5-(4-((2-fluoroethyl)(methyl)amino)cyclohex-1-en-1-yl)-3-isopropylimidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(8-amino-5-(4-((2-fluoroethyl)amino)cyclohex-1-en-1-yl)-3-methylimidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide; and

N-(4-(8-amino-3-isopropyl-5-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)imidazo[1,5-a]pyrazin-1-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

21. A pharmaceutical composition comprising at least one compound or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof of any of claims 1-20 and at least one pharmaceutically acceptable carrier.

22. Use of a therapeutically effective amount of a compound, or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, or tautomer thereof, of any one of claims 1-20 in the manufacture of a medicament for the treatment of an IRE1 α -related disease in a subject, wherein the disease is selected from the group consisting of a neurodegenerative disease, a demyelinating disease, cancer, an eye disease, a fibrotic disease, and diabetes.

23. The use of claim 22, wherein the neurodegenerative disease is selected from the group consisting of retinitis pigmentosa, amyotrophic lateral sclerosis, retinal degeneration, macular

degeneration, Parkinson's Disease, Alzheimer's Disease, Huntington's Disease, Prion Disease, Creutzfeldt- Jakob Disease, and Kuru.

24. The use of claim 22, wherein the demyelinating disease is selected from the group consisting of Wolfram Syndrome, Pelizaeus-Merzbacher Disease, Transverse Myelitis, Charcot-Marie-Tooth Disease, and Multiple Sclerosis.

25. The use of claim 22, wherein the cancer is multiple myeloma.

26. The use of claim 22, wherein the diabetes is selected from the group consisting of type I diabetes and type II diabetes.

27. The use of claim 22, wherein the eye disease is selected from the group consisting of retinitis pigmentosa, retinal degeneration, macular degeneration, and Wolfram Syndrome.

28. The use of claim 22, wherein the fibrotic disease is selected from the group consisting of idiopathic pulmonary fibrosis (IPF), myocardial infarction, cardiac hypertrophy, heart failure, cirrhosis, acetaminophen (Tylenol) liver toxicity, hepatitis C liver disease, hepatosteatorrhea (fatty liver disease), or hepatic fibrosis.

29. Use of an effective amount of a compound, or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, isotopologue, or tautomer thereof, of any one of claims 1-20 in the manufacture of a medicament for inhibiting the activity of an IRE1 protein, wherein the activity is selected from the group consisting of kinase activity, oligomerization activity, and RNase activity.

30. The use of claim 29, wherein the IRE1 protein is within a cell.

31. The use of claim 30, wherein apoptosis of the cell is prevented or minimized.

32. The use of claim 30, wherein the cell is in an organism that has an IRE1 α -related disease or disorder.

33. The use of claim 32, wherein the disease or disorder is a neurodegenerative disease, demyelinating disease, cancer, eye disease, fibrotic disease, or diabetes.

34. The use of any of claims 22-28, wherein the subject is need of the treatment.

35. A therapeutically effective amount of a compound, or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, or tautomer thereof, of any one of claims 1-20 for use as a medicament.