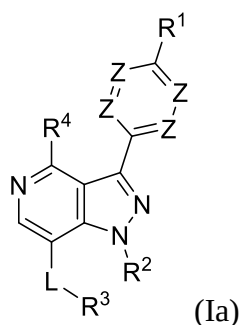


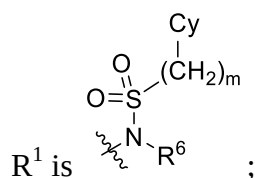
CLAIMS

What is claimed is:

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



wherein:



R^2 is selected from the group consisting of H, methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl, tert-butyl, CF_3 , CHF_2 , cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclooctyl, and 1-methylcyclopropyl;

L is a bond;

R^3 is selected from the group consisting of optionally substituted C_3 - C_8 cycloalkyl, optionally substituted C_3 - C_8 cycloalkenyl, optionally substituted C_3 - C_8 heterocycloalkyl, and optionally substituted C_2 - C_8 cycloheteroalkenyl;

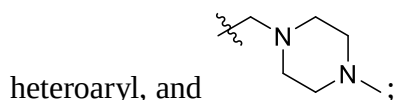
R^4 is $-NH_2$;

0-3 instances of Z are N and the remaining instances of Z are independently CH or CR^5 ;
each instance of R^5 is independently selected from the group consisting of H, halogen, -OH, optionally substituted C_1 - C_6 alkyl, and optionally substituted C_1 - C_6 alkoxy;

R^6 is H;

Cy is phenyl, thiophenyl, pyridinyl, pyridazinyl, pyrimidinyl, or pyrazinyl;

wherein Cy is substituted with 0 to 'n' instances of X, each instance of X being independently selected from the group consisting of H, halogen, nitrile, optionally substituted C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, optionally substituted C_1 - C_4 alkoxy, optionally substituted phenyl, optionally substituted naphthyl, optionally substituted



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

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

2. The compound of claim 1, wherein each occurrence of optionally substituted alkyl, optionally substituted alkoxy, optionally substituted heterocycloalkyl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, or optionally substituted cycloheteroalkenyl is independently optionally substituted with at least one substituent selected from the group consisting of C₁-C₆ alkyl, halogen, -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 of claim 1, wherein each occurrence of optionally substituted phenyl, optionally substituted naphthyl, or optionally substituted 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, halogen, -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 of claim 1, wherein each occurrence of optionally substituted phenyl, optionally substituted naphthyl, or optionally substituted 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, halogen, -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.

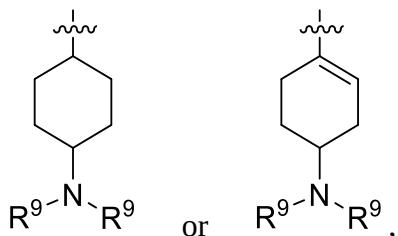
5. The compound of claim 1, wherein R¹ is selected from the group consisting of:



Chemical structures of various substituted benzene rings, including chlorophenyl, fluorophenyl, and various methoxy, ethoxy, and propoxy derivatives, as well as nitrile and difluoromethoxy groups, are shown. These structures represent different substituents that can be attached to the sulfonamide group.

7. The compound of claim 1, wherein R² is selected from the group consisting of methyl, ethyl, isopropyl, and cyclopropyl.

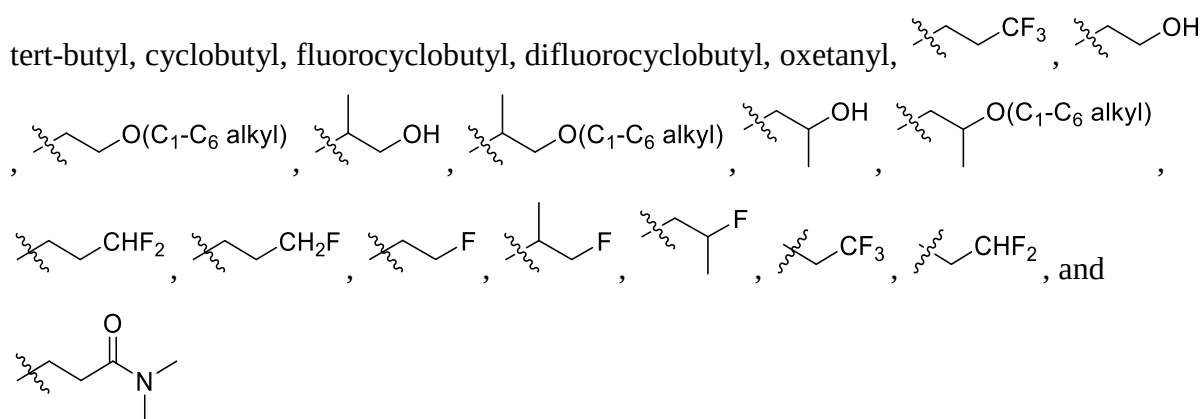
8. The compound of claim 1, wherein R³ is:



wherein each occurrence of R⁹ is independently selected from the group consisting of H, oxetanyl, C₁-C₆ alkyl, C₃-C₈ cycloalkyl, C₁-C₆ hydroxyalkyl, C₁-C₆ (C₁-C₆ alkoxy)alkyl, C₁-C₆ haloalkyl, C₁-C₆ carboxamido alkyl, C₁-C₆ carboxy alkyl, C₁-C₆ [carboxy(C₁-C₆)alkyl] alkyl, C₁-C₆ cyano alkyl, and C₁-C₆ sulfonyl alkyl, or the two R⁹ combine with the N to which they are bound to form a 3-8 heterocyclyl ring,

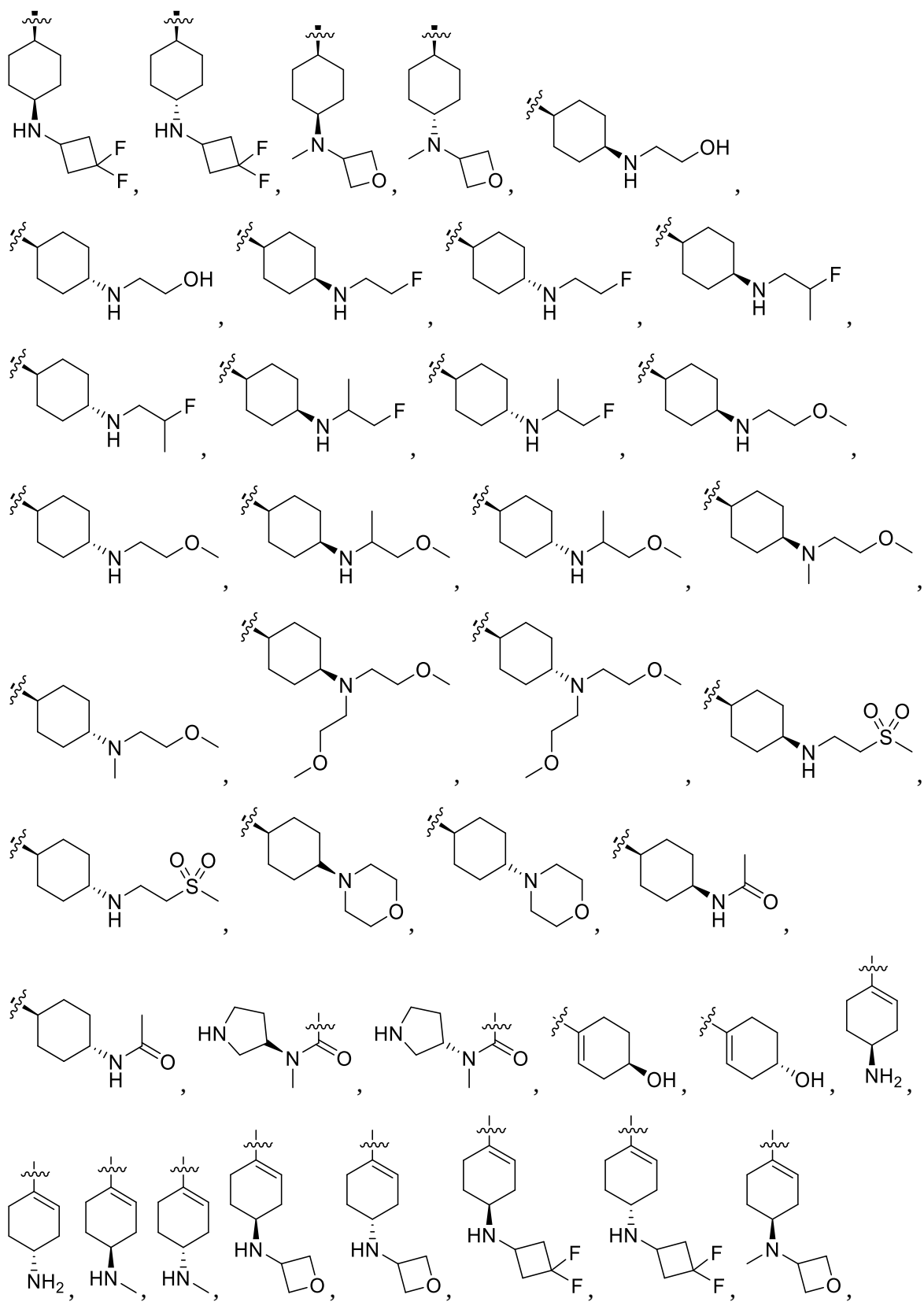
wherein each R⁹ is independently optionally substituted with at least one of OH, C₁-C₆ alkoxy, halogen, NH₂, NH(C₁-C₆ alkyl), N(C₁-C₆ alkyl)(C₁-C₆ alkyl), cyano, carboxamide, carboxy, and sulfonyl.

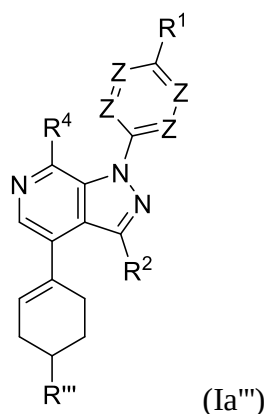
9. The compound of claim 8, wherein each occurrence of R⁹ is independently selected from the group consisting of H, methyl, ethyl, propyl, isopropyl, butyl, sec-butyl, isobutyl, tert-butyl, cyclobutyl, fluorocyclobutyl, difluorocyclobutyl, oxetanyl,



10. The compound of claim 1, wherein R³ is selected from the group consisting of:



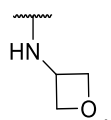




wherein each occurrence of R''' is independently selected from the group consisting of -OH, C₁-C₆ alkoxy, -NH₂, -NH(C₁-C₆ alkyl), -N(C₁-C₆ alkyl)(C₁-C₆ alkyl), and -NH(oxetanyl),

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.

15. The compound of claim 14, 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)NHMe₂, and



16. The compound of claim 1, which is selected from the group consisting of:

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-chloro-5-methoxybenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-morpholinocyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorobenzenesulphonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-5-chloro-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-

pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-5-(difluoromethoxy)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluoro-3-methoxybenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-5-ethoxy-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-4-methoxybenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-methoxybenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-3-methoxybenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1s,4s)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-4-fluoro-3-methoxybenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-4-chlorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-chloro-4-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-4-chloro-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-1-(4-fluorophenyl)methanesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-3-fluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-5-cyano-2-fluorobenzenesulfonamide;

N-(4-(4-amino-7-((1r,4r)-4-(dimethylamino)cyclohexyl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-1-(2-fluorophenyl)methanesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2,6-difluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2,4-difluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2,3-difluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-1-(2-fluorophenyl)methanesulfonamide;

N-(4-(4-amino-7-((1r,4r)-4-(bis(2-methoxyethyl)amino)cyclohexyl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluoro-5-methoxybenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluoro-5-methoxybenzenesulfonamide;

N-(4-(4-amino-7-((1r,4r)-4-(bis(2-methoxyethyl)amino)cyclohexyl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-3-(trifluoromethyl)benzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-3-(trifluoromethyl)benzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2,5-difluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-4-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-3-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-7-((1r,4r)-4-(bis(2-methoxyethyl)amino)cyclohexyl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)(methyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-(methyl(oxetan-3-yl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-7-((1r,4r)-4-(dimethylamino)cyclohexyl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-cyclopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-ethyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-ethyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-1-(2-fluorophenyl)methanesulfonamide;

N-(4-(4-amino-1-ethyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-1-ethyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-(methyl(oxetan-3-yl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-1-(2-fluorophenyl)methanesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-7-((1r,4r)-4-(dimethylamino)cyclohexyl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-ethyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-1-ethyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-fluorophenyl)methanesulfonamide;

N-(4-(4-amino-1-cyclopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-fluorophenyl)methanesulfonamide;

N-(4-(4-amino-1-cyclopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-cyclopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-(oxetan-3-ylamino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-fluorophenyl)methanesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((1-methoxypropan-2-yl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluoro-5-(trifluoromethoxy)benzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluoro-5-propoxybenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2,5-dichlorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-((1r,4r)-4-((2-methoxyethyl)amino)cyclohexyl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-chloro-5-ethylbenzenesulfonamide;

N-(4-(4-amino-7-((1r,4r)-4-((2-fluoropropyl)amino)cyclohexyl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-fluorophenyl)methanesulfonamide;

N-(4-(4-amino-1-isopropyl-7-(4-((1-methoxypropan-2-yl)amino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-(4-((1-methoxypropan-2-yl)amino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-isopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-isopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chloro-5-methoxybenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-isopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-5-chloro-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-isopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-

pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-fluoro-5-methylbenzenesulfonamide;

N-(4-(4-amino-1-cyclopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-1-cyclopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-fluorophenyl)methanesulfonamide;

N-(4-(4-amino-1-cyclopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-ethyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)phenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-ethyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-fluorophenyl)methanesulfonamide;

N-(4-(4-amino-1-ethyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-ethyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-ethyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-1-ethyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;

N-(4-(4-amino-1-ethyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-fluorobenzenesulfonamide;

N-(4-(4-amino-1-ethyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-fluoro-5-methylbenzenesulfonamide;

N-(4-(4-amino-1-ethyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chloro-5-methoxybenzenesulfonamide;

N-(4-(4-amino-1-ethyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-5-chloro-2-fluorobenzenesulfonamide;

N-(4-(4-amino-7-(4(R)-((1-fluoropropan-2(R)-yl)amino)cyclohex-1-en-1-yl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-7-(4(R)-((1-fluoropropan-2(S)-yl)amino)cyclohex-1-en-1-yl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-7-(4(S)-((1-fluoropropan-2(R)-yl)amino)cyclohex-1-en-1-yl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;

N-(4-(4-amino-7-(4(S)-((1-fluoropropan-2(S)-yl)amino)cyclohex-1-en-1-yl)-1-isopropyl-

1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;
 N-(4-(4-amino-7-(4-((2-fluoropropyl)amino)cyclohex-1-en-1-yl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;
 N-(4-(4-amino-7-(4-((1-fluoropropan-2-yl)amino)cyclohex-1-en-1-yl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;
 N-(4-(4-amino-7-(4-((2-fluoropropyl)amino)cyclohex-1-en-1-yl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;
 N-(4-(4-amino-7-(4-((3,3-difluorocyclobutyl)amino)cyclohex-1-en-1-yl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;
 N-(4-(4-amino-7-(4-((3,3-difluorocyclobutyl)amino)cyclohex-1-en-1-yl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;
 N-(4-(4-amino-1-isopropyl-7-(4-((2-methoxyethyl)amino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;
 N-(4-(4-amino-1-isopropyl-7-(4-((2-methoxyethyl)amino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-1-(2-chlorophenyl)methanesulfonamide;
 N-(4-(4-amino-1-isopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;
 N-(4-(4-amino-1-isopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-fluorobenzenesulfonamide;
 N-(4-(4-amino-1-isopropyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2,5-difluorophenyl)-2-fluorobenzenesulfonamide;
 N-(4-(4-amino-1-ethyl-7-(4-(oxetan-3-ylamino)cyclohex-1-en-1-yl)-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;
 N-(4-(4-amino-7-(4-((2-fluoroethyl)amino)cyclohex-1-en-1-yl)-1-isopropyl-1H-pyrazolo[4,3-c]pyridin-3-yl)-2-fluorophenyl)-2-chlorobenzenesulfonamide;
 or a salt, solvate, enantiomer, diastereoisomer, isotopologue or tautomer thereof.

17. A pharmaceutical composition comprising at least one compound of any of claims 1-16 and at least one pharmaceutically acceptable carrier.

18. Use of a therapeutically effective amount of a compound, or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, or tautomer thereof, of any of claims 1-16 and/or the composition of claim 17 for the manufacture of a medicament for the treatment of a IRE1 α -related disease.

19. The use of claim 18, 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.
20. The use of claim 19, 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.
21. The use of claim 19, 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.
22. The use of claim 19, wherein the cancer is multiple myeloma.
23. The use of claim 19, wherein the diabetes is selected from the group consisting of type I diabetes and type II diabetes.
24. The use of claim 19, wherein the eye disease is selected from the group consisting of retinitis pigmentosa, retinal degeneration, macular degeneration, and Wolfram Syndrome.
25. The use of claim 19, 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, hepatosteatorosis (fatty liver disease), or hepatic fibrosis.
26. Use of a compound, or a pharmaceutically acceptable salt thereof, of any of claims 1-16 and/or the composition of claim 17 in the manufacture of a medicament for the inhibition of the activity of an IRE1 protein.
27. The use of claim 26, wherein the activity is selected from the group consisting of kinase activity, oligomerization activity, and RNase activity.

28. The use of claim 26, wherein the IRE1 protein is within a cell.
29. The use of claim 28, wherein apoptosis of the cell is prevented or minimized.
30. The use of claim 28, wherein the cell is in an organism that has an IRE1 α -related disease or disorder.
31. The use of claim 30, wherein the disease or disorder is a neurodegenerative disease, demyelinating disease, cancer, eye disease, fibrotic disease, or diabetes.
32. The use of any of claims 18-31, wherein the subject is in need of the treatment.
33. A compound, or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, or tautomer thereof, of any of claims 1-16 and/or the composition of claim 17 for use in the treatment of a IRE1 α -related disease.
34. A compound, or a pharmaceutically acceptable salt, solvate, enantiomer, diastereoisomer, or tautomer thereof, of any of claims 1-16 and/or the composition of claim 17 for use in the inhibition of the activity of an IRE1 protein.