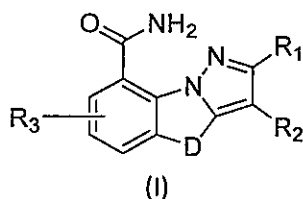


Claims

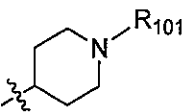
1. A compound of formula (I) or a pharmaceutically acceptable salt thereof,



wherein,

D is $-C(R_{d1})(R_{d2})-$ or $-N(R_{d4})-$;

R_1 is selected from the group consisting of H, F, Cl, Br, I, CN, OH, SH, NH_2 , C_{1-3} alkyl, C_{1-3}

alkyloxy, benzyloxy, and , in which R_{101} is selected from the group consisting of H, methyl, ethyl, n-propyl, or isopropyl;

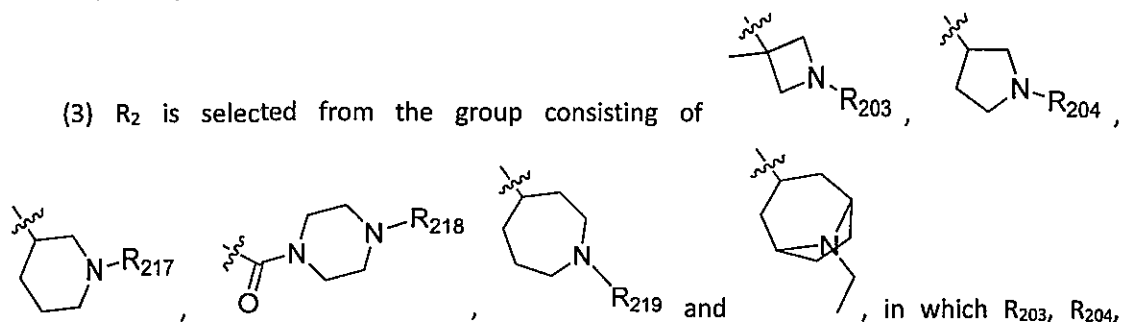
R_3 is selected from the group consisting of H, F, Cl, Br, CN, and methyl;

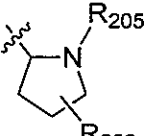
R_2 satisfies any one of following requirements (1) – (10):

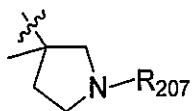
(1) R_2 is selected from H, F, Cl, Br, I, CN, OH, SH, and NH_2 ;

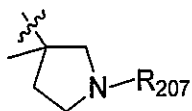
(2) R_2 is selected from $-CH_2N(R_{201})(R_{202})$, in which R_{201} and R_{202} are separately and independently selected from the group consisting of H, C_{1-3} alkyl, C_{1-3} alkylacyl, C_{3-6} cycloalkylacyl, or C_{3-6} cycloalkyl;

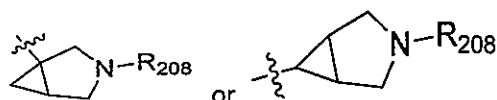
(3) R_2 is selected from the group consisting of

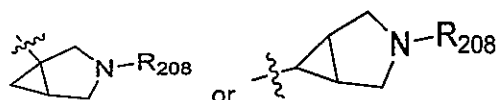


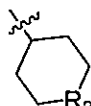
(4) R_2 is selected from , in which R_{205} and R_{206} are separately and independently selected from the group consisting of H, substituted or unsubstituted C_{1-3} alkyl, cyclopropyl, and cyclopropylmethylene, wherein the substituent is selected from the group consisting of F, Cl, Br, I, CN, OH, NH_2 , methyl, or methyloxy, and the number of substituents is 0, 1, 2, or 3; R_{206} is also selected from the group consisting of F, Cl, Br, I, CN, OH, and NH_2 ;

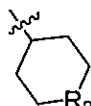


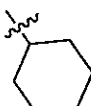
(5) R_2 is selected from , in which R_{207} is selected from the group consisting of H, substituted or unsubstituted C_{1-3} alkyl, cyclopropyl, cyclopropylmethylene, cyclobutyl, cyclobutylmethylene, oxacyclobutyl or oxacyclobutylalkylene, where the substituent is selected from the group consisting of F, Cl, Br, I, CN, OH, NH_2 , methyl, CF_3 , methyloxy, and methylsulfonyl, and the number of substituents is 0, 1, 2, or 3;

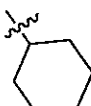


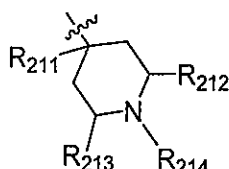
(6) R_2 is selected from the group consisting of , in which R_{208} is selected from the group consisting of H, cyclopropylmethylene, substituted or unsubstituted C_{1-4} alkyl, in the R_{208} , the substituted or unsubstituted C_{1-4} alkyl includes linear and cyclic ones, wherein the substituent is selected from the group consisting of F, Cl, Br, I, CN, OH, NH_2 , methyl, CF_3 , methyloxy, and methylsulfonyl, and the number of substituents is 0, 1, 2, or 3;

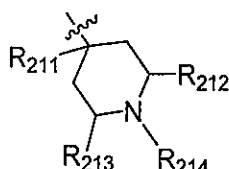


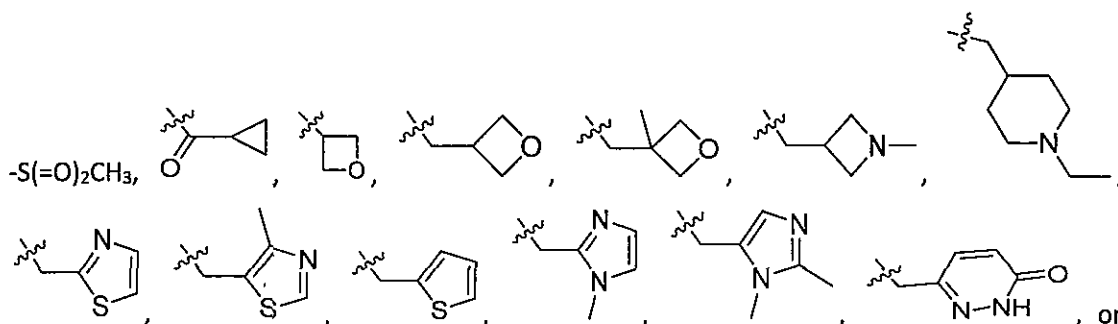
(7) R_2 is selected from , in which R_{209} is selected from the group consisting of $-C(R_{d1})(R_{d2})-$, $-C(=O)N(R_{d3})-$, $-N(R_{d4})-$, $-C(=NR_{d5})-$, $-S(=O)_2N(R_{d6})-$, $-S(=O)N(R_{d7})-$, $-O-$, $-S-$, $-C(=O)O-$, $-C(=O)-$, $-C(=S)-$, $-S(=O)-$, or $-S(=O)_2-$;

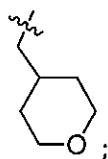


(8) R_2 is selected from , in which R_{210} is selected from the group consisting of H, F, Cl, Br, I, CN, OH, NH_2 , N,N-di(C_{1-3} alkyl)amino, and C_{1-3} alkylamino;



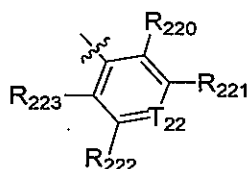
(9) R_2 is selected from , in which $R_{211-213}$ are selected from the group consisting of H or substituted or unsubstituted C_{1-4} alkyloxy carbonyl, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{3-6} cycloalkylmethylene, unsaturated C_{5-6} heterocyclohydrocarbyl, F, Cl, Br, I, CN, OH, and NH_2 , R_{214} is selected from the group consisting of H or substituted or unsubstituted C_{1-4} alkyloxy carbonyl, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{3-6} cycloalkylmethylene, or unsaturated C_{5-6} heterocyclohydrocarbyl, and



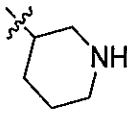


wherein the substituent includes R_{215} , the cycloalkyl or unsaturated heterocyclohydrocarbyl has O, S or NR_{216} with a number of 0, 1 or 2; R_{216} is selected from the group consisting of H and C_{1-4} alkyl substituted by R_{215} , R_{215} is selected from the group consisting of F, Cl, Br, I, CN, OH, NH_2 , methyl, ethyl, methyloxy, ethyloxy, formyl, , acetyl, methylsulfonyl, ethylsulfonyl, methyloxycarbonyl, ethyloxycarbonyl, dimethylamino, diethylamino, dimethylaminocarbonyl, diethylaminocarbonyl, oxo, the number of R_{215} is 1, 2, or 3,

optionally, R_{212} and R_{213} join together to form a linker selected from the group consisting of $-CH_2-$, $-CH_2CH_2-$, or $-CH_2CH_2CH_2-$;



(10) R_2 is selected from , in which T_{22} is selected from the group consisting of N or C(R_{224}), $R_{220-224}$ are separately and independently selected from the group

consisting of H, F, Cl, Br, I, CN, OH, SH, NH_2 , C_{1-3} alkylamino- C_{1-3} alkyl, and  ;

R_{d1} , and R_{d2} are separately and independently selected from the group consisting of H, F, Cl, Br, I, CN, OH, SH, and NH_2 , or selected from the group, optionally substituted by R_{01} , consisting of C_{1-10} alkyl, C_{1-10} heteroalkyl, C_{3-10} cyclohydrocarbyl and C_{3-10} heterocyclohydrocarbyl;

R_{01} is selected from the group consisting of F, Cl, Br, I, CN, OH, SH, NH_2 , and R_{02} ;

R_{02} is selected from the group consisting of C_{1-10} alkyl, C_{1-10} alkylamino, N,N-di(C_{1-10} alkyl) amino, C_{1-10} alkyloxy, C_{1-10} alkylacyl, C_{1-10} alkyloxycarbonyl, C_{1-10} alkylsulfonyl, C_{1-10} alkylsulfinyl, C_{3-10} cycloalkyl, C_{3-10} cycloalkylamino, C_{3-10} heterocycloalkylamino, C_{3-10} cycloalkyloxy, C_{3-10} cycloalkylacyl, C_{3-10} cycloalkyloxycarbonyl, C_{3-10} cycloalkylsulfonyl, and C_{3-10} cycloalkylsulfinyl;

R_{d3-d7} are separately and independently selected from the group consisting of H, and R_{03} ;

R_{03} is C_{1-10} alkyl;

R_{02} , and R_{03} are optionally substituted by R_{001} ;

R_{001} is selected from the group consisting of F, Cl, Br, I, CN, OH, $N(CH_3)_2$, $NH(CH_3)$, NH_2 , CF_3 , $(NH_2)CH_2$, $(HO)CH_2$, CH_3 , CH_3O , $CH_3C(=O)$, $CH_3O C(=O)$, $CH_3S(=O)_2$, and $CH_3S(=O)$; and

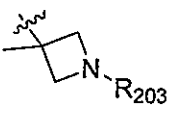
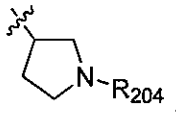
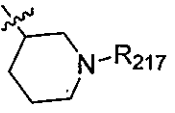
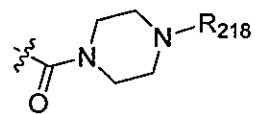
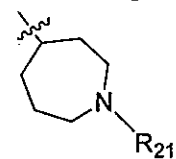
the number of R_{01} , R_{001} , the heteroatom, or heteroatomic group is separately and independently selected from 0, 1, 2, and 3;

heteroatom or heteroatomic group is separately and independently selected from the group consisting of $-C(=O)N(R_{d3})-$, $-N(R_{d4})-$, $-C(=NR_{d5})-$, $-S(=O)_2 N(R_{d6})-$, $-S(=O) N(R_{d7})-$, $-O-$, $-S-$, $-C(=O)O-$, $-C(=O)-$, $-C(=S)-$, $-S(=O)-$, and/or $-S(=O)_2-$.

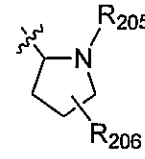
2. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the D is selected from $-NH-$, $-N(CH_3)-$, $-C(F)_2-$, $-C(H)(F)-$ and $-C(H)(OH)-$.

3. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R_2 is selected from $-\text{CH}_2\text{N}(\text{R}_{201})(\text{R}_{202})$, in which R_{201} and R_{202} are separately and independently selected from the group consisting of H and cyclopropylacyl.

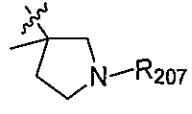
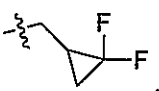
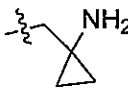
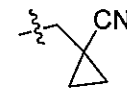
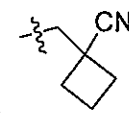
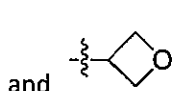
4. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R_2 is

selected from the group consisting of , , , , and , in which R_{203} is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, $-\text{CH}_2\text{C}(\text{CH}_3)(\text{CH}_3)(\text{OH})$, and cyclopropylmethylene, R_{204} is selected from the group consisting of methyl, ethyl, n-propyl, and isopropyl, $\text{R}_{217-219}$ are separately and independently selected from the group consisting of methyl and ethyl.

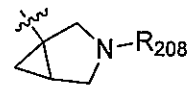
5. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R_2 is

selected from , in which R_{205} and R_{206} are separately and independently selected from the group consisting of H, methyl, ethyl, n-propyl, and isopropyl, R_{206} also is selected from the group consisting of F, Cl, Br, I, CN, OH, and NH_2 .

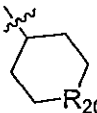
6. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R_2 is

selected from , in which R_{207} is selected from the group consisting of H, methyl, ethyl, n-propyl, isopropyl, $-\text{CH}_2\text{CF}_3$, $-\text{CH}_2\text{CH}_2\text{CF}_3$, $-\text{CH}_2\text{CH}_2\text{F}$, $-\text{CH}_2\text{CH}_2\text{S}(=\text{O})_2\text{CH}_3$, $-\text{CH}_2\text{CH}_2\text{CN}$, , , , , , and .

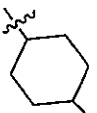
7. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R_2 is

selected from the group consisting of  or , in which R_{208} is selected from the group consisting of H, methyl, ethyl, n-propyl, isopropyl, cyclopropylmethylene, and cyclobutyl.

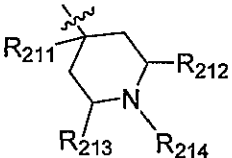
8. The compound of claim 3 or a pharmaceutically acceptable salt thereof, wherein R_2 is

selected from , in which R₂₀₉ is selected from the group consisting of O and S(=O)₂.

9. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R₂ is

selected from , in which R₂₁₀ is selected from the group consisting of dimethylamino, methylamino, H, F, Cl, Br, I, CN, OH, and NH₂.

10. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R₂ is

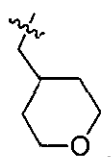
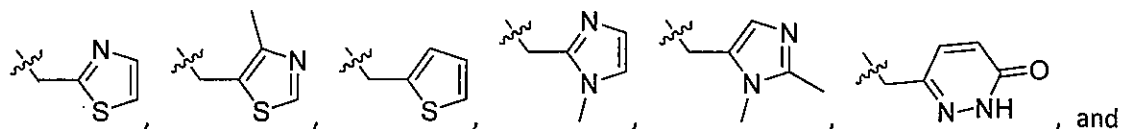
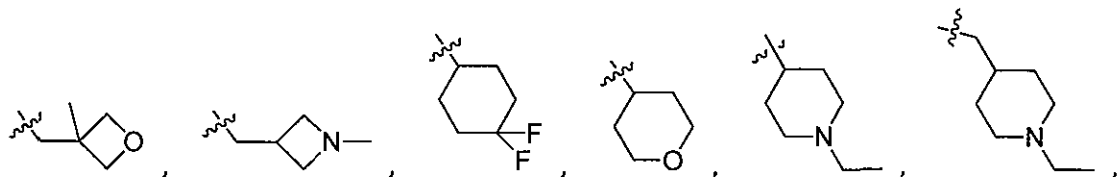
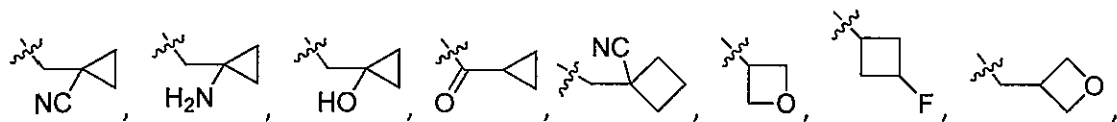
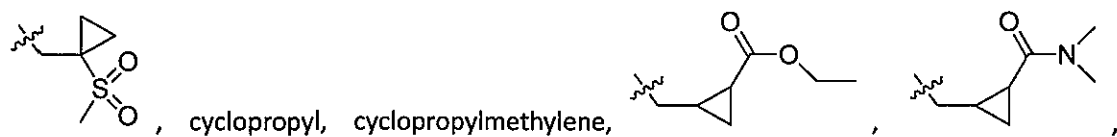
selected from , in which

R₂₁₁ is selected from the group consisting of H, F, Cl, Br, I, CN, OH, NH₂, methyl, ethyl, hydroxymethyl, and methyloxycarbonyl,

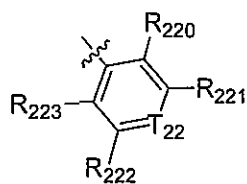
R₂₁₂ is selected from the group consisting of H, F, Cl, Br, I, CN, OH, NH₂, and methyl,

R₂₁₃ is selected from the group consisting of H, F, Cl, Br, I, CN, OH, and NH₂,

R₂₁₄ is selected from the group consisting of H, methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, tert-butyl, -CH₂CH(OH)(CH₃)₂, -CH₂CH(F)(CH₃)₂, -CH₂CH₂F, -CH₂CF₃, -CH₂CH₂CF₃, -CH₂CH₂NH₂, -CH₂CH₂OH, -CH₂CH₂OCH₃, -CH₂CH₂CH₂OCH₃, -CH₂CH₂N(CH₃)₂, -S(=O)₂CH₃, -CH₂CH₂S(=O)₂CH₃,



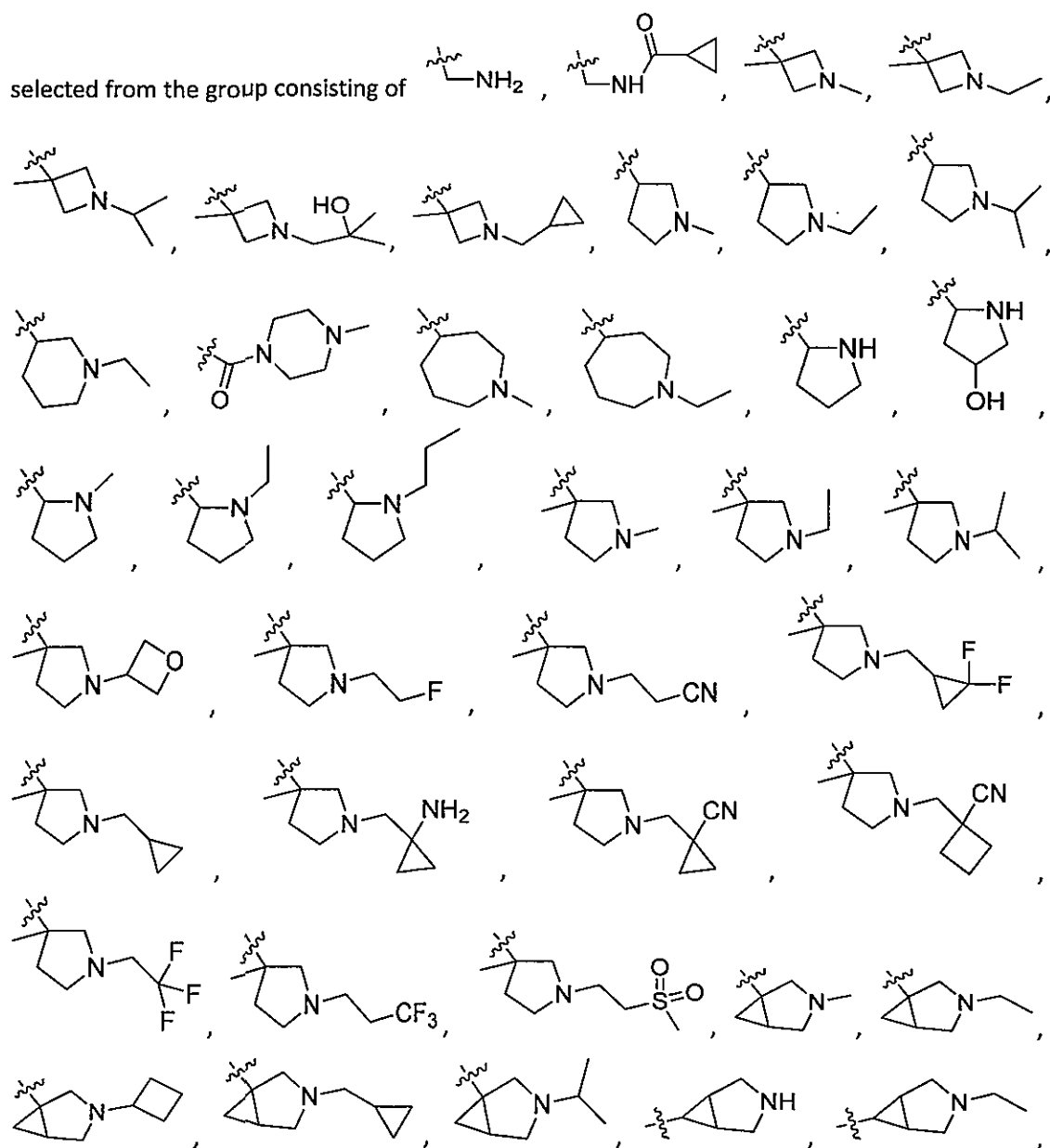
11. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R₂ is

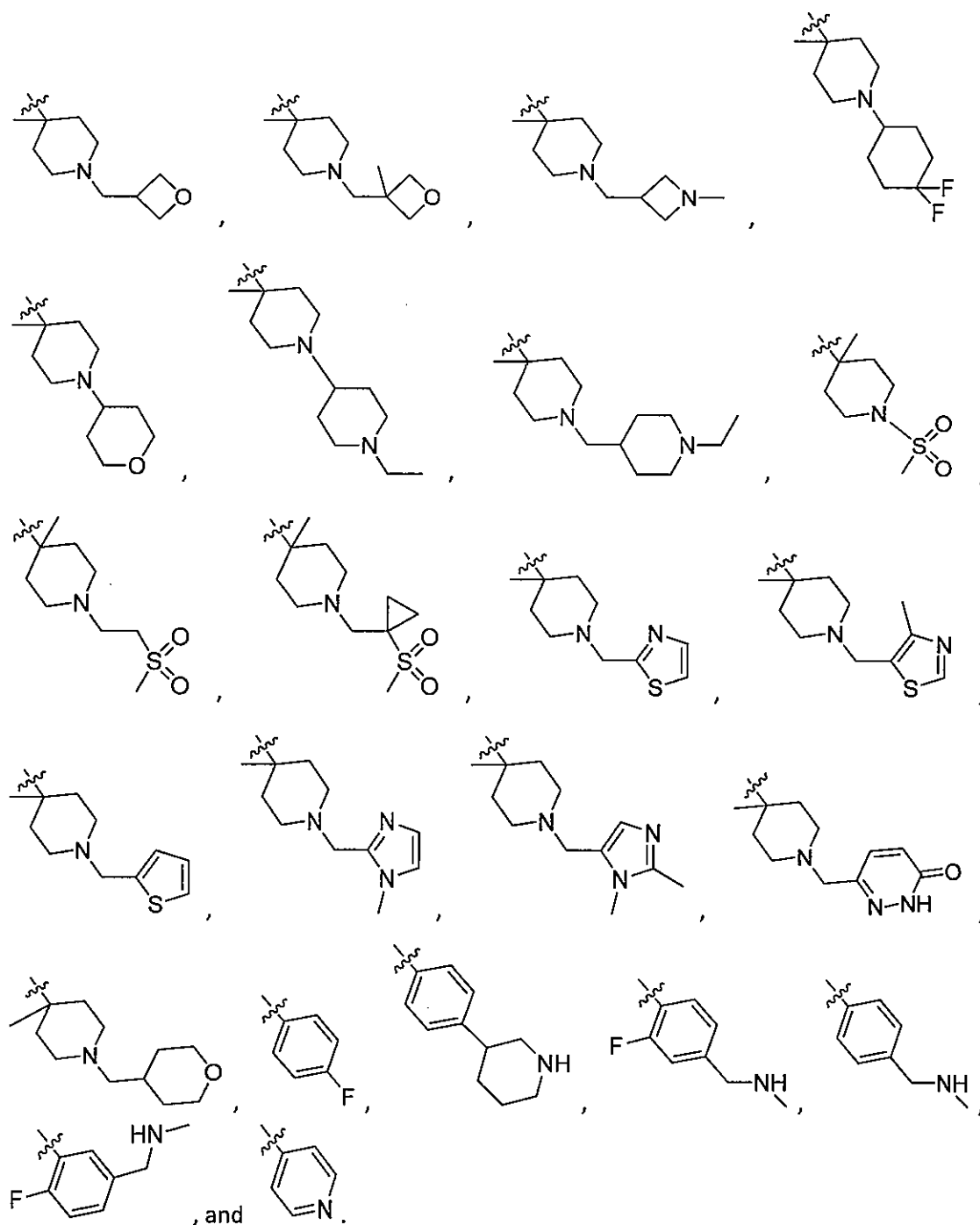


selected from $\text{C(R}_{224}\text{)}$, in which T₂₂ is selected from the group consisting of N or C(R₂₂₄), R₂₂₀₋₂₂₄ are separately and independently selected from the group consisting of H, F, Cl, Br,

I, CN, OH, SH, NH₂, C₁₋₃ alkylamino-C₁₋₃ alkyl, and ;
the C₁₋₃ alkylamino-C₁₋₃ alkyl is selected from methylaminomethylene.

12. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein R₂ is





13. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein the compound is selected from the group consisting of:

- 1) 6-fluoro-3-(piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 2) 3-(1-ethylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 3) 6-fluoro-3-(1-(2-fluoroethyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 4) 3-(1-cyclopropylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 5) 3-(1-(cyclopropylmethyl)piperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;

- 6) 6-fluoro-3-(1-(2-hydroxy-2-methylpropyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 7) 6-fluoro-3-(1-(2-fluoro-2-methylpropyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 8) 3-(1-(cyclopropanecarbonyl)piperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 9) 6-fluoro-3-(1-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 10) 6-fluoro-3-(1-isopropylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 11) 6-fluoro-3-(1-(oxetan-3-yl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 12) 6-fluoro-3-(1-propylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 13) 3-(1-(2-aminoethyl)piperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 14) 3-(1-(2-(dimethylamino)ethyl)piperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 15) 6-fluoro-3-(1-(2-methoxyethyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 16) 6-fluoro-3-(1-(2-hydroxyethyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 17) 3-(1-ethylpiperidin-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 18) 3-(1-ethylazepan-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 19) 6-fluoro-3-(1-methylazepan-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 20) 6-fluoro-3-(1-methylpyrrolidin-3-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 21) 3-(1-ethylpyrrolidin-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 22) 6-fluoro-3-(1-isopropylpyrrolidin-3-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 23) 6-fluoro-3-(pyrrolidin-2-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 24) 6-fluoro-3-(1-methylpyrrolidin-2-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 25) 3-(1-ethylpyrrolidin-2-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 26) 3-(1-ethylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 27) 6-fluoro-3-(1-propylpyrrolidin-2-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 28) 6-fluoro-3-(3-methyl-3-azabicyclo[3.1.0]hexan-1-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 29) 3-(3-ethyl-3-azabicyclo[3.1.0]hexan-1-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 30) 3-(3-cyclobutyl-3-azabicyclo[3.1.0]hexan-1-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 31) 3-(3-(cyclopropylmethylene)-3-azabicyclo[3.1.0]hexan-1-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 32) 6-fluoro-3-(3-isopropyl-3-azabicyclo[3.1.0]hexan-1-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 33) 3-(3-azabicyclo[3.1.0]hexan-6-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 34) 3-(3-ethyl-3-azabicyclo[3.1.0]hexan-6-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 35) 3-(8-ethyl-8-azabicyclo[3.2.1]octan-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;

- boxamide;
- 36) 6-fluoro-3-(4-hydroxypyrrolidin-2-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 37) 3-cyano-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 38) 3-cyano-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 39) 3-(aminomethyl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 40) 3-(cyclopropanecarboxamidomethylene)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 41) 6-fluoro-3-(4-fluorophenyl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 42) 6-fluoro-3-(2-fluoro-4-((methylamino)methylene)phenyl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 43) 6-fluoro-3-(4-((methylamino)methyl)phenyl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 44) 6-fluoro-3-(2-fluoro-5-((methylamino)methyl)phenyl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 45) 6-fluoro-3-(pyridin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 46) 6-fluoro-3-(4-(piperidin-3-yl)phenyl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 47) 6-fluoro-3-(tetrahydro-2H-pyran-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 48) 3-(4-(dimethylamino)cyclohexyl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 49) 6-fluoro-3-(4-methylpiperazine-1-carbonyl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 50) 3-(1-(cyclopropylmethyl)piperidin-4-yl)-4,4,6-trifluoro-4H-pyrazolo[1,5- α]indole-8-carboxamide;
 - 51) 3-(1-ethylpiperidin-4-yl)-6-fluoro-4-hydroxy-4H-pyrazolo[1,5- α]indole-8-carboxamide;
 - 52) 3-(1-ethylpiperidin-4-yl)-6-fluoro-4-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 53) 6-fluoro-3-(4-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 54) 3-(1-ethyl-4-methylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 55) 3-(1-cyclopropyl-4-methylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide ;
 - 56) 6-fluoro-3-(1-(2-hydroxy-2-methylpropyl)-4-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 57) 3-(1-(cyclopropylmethylene)-4-methylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 58) 3-(1-(4,4-difluorocyclohexyl)-4-methylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 59) 6-fluoro-3-(4-methyl-1-(tetrahydro-2H-pyran-4-yl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 60) 6-fluoro-3-(1-(2-fluoroethyl)-4-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 61) 6-fluoro-3-(4-methyl-1-(2,2,2-trifluoroethyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
 - 62) 6-fluoro-3-(4-methyl-1-(3,3,3-trifluoropropyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;

- 63) 3-(1-((1-cyanocyclopropyl)methyl)-4-methylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 64) 3-(1-((1-cyanocyclobutyl)methyl)-4-methylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 65) 6-fluoro-3-(4-methyl-1-(2-(methylsulfonyl)ethyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 66) 6-fluoro-3-(4-methyl-1-((tetrahydro-2H-pyran-4-yl)methyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 67) 3-(1-((1-aminocyclopropyl)methyl)-4-methylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 68) 6-fluoro-3-(4-methyl-1-(oxetan-3-ylmethyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 69) 6-fluoro-3-(1-(2-methoxyethyl)-4-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 70) 6-fluoro-3-(1-((1-hydroxycyclopropyl)methyl)-4-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 71) 6-fluoro-3-(4-methyl-1-((3-methyloxetan-3-yl)methyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 72) 6-fluoro-3-(1-(3-methoxypropyl)-4-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 73) 6-fluoro-3-(4-methyl-1-((1-(methylsulfonyl)cyclopropyl)methyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 74) 6-fluoro-3-(4-methyl-1-(thiazol-2-ylmethyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 75) 6-fluoro-3-(4-methyl-1-(methylsulfonyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 76) 6-fluoro-3-(1-(3-fluorocyclobutyl)-4-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 77) 6-fluoro-3-(4-methyl-1-(thiophen-2-ylmethyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 78) 3-(1-((1-ethylpiperidin-4-yl)methyl)-4-methylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 79) 6-fluoro-3-(4-methyl-1-((1-methylazetidin-3-yl)methyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 80) ethyl
2-((4-(8-carbamoyl-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazol-3-yl)-4-methylpiperidin-1-yl)methyl)cyclopropanecarboxylate;
- 81) 3-(1-((2-(dimethylcarbamoyl)cyclopropyl)methyl)-4-methylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 82) 6-fluoro-3-(1-isobutyl-4-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 83) 6-fluoro-3-(4-methyl-1-((4-methylthiazol-5-yl)methyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 84) 6-fluoro-3-(4-methyl-1-((1-methyl-1H-imidazol-2-yl)methyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;

- 85) 3-(1-((1,2-dimethyl-1H-imidazol-5-yl)methyl)-4-methylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide
- 86) 3-(1'-ethyl-4-methyl-[1,4'-bipiperidin]-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 87) 6-fluoro-3-(4-methyl-1-((6-oxo-1,6-dihydropyridazin-3-yl)methyl)piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 88) 3-(1-(2-cyanoethyl)-4-methylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 89) 6-chloro-3-(1-ethyl-4-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 90) 3-(1-ethyl-3-methylpyrrolidin-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 91) 3-(1,3-dimethylpyrrolidin-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide ;
- 92) 6-fluoro-3-(1-isopropyl-3-methylpyrrolidin-3-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 93) 3-(1-(cyclopropylmethyl)-3-methylpyrrolidin-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 94) 6-fluoro-3-(3-methyl-1-(oxetan-3-yl)pyrrolidin-3-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 95) 6-fluoro-3-(1-(2-fluoroethyl)-3-methylpyrrolidin-3-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 96) 3-(1-((2,2-difluorocyclopropyl)methyl)-3-methylpyrrolidin-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 97) 6-fluoro-3-(3-methyl-1-(2,2,2-trifluoroethyl)pyrrolidin-3-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 98) 6-fluoro-3-(3-methyl-1-(2-(methylsulfonyl)ethyl)pyrrolidin-3-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 99) 6-fluoro-3-(3-methyl-1-(3,3,3-trifluoropropyl)pyrrolidin-3-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 100) 3-(1-((1-aminocyclopropyl)methyl)-3-methylpyrrolidin-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 101) 3-(1-((1-cyanocyclobutyl)methyl)-3-methylpyrrolidin-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 102) 3-(1-((1-cyanocyclopropyl)methyl)-3-methylpyrrolidin-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 103) 3-(1-(2-cyanoethyl)-3-methylpyrrolidin-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 104) 3-(1-(cyclopropylmethyl)-3-methylazetidin-3-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 105) 6-fluoro-3-(1-isopropyl-4-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 106) 6-fluoro-3-(4-methyl-1,1-dioxido-2H-thiopyran-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 107) 3-(1,4-diethylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;

- 108) 3-(4-cyano-1-(cyclopropylmethyl)piperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 109) 3-(1-(cyclopropylmethyl)-4-(hydroxymethyl)piperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 110) Methyl
4-(8-carbamoyl-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazol-3-yl)-1-(cyclopropylmethyl)piperidine-4-carboxylate;
- 111) 3-(1-(cyclopropylmethyl)-4-methylpiperidin-4-yl)-6-fluoro-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 112) 3-(1-ethyl-4-methylpiperidin-4-yl)-6-fluoro-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 113) 6-fluoro-3-(1-isobutyl-4-methylpiperidin-4-yl)-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 114) 6-fluoro-3-(1-isopropyl-4-methylpiperidin-4-yl)-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 115) 3-(1,4-dimethylpiperidin-4-yl)-6-fluoro-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 116) 6-fluoro-3-(1-(2-hydroxy-2-methylpropyl)-4-methylpiperidin-4-yl)-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 117) 3-(1-ethyl-2,4-dimethylpiperidin-4-yl)-6-fluoro-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 118) 3-(1-ethyl-3-methylpyrrolidin-3-yl)-6-fluoro-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 119) 6-fluoro-3-(1-isopropyl-3-methylpyrrolidin-3-yl)-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 120) 3-(1-(cyclopropylmethyl)-3-methylpyrrolidin-3-yl)-6-fluoro-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 121) 3-(1,3-dimethylazetidin-3-yl)-6-fluoro-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 122) 3-(1-ethyl-3-methylazetidin-3-yl)-6-fluoro-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 123) 6-fluoro-3-(1-isopropyl-3-methylazetidin-3-yl)-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 124) 3-(1-(cyclopropylmethyl)-3-methylazetidin-3-yl)-6-fluoro-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 125) 6-fluoro-3-(1-(2-hydroxy-2-methylpropyl)-3-methylazetidin-3-yl)-2-methyl-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 126) 6-fluoro-3-(1-isopropyl-4-methylpiperidin-4-yl)-2-methoxy-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 127) 2-(benzyloxy)-6-fluoro-3-(1-isopropyl-4-methylpiperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 128) 6-fluoro-2-(piperidin-4-yl)-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide;
- 129) 2-(1-ethylpiperidin-4-yl)-6-fluoro-4H-benzo[4,5]imidazo[1,2-b]pyrazole-8-carboxamide.

14. Use of the compound of any one of claims 1-13 or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for the treatment of cancer, stroke, cardiac ischemia, inflammation and diabetes.

15. A therapeutic agent for use in treating cancer, stroke, cardiac ischemia, inflammation or diabetes, comprising the compound of any one of claims 1-13 or a pharmaceutically acceptable salt thereof.