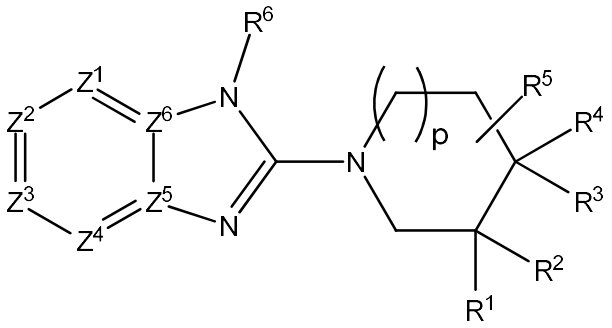
diabetic nephropathy, sepsis, pulmonary hypertension, acute lung disorder, acute respiratory distress syndrome (ARDS) heart failure, stroke, malignant tumor , and muscular dystrophy. There remains a need for agents that exploit different mechanisms of action and may have better outcomes in terms of relief of symptoms, safety, and patient mortality, both short-term and long-term.

SUMMARY

The present disclosure provides compounds which inhibit TRPC proteins, and more specifically inhibit TRPC6 proteins. The present disclosure provides, in one example, benzimidazole compounds which inhibit TRPC6 activity. Inhibition of TRPC6 activity may be particularly desirable in the treatment or prevention of a variety of diseases including nephrotic syndrome, focal segmental glomerulosclerosis, membranous nephropathy, diabetic nephropathy, heart failure, stroke, acute lung injury, acute respiratory distress syndrome (ARDS) and acute renal failure.

In one aspect, the present disclosure refers to a compound or pharmaceutically acceptable salt thereof, according to Formula I:



(I)

Wherein

p is 0 or 1;

when p is 0, then R^1 is hydrogen, C_1-C_6alkyl, halogen or hydroxy; R^2 is amino or aminoC_1-C_4alkyl; R^3 is hydrogen; and R^4 is C_1-C_6alkyl or phenyl; or

when p is 0, then R^1 and R^3, taken in combination, form a fused C_3-C_6cycloalkyl ring or a fused 4 to 6 member heterocycle ring having 1 or 2 ring heteroatoms independently selected from N, O or S, which cycloalkyl or heterocycle is optionally substituted with amino; R^2 is hydrogen, C_1-C_6alkyl or aminoC_1-C_4alkyl; and R^4 is hydrogen; or

when p is 1, then R^1 is NHR^{1a}; R^{1a} is hydrogen, C_1-C_4alkyl, C_3-C_7cycloalkyl, hydroxyC_1-C_4alkyl,or 4 to 6 member heterocycloalkyl having one ring heteroatom selected from N, O or S; R^2 is hydrogen, C_1-C_4alkyl, hydroxyC_1-C_4alkyl or $C(O)NH_2$; R^3 is halogen, C_1-C_4alkyl, C_1-C_4alkoxy or hydroxy; and R^4 is hydrogen, C_1-C_4alkyl or halogen; or

when p is 0 or 1, then CR^1R^2, taken in combination, form a spirocyclic 4 to 6 member heterocycloalkyl; R^3 is hydrogen, halogen, C_1-C_4alkyl, C_1-C_4alkoxy, or hydroxy; and R^4 is hydrogen or halogen; or

Z^2 is N or CR^{12};

Z^3 is N or CR^{13};

Z^4 is N or CR^{14},

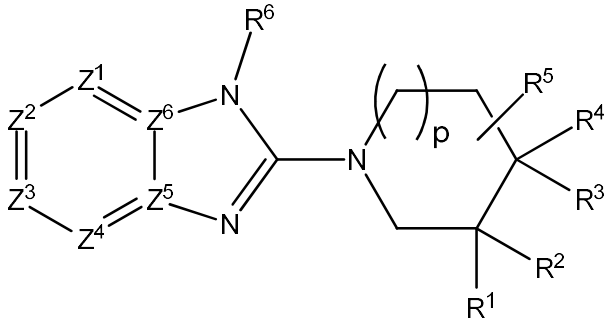
Z^5 and Z^6 are each independently N or C;

wherein 0, 1 or 2 of Z^1, Z^2, Z^3, Z^4, Z^5 and Z^6 are N;

each of R^{11}, R^{12}, R^{13} and R^{14} is independently selected from the group consisting of hydrogen, halogen, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6alkoxy, haloC_1-C_6alkyl, haloC_1-C_6alkoxy, C_3-C_7cycloalkyl, cyano, SO_2C_1-C_6alkyl, phenyl, and saturated, partially unsaturated or aromatic 5 or 6 member heterocycle having 1 or 2 ring heteroatoms independently selected from N, O and S, which heterocycle is optionally substituted with 1 or 2 substituents independently selected from C_1-C_6alkyl andhalogen; and

R^{15} is selected at each occurrence from hydrogen or C_1-C_4alkyl, or $N(R^{15})_2$, taken in combination, form a 4 to 7 member azacycle optionally substituted with 0, 1 or 2 C_1-C_4alkyl; with the proviso that compounds of Formula I do not include 1- [7-fluoro-6-methoxy-1-[[2-(trifluoromethyl)phenyl]methyl]-1*H*-benzimidazol-2-yl]-3-piperidinamine.

In another aspect, the present disclosure refers to a compound or pharmaceutically acceptable salt thereof, according to Formula I:



(I)

Wherein

p is 0 or 1;

when p is 0, then R^1 is hydrogen, C_1-C_6alkyl, halogen or hydroxy; R^2 is amino or aminoC_1-C_4alkyl; R^3 is hydrogen; and R^4 is C_1-C_6alkyl or phenyl; or

when p is 0, then R^1 and R^3, taken in combination, form a fused C_3-C_6cycloalkyl ring or a fused 4 to 6 member heterocycle ring having 1 or 2 ring heteroatoms independently selected from N, O or S, which cycloalkyl or heterocycle is optionally substituted with amino; R^2 is hydrogen, C_1-C_6alkyl or aminoC_1-C_4alkyl; and R^4 is hydrogen; or

when p is 1, then R^1 is NHR^{1a}; R^{1a} is hydrogen, C_1-C_4alkyl, C_3-C_7cycloalkyl, hydroxyC_1-C_4alkyl,or 4 to 6 member heterocycloalkyl having one ring heteroatom selected from N, O or S; R^2 is hydrogen, C_1-C_4alkyl, hydroxyC_1-C_4alkyl or $C(O)NH_2$; R^3 is halogen, C_1-C_4alkyl, C_1-C_4alkoxy or hydroxy; and R^4 is hydrogen, C_1-C_4alkyl or halogen; or

C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, haloC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, $C(O)NH_2$, C(O)OH or $C(O)NHC_1$-C_6alkyl;

R^7 is hydrogen, C_1-C_4alkyl or amino;

R^8 is hydrogen or C_1-C_4alkyl; or

CR^7R^8, taken in combination form a 3 to 6 member cycloalkandiyl group;

R^9 is hydrogen, C_1-C_6alkyl, hydroxyC_1-C_6alkyl, haloC_1-C_6alkyl or cyano C_1-C_6alkyl;

R^{10} is hydrogen, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, halo C_1-C_6alkyl, C_3-C_7cycloalkyl or 4 to 7 member heterocycle, which heterocycle has 1 or 2 ring hetero atoms selected from N, O or S, which sulfur may be optionally oxidized, and wherein each alkyl or cycloalkyl is optionally substituted with cyano, halogen, hydroxy, C_1-C_6alkoxy, $S(O)_qC_1$-C_6alkyl, 4 to 6 member heterocycle having 1 or 2 ring heteroatoms selected from N, O or S or 5 or 6 member heteroaryl having 1 ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms; or

NR^9R^{10}, taken in combination, form a monocyclic or bicyclic 4 to 9 member heterocycle having one ring nitrogen atom and 0 or 1 additional ring heteroatom selected from N, O or S, which ring sulfur may be optionally oxidized, which heterocycle is optionally substituted with 0, 1 or 2 substitutents selected from halogen, oxo, hydroxy, cyano, C_1-C_6alkyl, halo C_1-C_6alkyl, hydroxyC_1-C_6alkyl, C_1-C_6alkoxy, $S(O)_qC_1$-C_6alkyl, CO_2H, $C(O)C_1$-C_6alkyl, or $C(O)NH_2$;

q is 0, 1 or 2;

Z^1 is N or CR^{11};

Z^2 is N or CR^{12};

Z^3 is N or CR^{13};

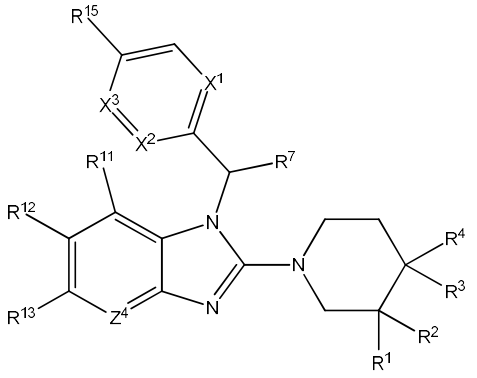
Z^4 is N or CR^{14},

Z^5 and Z^6 are each independently N or C;

wherein 0, 1 or 2 of Z^1, Z^2, Z^3, Z^4, Z^5 and Z^6 are N;

each of R^{11}, R^{12}, R^{13} and R^{14} is independently selected from the group consisting of hydrogen, halogen, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6alkoxy, haloC_1-C_6alkyl, haloC_1-C_6alkoxy, C_3-C_7cycloalkyl, cyano, SO_2C_1-C_6alkyl, phenyl, and saturated, partially unsaturated or aromatic 5 or 6 member heterocycle having 1 or 2 ring heteroatoms independently selected from N, O and S, which heterocycle is optionally substituted with 1 or 2 substituents independently selected from C_1-C_6alkyl and halogen; and with the proviso that compounds of Formula I do not include 1- [7-fluoro-6-methoxy-1-[[2-(trifluoromethyl)phenyl]methyl]-1*H*-benzimidazol-2-yl]-3-piperidinamine.

In another aspect, the present disclosure refers to a compound of Formula III:



(III)

Wherein

X^1 is CR^{16} or N;

X^2 is CR^{17} or N;

X^3 is CR^{18} or N;

Z^4 is N or CR^{14};

R^1 is NHR^{1a};

R^{1a} is hydrogen or C_1-C_4alkyl;

R^2 is hydrogen or C_1-C_4alkyl;

R^3 is hydrogen or halogen;

R^4 is hydrogen or halogen;

R^7 is hydrogen, methyl or ethyl;

R^{11} is hydrogen, halogen, cyano or C_1-C_4alkyl;

R^{12} and R^{13} are each independently selected from the group consisting of hydrogen, halogen, cyano, C_1-C_4alkyl, haloC_1-C_4alkyl, C_1-C_4alkoxy, or haloC_1-C_4alkoxy;

R^{14} is hydrogen, halogen, cyano or C_1-C_4alkyl;

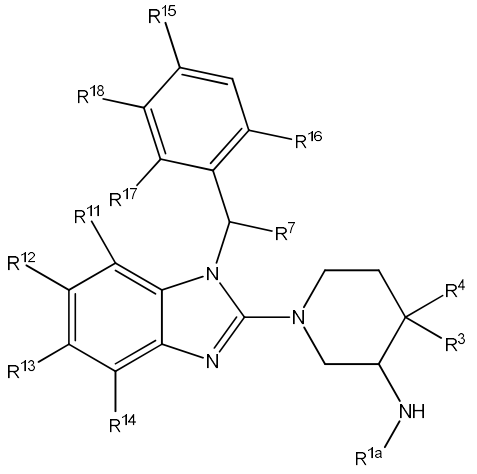
R^{15} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl, haloC_1-C_4alkoxy, $C(O)NH_2$, $C(O)NH(C_1$-C_4alkyl) or 5 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms;

R^{16} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl or haloC_1-C_4alkoxy;

R^{17} is hydrogen or halogen; and

R^{18} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl or haloC_1-C_4alkoxy, wherein at least one of R^{15}, R^{16}, R^{17} or R^{18} is not hydrogen.

In another aspect, the present disclosure refers to a compound of Formula VI:



(VI)

Wherein

R^{1a} is hydrogen or C_1-C_4alkyl;

R^3 is hydrogen or halogen;

R^4 is hydrogen or halogen;

R^7 is hydrogen, methyl or ethyl;

R^{11} is hydrogen, halogen, cyano or C_1-C_4alkyl;

R^{12} and R^{13} are each independently selected from the group consisting of hydrogen, halogen, cyano, C_1-C_4alkyl, haloC_1-C_4alkyl, C_1-C_4alkoxy, or haloC_1-C_4alkoxy;

R^{14} is hydrogen, halogen, cyano or C_1-C_4alkyl;

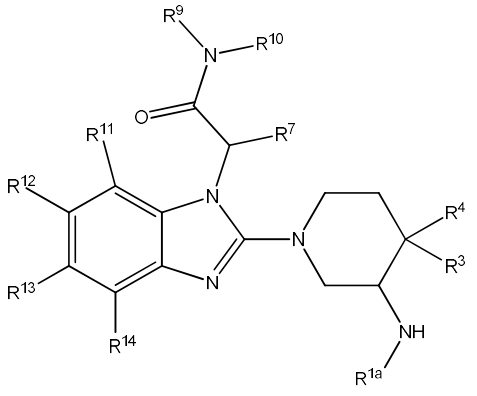
R^{15} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl, haloC_1-C_4alkoxy, $C(O)NH_2$, $C(O)NH(C_1$-C_4alkyl) or 5 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms;

R^{16} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl or haloC_1-C_4alkoxy;

R^{17} is hydrogen or halogen; and

R^{18} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl or haloC_1-C_4alkoxy, wherein at least one of R^{15}, R^{16}, R^{17} or R^{18} is not hydrogen.

In another aspect, the present disclosure refers to a compound of Formula VII:



(VII)

Wherein

R^{1a} is hydrogen or C_1-C_4alkyl;

R^3 is hydrogen or halogen;

R^4 is hydrogen or halogen;

R^7 is hydrogen, methyl or ethyl;

R^9 is hydrogen, methyl or ethyl;

R^{10} is C_1-C_4alkyl or haloC_1-C_4alkyl wherein each alkyl is optionally substituted with cyano, halogen, hydroxy, C_1-C_6alkoxy or $S(O)_qC_1$-C_6alkyl; or

NR^9R^{10}, taken in combination, form a 4 to 6 member monocyclic azacycle or a 7 to 9 member bicyclic azacycle, each of which having one ring nitrogen atom and 0 or 1 additional ring heteroatom selected from N, O or S, which ring sulfur may be optionally oxidized, wherein each azacycle is optionally substituted with 0, 1 or 2 substitutents selected from halogen, oxo, hydroxy, cyano, C_1-C_6alkyl, halo C_1-C_6alkyl, hydroxyC_1-C_6alkyl, C_1-C_6alkoxy, $S(O)_2C_1$-C_6alkyl, CO_2H, $C(O)C_1$-C_6alkyl, or $C(O)NH_2$;

R^{11} is hydrogen, halogen, cyano or C_1-C_4alkyl;

R^{12} and R^{13} are each independently selected from the group consisting of hydrogen, halogen, cyano, C_1-C_4alkyl, haloC_1-C_4alkyl, C_1-C_4alkoxy, or haloC_1-C_4alkoxy; and

R^{14} is hydrogen, halogen, cyano or C_1-C_4alkyl.

In another aspect, the present disclosure refers to a compound, selected from:

(S)-6-((2-(3-aminopiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-4-carbonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3S,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(5-amino-3,3-difluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazole-4-carbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-(trifluoromethoxy)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-(trifluoromethoxy)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-fluoro-5-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-fluoro-6-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3aR,7aR)-hexahydro-1H-pyrrolo[2,3-c]pyridin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3aR,7aS)-hexahydro-1H-pyrrolo[2,3-c]pyridin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3aS,7aS)-hexahydro-1H-pyrrolo[2,3-c]pyridin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3aS,7aR)-hexahydro-1H-pyrrolo[2,3-c]pyridin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(1,6-diazaspiro[3.5]nonan-6-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(1,6-diazaspiro[3.5]nonan-6-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(3R,4R)-1-(1-((5-chloropyridin-2-yl)methyl)-6-(methylsulfonyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-1-(1-((5-chloropyridin-2-yl)methyl)-5-(methylsulfonyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazole-4-carbonitrile;

(3R,4R)-1-(5,7-difluoro-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-1-(4,6-difluoro-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-1-(5,7-difluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-1-(4,6-difluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-fluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-4-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-fluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-4-carbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(3R,4S)-1-(1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4S)-1-(1-((5-chloropyrimidin-2-yl)methyl)-5-fluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

tert-butyl ((3R,4R)-1-(1-((5-cyanopyridin-2-yl)methyl)-5,6-dimethyl-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-yl)carbamate;

(S)-6-((2-(3-aminopiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(S)-6-((2-(3-aminopiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(S)-2-(3-aminopiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

(S)-2-(3-aminopiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-4,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-4,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-4,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-5,7-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,7-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-4,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5,7-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-5,7-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((1R,5S)-1-(aminomethyl)-3-azabicyclo[3.1.0]hexan-3-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((1S,5R)-1-(aminomethyl)-3-azabicyclo[3.1.0]hexan-3-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3aR,4R,6aS)-4-aminohexahydrocyclopenta[c]pyrrol-2(1H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3aS,4S,6aR)-4-aminohexahydrocyclopenta[c]pyrrol-2(1H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3aR,4S,6aS)-4-aminohexahydrocyclopenta[c]pyrrol-2(1H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3aS,4R,6aR)-4-aminohexahydrocyclopenta[c]pyrrol-2(1H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(R)-6-((2-(3-(aminomethyl)pyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(S)-6-((2-(3-(aminomethyl)pyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(R)-1-(1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4,4-difluoropiperidin-3-amine hydrochloride;

(3R,4S)-1-(1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-4-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-3H-imidazo[4,5-b]pyridin-3-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-imidazo[4,5-b]pyridin-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-imidazo[4,5-b]pyridin-1-yl)methyl)-N-(tert-butyl)nicotinamide;

6-((2-((3R,4R)-3-amino-4-hydroxypiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3S,4S)-3-amino-4-hydroxypiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-(2,6-diazaspiro[3.4]octan-6-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((4aR,7aS)-hexahydropyrrolo[3,4-b][1,4]oxazin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((4aS,7aR)-hexahydropyrrolo[3,4-b][1,4]oxazin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((4aR,7aR)-hexahydropyrrolo[3,4-b][1,4]oxazin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((4aS,7aS)-hexahydropyrrolo[3,4-b][1,4]oxazin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-3-amino-1-(1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidine-3-carboxamide;

(R)-3-amino-1-(1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidine-3-carboxamide;

(S)-6-((2-(3-amino-3-(hydroxymethyl)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-3-(hydroxymethyl)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-chloro-5-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-chloro-6-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-fluoro-5-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-fluoro-6-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3S)-3-(methylamino)-1-piperidinyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R)-3-(methylamino)-1-piperidinyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-(difluoromethoxy)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-(difluoromethoxy)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-4-methoxy-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-4-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

5-((2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarboxamide;

5-((2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarboxamide;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-chloro-5-(trifluoromethoxy)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-chloro-6-(trifluoromethoxy)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-chloro-5-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-chloro-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((5R)-1,7-diazaspiro[4.5]decan-7-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile, 6-((2-((5S)-1,7-diazaspiro[4.5]decan-7-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((6R)-1,8-diazaspiro[5.5]undecan-8-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((6S)-1,8-diazaspiro[5.5]undecan-8-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((4aR,8aR)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((4aS,8aS)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

5-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarboxamide;

5-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarboxamide;

6-((2-((5R)-1,7-diazaspiro[4.5]decan-7-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((5S)-1,7-diazaspiro[4.5]decan-7-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-5-methoxy-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-6-methoxy-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3S)-3-(methylamino)-1-piperidinyl)-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3S)-3-(methylamino)-1-piperidinyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3S)-3-amino-3-methyl-1-piperidinyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile 2,2,2-trifluoroacetate;

(S)-6-((2-(3-aminopiperidin-1-yl)-5-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile 2,2,2-trifluoroacetate;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4-chloro-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile 2,2,2-trifluoroacetate;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazole-4-carbonitrile;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-5-fluoro-1H-benzo[d]imidazole-7-carbonitrile;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazole-4-carbonitrile;

6-((2-((3R,4R)-3-amino-4-hydroxypiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-hydroxypiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-4-((2-(3-amino-4,4-difluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-hydroxypiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile compound with 4-((2-((3S,4S)-3-amino-4-hydroxypiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile (1:1) dihydrochloride;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,7-difluoro-1H-benzimidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-4,6-difluoro-1H-benzimidazol-1-yl)methyl)benzonitrile;

2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-1-(4-cyanobenzyl)-1H-benzimidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-1-(4-cyanobenzyl)-1H-benzimidazole-5-carbonitrile;

2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-1-(4-cyanobenzyl)-1H-benzimidazole-6-carbonitrile;

2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-1-(4-cyanobenzyl)-1H-benzimidazole-5-carbonitrile;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-methylpiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-(3-(aminomethyl)-3-methylpyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3S,4R)-3-amino-4-phenylpyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile & 4-((2-((3R,4S)-3-amino-4-phenylpyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(S)-4-((2-(3-aminopyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(S)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-(6-amino-2-azaspiro[4.4]nonan-2-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-(4-aminohexahydrocyclopenta[c]pyrrol-2(1H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3S,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3S,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-(aminomethyl)-3-fluoropyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(S)-4-((2-(3-(aminomethyl)-3-fluoropyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(R)-4-((2-(3-(aminomethyl)-3-hydroxypyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(S)-4-((2-(3-(aminomethyl)-3-hydroxypyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(S)-4-((2-(3-(aminomethyl)pyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-(aminomethyl)pyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3S,4S)-3-amino-4-methylpiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

4-((2-((3S,4R)-3-amino-4-methylpiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

4-((2-((3R,4S)-3-amino-4-methylpiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

4-((2-((1S,5R)-1-(aminomethyl)-3-azabicyclo[3.1.0]hexan-3-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((1R,5S)-1-(aminomethyl)-3-azabicyclo[3.1.0]hexan-3-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-aminopiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-aminopiperidin-1-yl)-5-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

(3R,4R)-4-fluoro-1-(1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(3R,4R)-4-fluoro-1-(1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

(3R,4R)-1-(1-((5-bromopyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-4-fluoro-1-(1-((5-(trifluoromethyl)pyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(3R,4R)-4-fluoro-1-(1-((5-methoxypyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(3R,4R)-1-(1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-bromopyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-bromopyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

5-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)pyrazine-2-carbonitrile;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

(3R,4R)-3-amino-1-(1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazol-2-yl)piperidin-4-ol;

(3R,4R)-3-amino-1-(1-((5-chloropyrimidin-2-yl)methyl)-5-fluoro-1H-benzo[d]imidazol-2-yl)piperidin-4-ol;

6-((2-((3R,4R)-3-amino-4-hydroxypiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-hydroxypiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-1-(1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(S)-5-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)picolinonitrile;

(3R,4R)-1-(1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile hydrochloride;

(3R,4R)-1-(1-((R)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(1-((S)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(1-((R)-1-(5-chloropyridin-2-yl)ethyl)-5,6-difluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(1-((S)-1-(5-chloropyridin-2-yl)ethyl)-5,6-difluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(5-chloro-1-((R)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(5-chloro-1-((S)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(6-chloro-1-((R)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(6-chloro-1-((S)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((R)-1-(5-cyanopyridin-2-yl)ethyl)-1H-benzo[d]imidazole-6-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((R)-1-(5-cyanopyridin-2-yl)ethyl)-1H-benzo[d]imidazole-5-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((S)-1-(5-cyanopyridin-2-yl)ethyl)-1H-benzo[d]imidazole-6-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((S)-1-(5-cyanopyridin-2-yl)ethyl)-1H-benzo[d]imidazole-5-carbonitrile hydrochloride;

(3R,4R)-1-(1-((5-chloropyridin-2-yl)methyl)-5,6-difluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(5,6-difluoro-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(R)-1-(1-((5-chloropyridin-2-yl)methyl)-5,7-difluoro-1H-benzo[d]imidazol-2-yl)-4,4-difluoropiperidin-3-amine hydrochloride;

(R)-1-(1-((5-chloropyridin-2-yl)methyl)-4,6-difluoro-1H-benzo[d]imidazol-2-yl)-4,4-difluoropiperidin-3-amine hydrochloride;

(R)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)-2,3-dihydro-1H-indene-5-carbonitrile hydrochloride;

(S)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)-2,3-dihydro-1H-indene-5-carbonitrile hydrochloride;

(R)-5-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)pyrazine-2-carbonitrile;

(R)-5-((2-(3-amino-4,4-difluoropiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)pyrazine-2-carbonitrile;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-N-isopropylacetamide;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(azetidin-1-yl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-N-(2-cyanopropyl)-N-ethylacetamide;

3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-methylpyrrolidin-2-one;

3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-phenylpiperidin-2-one;

3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(4-chlorophenyl)pyrrolidin-2-one;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-methoxypyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-methoxypyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((6-(trifluoromethyl)pyridin-3-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((6-(trifluoromethyl)pyridin-3-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile hydrochloride;

(S)-3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-methylpyrrolidin-2-one;

(R)-3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-methylpyrrolidin-2-one;

(S)-3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(4-chlorophenyl)pyrrolidin-2-one;

(R)-3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(4-chlorophenyl)pyrrolidin-2-one;

2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-1-((5-cyano-2-pyrazinyl)methyl)-1H-benzimidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-1-((5-cyano-2-pyrazinyl)methyl)-1H-benzimidazole-5-carbonitrile;

5-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-4,6-difluoro-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarbonitrile;

5-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,7-difluoro-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarbonitrile;

(3S)-1-(1-((5-fluoro-2-pyridinyl)methyl)-1H-benzimidazol-2-yl)-N-methyl-3-piperidinamine;

(3S)-1-(1-((5-chloro-2-pyridinyl)methyl)-1H-benzimidazol-2-yl)-N-methyl-3-piperidinamine;

6-((1R)-1-(2-((3S)-3-(methylamino)-1-piperidinyl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1S)-1-(2-((3S)-3-(methylamino)-1-piperidinyl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

(3R,4R)-1-(1-((5-chloro-2-pyrimidinyl)methyl)-5,7-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((5-chloro-2-pyrimidinyl)methyl)-4,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1-methyl-1H-indazol-4-yl)methyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(5-quinolinylmethyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1R)-1-(8-quinolinyl)ethyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1S)-1-(8-quinolinyl)ethyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((3-(3-chlorophenyl)-1,2-oxazol-5-yl)methyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1-methyl-1H-indazol-7-yl)methyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(2,6-dichlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

1-(1-azetidinyl)-2-(2-((3S)-3-(methylamino)-1-piperidinyl)-1H-benzimidazol-1-yl)ethanone;

6-((1R)-1-(4,6-difluoro-2-((4aR,8aR)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1R)-1-(4,6-difluoro-2-((4aS,8aS)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1S)-1-(4,6-difluoro-2-((4aS,8aS)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1S)-1-(4,6-difluoro-2-((4aR,8aR)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1R)-1-(5,7-difluoro-2-((4aR,8aR)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1R)-1-(5,7-difluoro-2-((4aS,8aS)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1S)-1-(5,7-difluoro-2-((4aS,8aS)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1S)-1-(5,7-difluoro-2-((4aR,8aR)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-N-methylacetamide;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-1-(4-morpholinyl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-1-(1-pyrrolidinyl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-N,N-dimethylacetamide;

(2R)-2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-N,N-dimethylpropanamide;

(2S)-2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-N,N-dimethylpropanamide;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-1-(1-piperidinyl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-N-ethylacetamide;

1-((5-chloro-2-pyrimidinyl)methyl)-2-((3R,4R)-4-fluoro-3-(methylamino)-1-piperidinyl)-1H-benzimidazole-6-carbonitrile;

1-((5-chloro-2-pyrimidinyl)methyl)-2-((3R,4R)-4-fluoro-3-(methylamino)-1-piperidinyl)-1H-benzimidazole-5-carbonitrile;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-chloro-1H-benzimidazol-1-yl)-1-(1-azetidinyl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-chloro-1H-benzimidazol-1-yl)-1-(1-azetidinyl)ethanone;

2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-1-(2-(1-azetidinyl)-2-oxoethyl)-1H-benzimidazole-6-carbonitrile;

2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-1-(2-(1-azetidinyl)-2-oxoethyl)-1H-benzimidazole-5-carbonitrile;

(3R,4R)-1-(1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-1-(1-((5-chloropyrimidin-2-yl)methyl)-5-fluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(R)-6-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-5-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)picolinonitrile 2,2,2-trifluoroacetate;

(R)-1-(1-(isoquinolin-7-ylmethyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-((1-methyl-1H-indazol-7-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

6-((R)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile hydrochloride;

6-((S)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile hydrochloride;

6-((R)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile hydrochloride;

6-((S)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile hydrochloride;

6-((R)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)propyl)nicotinonitrile hydrochloride;

6-((S)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)propyl)nicotinonitrile hydrochloride;

(3R,4R)-1-(5,6-difluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

3-(1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile;

(3R,4R)-1-(5,6-difluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4S)-1-(5,6-difluoro-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4S)-4-fluoro-1-(1-((5-fluoropyrimidin-2-yl)methyl)-6-(trifluoromethyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(3R,4S)-4-fluoro-1-(1-((5-fluoropyrimidin-2-yl)methyl)-5-(trifluoromethyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(5,6-difluoro-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4,4-difluoropiperidin-3-amine;

2-(2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)-1-(azetidin-1-yl)ethan-1-one;

2-(2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)-1-(azetidin-1-yl)ethan-1-one;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(2,2-dimethylpyrrolidin-1-yl)ethan-1-one;

6-((2-((3R,4S)-3-amino-4-hydroxypiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-hydroxypiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

4-((R)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

4-((S)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

(S)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-3-fluorobenzonitrile hydrochloride;

(S)-1-(1-(4-chlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine hydrochloride;

4-((R)-1-(2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

4-((S)-1-(2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

4-((R)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

4-((S)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

(S)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-3-chlorobenzonitrile hydrochloride;

(3R,4R)-1-(1-((1R)-1-(2,4-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(2,4-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(2-chlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(2-chlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(3-chlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(3-chlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(2,5-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(2,5-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(2,4-difluorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(2,4-difluorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(3,4-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(3,4-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(2,5-difluorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(2,5-difluorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1R)-1-(4-(trifluoromethyl)phenyl)ethyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1R)-1-(4-(trifluoromethoxy)phenyl)ethyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(5-chloro-2-(trifluoromethoxy)benzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(4-(1H-1,2,4-triazol-1-yl)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

2-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-5-chlorobenzonitrile;

(3R,4R)-1-(1-(2,4-dichlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-3-(difluoromethoxy)benzonitrile;

(3R,4R)-1-(1-(2,5-dichlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(4-(1,1-difluoroethyl)benzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-2-methylbenzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-2-chlorobenzonitrile;

2-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-4-chlorobenzonitrile;

(3R,4R)-1-(1-(2-(difluoromethoxy)benzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(3-chloro-4-fluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(4-chloro-2-methoxybenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(2,4-difluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(2-(trifluoromethyl)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

2-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)benzonitrile;

(3R,4R)-1-(1-(2-chlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(2-chloro-4-fluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(4-fluoro-2-(trifluoromethyl)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(3,4-difluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(4-chloro-2-fluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(3,4-dichlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(4-chloro-3-fluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(4-(trifluoromethyl)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(4-(trifluoromethoxy)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(4-(difluoromethyl)benzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(3-(trifluoromethoxy)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(3-(trifluoromethyl)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

3-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)benzonitrile;

(3R,4R)-1-(1-(3-chlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(S)-1-(1-(4-fluorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(S)-1-(1-(4-(1,2,4-oxadiazol-3-yl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-(methylsulfonyl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-(1H-1,2,4-triazol-1-yl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-2-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-1-(1-(2,6-dichlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(2-chlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-(trifluoromethyl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-(trifluoromethoxy)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-chlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(3-chlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-(1,1-difluoroethyl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-2-(4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)phenyl)-2-methylpropanenitrile;

(R)-1-(1-(4-(difluoromethyl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-N-methylbenzamide;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-3-fluorobenzonitrile;

(R)-2-(4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)phenoxy)acetonitrile;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-N,N-dimethylbenzenesulfonamide;

(R)-1-(1-(4-methylbenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-fluorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-((1-methyl-1H-indazol-7-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(2,4-difluorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(3,4-difluorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-chloro-3-fluorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-((3-(3-chlorophenyl)isoxazol-5-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(3-chloro-4-methoxybenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-3-chlorobenzonitrile;

(R)-1-(1-(2,4-dichlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-3-methoxybenzonitrile;

(R)-2-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-5-chlorobenzonitrile;

4-((R)-1-(2-((R)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile;

4-(1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile;

(R)-3-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile hydrochloride;

(S)-4-((2-(3-aminopiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile hydrochloride;

4-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(S)-4-((2-(3-aminopiperidin-1-yl)-5-methoxy-3H-imidazo[4,5-b]pyridin-3-yl)methyl)benzonitrile hydrochloride;

(R)-4-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-imidazo[4,5-c]pyridin-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-3H-imidazo[4,5-c]pyridin-3-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-ethoxy-1H-benzimidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-imidazo[4,5-b]pyridin-1-yl)methyl)benzonitrile;

4-((2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-6-fluoro-1H-benzimidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-imidazo[4,5-b]pyridin-1-yl)methyl)benzonitrile;

(S)-4-((2-(3-aminopiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(S)-4-((2-(3-aminopiperidin-1-yl)-3H-imidazo[4,5-b]pyridin-3-yl)methyl)benzonitrile hydrochloride;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile hydrochloride;

(S)-4-((2-(3-aminopiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(S)-4-((2-(3-aminopiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)-2,3-dihydro-1H-indene-5-carbonitrile;

(S)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)-2,3-dihydro-1H-indene-5-carbonitrile;

(3R,4R)-4-fluoro-1-(1-((5-methoxypyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

1-(2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)acetyl)azetidine-3-carbonitrile;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(3-(tert-butoxy)azetidin-1-yl)ethan-1-one;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(3,3-difluoroazetidin-1-yl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(3-isopropylazetidin-1-yl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(6,6-difluoro-2-azaspiro[3.3]heptan-2-yl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(7-oxa-2-azaspiro[3.5]nonan-2-yl)ethanone;

(R)-6-((2-(4,4-difluoro-3-(methylamino)piperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(4,4-difluoro-3-((2-hydroxyethyl)amino)piperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinic acid;

(S)-6-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinamide;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinamide;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)acetic acid;

6-((R)-1-(4,6-difluoro-2-((3R,4R)-4-fluoro-3-(methylamino)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile;

6-((S)-1-(4,6-difluoro-2-((3R,4R)-4-fluoro-3-(methylamino)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile;

6-((R)-1-(5,7-difluoro-2-((3R,4R)-4-fluoro-3-(methylamino)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile; and

6-((S)-1-(5,7-difluoro-2-((3R,4R)-4-fluoro-3-(methylamino)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile.

In another aspect, the present disclosure refers to a compound, selected from:

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazole-4-carbonitrile;

(3R,4R)-1-(4,6-difluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-4-methoxy-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

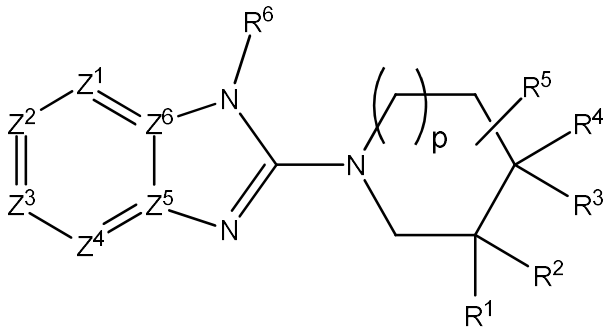
(3R,4R)-4-fluoro-1-(1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine; and

(3R,4R)-1-(1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine.

In another aspect, the present disclosure refers to a pharmaceutical composition comprising a pharmaceutically acceptable excipient, carrier or adjuvant and at least one compound as described herein. In yet another aspect, the present disclosure refers to the use of at least one compound as described herein, or a pharmaceutical salt thereof or a pharmaceutical composition thereof in the manufacture of a medicament for treating a disease or disorder mediated by TRPC6 in a mammal, wherein the disease or disorder mediated by TRPC6 is selected from the group consisting of nephrotic syndrome, minimal change disease, focal segmental glomerulosclerosis, collapsing glomerulopathy, membranous nephropathy, membranoproliferative glomerulonephritis, IGA nephropathy, acute renal failure, chronic renal failure, diabetic nephropathy, sepsis, pulmonary hypertension, acute lung disorder, acute respiratory distress syndrome (ARDS), heart failure, stroke, malignant tumor, and muscular dystrophy. In yet another aspect, the present disclosure refers to a a compound as described herein for use as a medicament.

The disclosure provides, in one example, substituted benzimidazole compounds which modulate the activity of TRPC6. Preferably, the substituted benzimidazole compounds of the disclosure are TRPC6 inhibitors.

The substituted benzimidazole compounds of the disclosure are compounds and salts according to Formula (I):



(I)

Also provided is a pharmaceutical composition comprising a pharmaceutically acceptable excipient, carrier or adjuvant and at least one compound of Formula (I) or subformulae thereof. Pharmaceutical compositions provided by the disclosure are suitable for use in the treatment of disease modulated by TRPC6 activity. In certain examples the pharmaceutical compositions of the disclosure are suitable for use in the treatment of , e.g., treatment of nephrotic syndrome, minimal change disease, focal segmental glomerulosclerosis, collapsing glomerulopathy, membranous nephropathy, membranoproliferative glomerulonephritis, IGA nephropathy, acute renal failure, chronic renal failure, diabetic nephropathy, sepsis, pulmonary hypertension, acute lung disorder, heart failure, stroke, malignant tumor or muscular dystrophy.

Also provided is a packaged pharmaceutical composition, comprising a pharmaceutical composition comprising a pharmaceutically acceptable excipient, carrier or adjuvant and at least one compound of formula (I) or subformulae thereof, and instructions for using the composition to treat a patient suffering from a disease mediated by TRPC6 activity or more particularly to treat a patient suffering from nephrotic syndrome, minimal change disease, focal segmental glomerulosclerosis, collapsing glomerulopathy, membranous nephropathy, membranoproliferative glomerulonephritis, IGA nephropathy, acute renal failure, chronic renal failure, diabetic nephropathy, sepsis, pulmonary hypertension, acute lung disorder, acute respiratory distress syndrome (ARDS) heart failure, stroke, malignant tumor or muscular dystrophy. In certain instances, the patient is suffering from nephrotic syndrome, membranous nephropathy, and acute renal failure.

Also provided is a method of treating or preventing disease in a mammal which method comprises administering to a mammal in need thereof a therapeutically effective amount of at least one compound of formula (I) or subformulae thereof or a pharmaceutical composition comprising a pharmaceutically acceptable excipient, carrier or adjuvant and at least one compound of formula (I) or subformulae thereof.

Also provided is a method for modulating TRPC6 activity in a mammal, which method comprises administering to the mammal in need thereof a therapeutically effective amount of at least one compound of formula (I) or subformulae thereof or a pharmaceutical composition comprising a pharmaceutically acceptable excipient, carrier or adjuvant and at least one compound of formula (I) or subformulae thereof. Another example of the disclosure relates to a method of treating a TRPC6-mediated disease or disorder,

the method comprising administering a TRPC6 inhibitor of the disclosure to a patient in need of therapy. In certain examples, the TRPC6 mediated disease or disorder is selected from nephrotic syndrome, minimal change disease, focal segmental glomerulosclerosis, collapsing glomerulopathy, membranous nephropathy, membranoproliferative glomerulonephritis, IGA nephropathy, acute renal failure, chronic renal failure, diabetic nephropathy, sepsis, pulmonary hypertension, acute lung disorder, acute respiratory distress syndrome (ARDS), heart failure, stroke, malignant tumor or muscular dystrophy. In certain instances, the patient is suffering from nephrotic syndrome, membranous nephropathy, and acute renal failure .

Also provided is the use, in the manufacture of a medicament for treating or preventing disease mediated by TRPC6 activity, of at least one compound of formula I or subformulae thereof.

Other examples will be apparent to those skilled in the art form the following detailed description.

DETAILED DESCRIPTION OF THE INVENTION

The invention related generally to compounds of Formula I and salts and tautomers thereof which inhibit TRPC protein activity and more particularly inhibit TRPC6 protein activity. In particular, the invention relates to compounds which selectively inhibit TRPC6 protein activity.

In a first embodiment, the invention provides a compound or pharmaceutically acceptable salt thereof, according to Formula I:

(R)-4-((2-(3-(aminomethyl)-3-hydroxypyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(S)-4-((2-(3-(aminomethyl)-3-hydroxypyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(S)-4-((2-(3-(aminomethyl)pyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-(aminomethyl)pyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3S,4S)-3-amino-4-methylpiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

4-((2-((3S,4R)-3-amino-4-methylpiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

4-((2-((3R,4S)-3-amino-4-methylpiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

4-((2-((1S,5R)-1-(aminomethyl)-3-azabicyclo[3.1.0]hexan-3-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((1R,5S)-1-(aminomethyl)-3-azabicyclo[3.1.0]hexan-3-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-aminopiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-aminopiperidin-1-yl)-5-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

(3R,4R)-4-fluoro-1-(1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(3R,4R)-4-fluoro-1-(1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

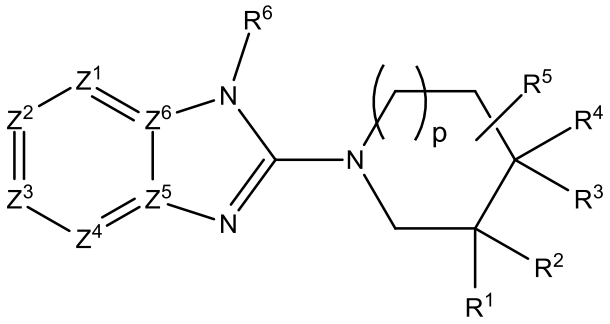
2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

(3R,4R)-1-(1-((5-bromopyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-4-fluoro-1-(1-((5-(trifluoromethyl)pyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

What is claimed is

1. A compound or pharmaceutically acceptable salt thereof, according to Formula I:



(I)

Wherein

p is 0 or 1;

when p is 0, then R^1 is hydrogen, C_1-C_6alkyl, halogen or hydroxy; R^2 is amino or aminoC_1-C_4alkyl; R^3 is hydrogen; and R^4 is C_1-C_6alkyl or phenyl; or

when p is 0, then R^1 and R^3, taken in combination, form a fused C_3-C_6cycloalkyl ring or a fused 4 to 6 member heterocycle ring having 1 or 2 ring heteroatoms independently selected from N, O or S, which cycloalkyl or heterocycle is optionally substituted with amino; R^2 is hydrogen, C_1-C_6alkyl or aminoC_1-C_4alkyl; and R^4 is hydrogen; or

when p is 1, then R^1 is NHR^{1a}; R^{1a} is hydrogen, C_1-C_4alkyl, C_3-C_7cycloalkyl, hydroxyC_1-C_4alkyl,or 4 to 6 member heterocycloalkyl having one ring heteroatom selected from N, O or S; R^2 is hydrogen, C_1-C_4alkyl, hydroxyC_1-C_4alkyl or $C(O)NH_2$; R^3 is halogen, C_1-C_4alkyl, C_1-C_4alkoxy or hydroxy; and R^4 is hydrogen, C_1-C_4alkyl or halogen; or

when p is 0 or 1, then CR^1R^2, taken in combination, form a spirocyclic 4 to 6 member heterocycloalkyl; R^3 is hydrogen, halogen, C_1-C_4alkyl, C_1-C_4alkoxy, or hydroxy; and R^4 is hydrogen or halogen; or

when p is 1, then R^1 and R^3, taken in combination, form a fused 4 to 6 member heterocycle or a fused 3 to 7 member carbocycle, which heterocycle comprises a ring nitrogen atom and optionally 0 or 1 additional ring heteroatoms selected from N, O and S, and which carbocycle is substituted with amino; and R^2 is hydrogen; and R^4 is hydrogen, halogen or hydroxy;

R^5 represents 1 or 2 substituents independently selected from hydrogen, halogen, hydroxy, amino, C_1-C_6alkyl or C_1-C_6alkoxy;

R^6 is $–(CR^7R^8)$-A; or

R^6 is a 4 to 7 member lactam which is optionally substituted with one or two substituents independently selected from the group consisting of hydroxy, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_3-C_6cycloalkyl, haloC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, hydroxyC_1-C_6alkyl, C_1-C_6alkoxyC_1-C_6alkyl, phenyl, 4 to 7 member heterocycle having 1 ring atoms selected from N, O or S and 0 or 1 additional ring N atoms or 5 or 6 member heteroaryl having one ring heteroatom selected from N, O or S and 0 or 1

additional ring nitrogen atom, wherein the heteroaryl, heterocycle or phenyl group is optionally substituted with 0, 1 or 2 C_1-C_6alkyl or halogen; or

R^6 is a partially unsaturated 9 or 10 member bicyclic carbocycle, which is optionally substituted with 1 or 2 substituents independently selected from halogen, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, haloC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, $C(O)NH_2$ and $C(O)NHC_1$-C_6alkyl;

A is 5 or 6 member heteroaryl, which heteroaryl comprises one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms, which heteroaryl is optionally substituted with 0, 1, 2, 3 or 4 groups independently selected from halogen, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_3-C_6cycloalkyl, haloC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, $C(O)N(R^A)_2$, $S(O)_2C_1$-C_6alkyl, phenyl or 5 or 6 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms, wherein the optional heteroaryl or phenyl substituent is further substituted with 0, 1 or 2 C_1-C_6alkyl; or

A is phenyl substituted with 1, 2 or 3 substituents independently selected from halogen, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, haloC_1-C_6alkyl, cyanoC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, cyanoC_1-C_6 alkoxy, $S(O)_qC_1$-C_6alkyl, $S(O)_2NH_2$, $S(O)_2NHC_1$-C_6alkyl, $S(O)_2N(C_1$-C_6alkyl$)_2$, $C(O)NH_2$, $C(O)NHC_1$-C_6alkyl, $C(O)N(C_1$-C_6alkyl$)_2$, hydroxy, cyano, or 5 or 6 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms which heteroaryl is further substituted with 0, 1 or 2 C_1-C_6alkyl; or

A is $C(O)OR^9$ or $C(O)NR^9R^{10}$; or

A is optionally substituted 9 or 10 member aromatic or partially unsaturated bicyclyl having 0, 1 or 2 ring nitrogen atoms and 0 or 1 additional ring heteroatoms selected from N, O or S, which bicyclyl is substituted with 0, 1 or 2 substituents independently selected from the group consisting of halogen, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, haloC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, $C(O)NH_2$, C(O)OH or $C(O)NHC_1$-C_6alkyl;

R^A is independently selected at each occurrence from hydrogen or C_1-C_4alkyl; or

$N(R^A)_2$, taken in combination, forms a 4 to 7 member azacycle which is optionally substituted with 0, 1, or 2 C_1-C_4alkyl;

R^7 is hydrogen, C_1-C_4alkyl or amino;

R^8 is hydrogen or C_1-C_4alkyl; or

CR^7R^8, taken in combination form a 3 to 6 member cycloalkandiyl group;

R^9 is hydrogen, C_1-C_6alkyl, C_3-C_6cycloalkyl, hydroxyC_1-C_6alkyl, C_1-C_4alkoxyC_1-C_6alkyl, haloC_1-C_6alkyl, cyano C_1-C_6alkyl or $–(CH_2)_rR^{9A}$ wherein r is 0 or 1 and R^{9A} is phenyl, 4 to 7 member heterocycle having one ring heteroatoms selected from N, O or S, which ring sulfur may be optionally oxidized, and 0 or 1 additional ring N atoms or 5 or 6 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1, or 2 additional ring N atoms, which phenyl, heterocycle or heteroaryl is optionally substituted with 0, 1 or 2 halogen, C_1-C_4alkyl or $C(O)C_1$-C_4alkyl;

R^{10} is hydrogen, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, halo C_1-C_6alkyl, C_3-C_7cycloalkyl or saturated, partially unsaturated or aromatic 5 or 6 member heterocycle having 1 or 2 ring heteroatoms independently selected from N, O and S, which sulfur is optionally oxidized, and which heterocycle is optionally substituted with 1 or 2 substituents independently selected from C_1-C_6alkyl and halogen, which heterocycle has 1 or 2 ring hetero atoms selected from N, O or S, which sulfur may be optionally oxidized, and wherein each alkyl or cycloalkyl is optionally substituted with cyano, halogen, hydroxy, C_1-C_6alkoxy, $S(O)_qC_1$-C_6alkyl, 4 to 6 member heterocycle having 1 or 2 ring heteroatoms selected from N, O or S or 5 or 6 member heteroaryl having 1 ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms and where each heterocycle or heteroaryl is optionally substituted with 0, 1, or 2 C_1-C_4alkyl; or

NR^9R^{10}, taken in combination, form a monocyclic or bicyclic 4 to 10 member saturated or partially unsaturated heterocycle having one or two ring nitrogen atoms and 0 or 1 additional ring heteroatom selected from N, O or S, which ring sulfur may be optionally oxidized, which heterocycle is optionally substituted with 0, 1 or 2 substitutents selected from halogen, oxo, hydroxy, cyano, C_1-C_6alkyl, C_3-C_6cycloalkyl, haloC_1-C_6alkyl, hydroxyC_1-C_6alkyl, cyanoC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, C_1-C_6alkoxyC_1-C_4alkyl, $S(O)_qC_1$-C_6alkyl, C_1-C_6alkyl$S(O)_qC_1$-C_6alkyl CO_2H, $C(O)C_1$-C_6alkyl, $C(O)OC_1$-C_6alkyl, $C(O)C_3$-C_6cycloalkyl, $N(R^{15})C(O)C_1$-C_6alkyl or $C(O)N(R^{15})_2$, phenyl, 4 to 6 member heterocycle having 1 or 2 ring heteroatoms selected from N, O or S or a 5 or 6 member heteroaryl having 1 ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms and where each heterocycle or heteroaryl is optionally substituted with 0, 1, or 2 C_1-C_4alkyl;

q is 0, 1 or 2;

Z^1 is N or CR^{11};

Z^2 is N or CR^{12};

Z^3 is N or CR^{13};

Z^4 is N or CR^{14},

Z^5 and Z^6 are each independently N or C;

wherein 0, 1 or 2 of Z^1, Z^2, Z^3, Z^4, Z^5 and Z^6 are N;

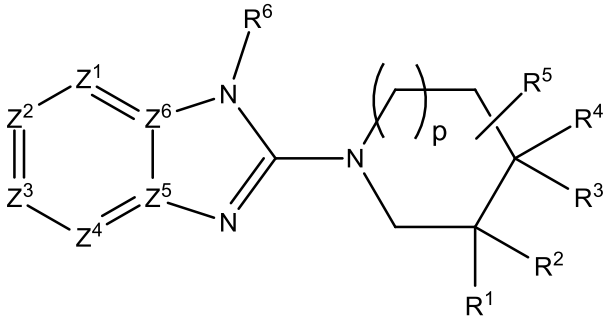
each of R^{11}, R^{12}, R^{13} and R^{14} is independently selected from the group consisting of hydrogen, halogen, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6alkoxy, haloC_1-C_6alkyl, haloC_1-C_6alkoxy, C_3-C_7cycloalkyl, cyano, SO_2C_1-C_6alkyl, phenyl, and saturated, partially unsaturated or aromatic 5 or 6 member heterocycle having 1 or 2 ring heteroatoms independently selected from N, O and S, which heterocycle is optionally substituted with 1 or 2 substituents independently selected from C_1-C_6alkyl andhalogen; and

R^{15} is selected at each occurrence from hydrogen or C_1-C_4alkyl, or

$N(R^{15})_2$, taken in combination, form a 4 to 7 member azacycle optionally substituted with 0, 1 or 2 C_1-C_4alkyl;

with the proviso that compounds of Formula I do not include 1- [7-fluoro-6-methoxy-1-[[2-(trifluoromethyl)phenyl]methyl]-1*H*-benzimidazol-2-yl]-3-piperidinamine.

2. A compound or pharmaceutically acceptable salt thereof, according to Formula I:



(I)

Wherein

p is 0 or 1;

when p is 0, then R^1 is hydrogen, C_1-C_6alkyl, halogen or hydroxy; R^2 is amino or aminoC_1-C_4alkyl; R^3 is hydrogen; and R^4 is C_1-C_6alkyl or phenyl; or

when p is 0, then R^1 and R^3, taken in combination, form a fused C_3-C_6cycloalkyl ring or a fused 4 to 6 member heterocycle ring having 1 or 2 ring heteroatoms independently selected from N, O or S, which cycloalkyl or heterocycle is optionally substituted with amino; R^2 is hydrogen, C_1-C_6alkyl or aminoC_1-C_4alkyl; and R^4 is hydrogen; or

when p is 1, then R^1 is NHR^{1a}; R^{1a} is hydrogen, C_1-C_4alkyl, C_3-C_7cycloalkyl, hydroxyC_1-C_4alkyl,or 4 to 6 member heterocycloalkyl having one ring heteroatom selected from N, O or S; R^2 is hydrogen, C_1-C_4alkyl, hydroxyC_1-C_4alkyl or $C(O)NH_2$; R^3 is halogen, C_1-C_4alkyl, C_1-C_4alkoxy or hydroxy; and R^4 is hydrogen, C_1-C_4alkyl or halogen; or

when p is 0 or 1, then $C(NHR^{1a})R^2$, taken in combination, form a spirocyclic 4 to 6 member heterocycloalkyl; R^3 is hydrogen, halogen C_1-C_4alkyl, C_1-C_4alkoxy, or hydroxy; and R^4 is hydrogen or halogen; or

when p is 1, then R^1 and R^3, taken in combination, form a fused 4 to 6 member heterocycle or a fused 3 to 7 member carbocycle, which heterocycle comprises a ring nitrogen atom and optionally 0 or 1 additional ring heteroatoms selected from N, O and S, and which carbocycle is substituted with amino; and R^2 is hydrogen; and R^4 is hydrogen, halogen or hydroxy;

R^5 represents 1 or 2 substituents independently selected from hydrogen, halogen, hydroxy, amino, C_1-C_6alkyl or C_1-C_6alkoxy;

R^6 is $–(CR^7R^8)$-A; or

R^6 is a 4 to 7 member lactam which is optionally substituted with one or two substituents independently selected from the group consisting of hydroxy, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, haloC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, hydroxyC_1-C_6alkyl, C_1-C_6alkoxyC_1-C_6alkyl, phenyl or 5 or 6 member heteroaryl having one ring heteroatom selected from N, O or S and 0 or 1 additional ring

nitrogen atom, wherein the heteroaryl or phenyl group is optionally substituted with 0, 1 or 2 C_1-C_6alkyl or halogen; or

R^6 is a partially unsaturated 9 or 10 member bicyclic carbocycle, which is optionally substituted with 1 or 2 substituents independently selected from halogen, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, haloC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, $C(O)NH_2$ and $C(O)NHC_1$-C_6alkyl;

A is 5 or 6 member heteroaryl, which heteroaryl comprises one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms, which heteroaryl is optionally substituted with 0, 1, 2, 3 or 4 groups independently selected from halogen, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, haloC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, $C(O)NH_2$, $C(O)NHC_1$-C_6alkyl, phenyl or 5 or 6 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms, wherein the optional heteroaryl or phenyl substituent is further substituted with 0, 1 or 2 C_1-C_6alkyl; or

A is phenyl substituted with 1, 2 or 3 substituents independently selected from halogen, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, haloC_1-C_6alkyl, cyanoC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, cyanoC_1-C_6 alkoxy, $S(O)_q C_1$-C_6alkyl, $S(O)_2NH_2$, $S(O)_2NHC_1$-C_6alkyl, $S(O)_2N(C_1$-C_6alkyl$)_2$, $C(O)NH_2$, $C(O)NHC_1$-C_6alkyl, $C(O)N(C_1$-C_6alkyl$)_2$, hydroxy, cyano, or 5 or 6 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms which heteroaryl is further substituted with 0, 1 or 2 C_1-C_6alkyl; or

A is $C(O)OR^9$ or $C(O)NR^9R^{10}$; or

A is optionally substituted 9 or 10 member aromatic or partially unsaturated bicyclyl having 0, 1 or 2 ring nitrogen atoms and 0 or 1 additional ring heteroatoms selected from N, O or S, which bicyclyl is substituted with 0, 1 or 2 substituents independently selected from the group consisting of halogen, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, haloC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, $C(O)NH_2$, C(O)OH or $C(O)NHC_1$-C_6alkyl;

R^7 is hydrogen, C_1-C_4alkyl or amino;

R^8 is hydrogen or C_1-C_4alkyl; or

CR^7R^8, taken in combination form a 3 to 6 member cycloalkandiyl group;

R^9 is hydrogen, C_1-C_6alkyl, hydroxyC_1-C_6alkyl, haloC_1-C_6alkyl or cyano C_1-C_6alkyl;

R^{10} is hydrogen, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, halo C_1-C_6alkyl, C_3-C_7cycloalkyl or 4 to 7 member heterocycle, which heterocycle has 1 or 2 ring hetero atoms selected from N, O or S, which sulfur may be optionally oxidized, and wherein each alkyl or cycloalkyl is optionally substituted with cyano, halogen, hydroxy, C_1-C_6alkoxy, $S(O)_q C_1$-C_6alkyl, 4 to 6 member heterocycle having 1 or 2 ring heteroatoms selected from N, O or S or 5 or 6 member heteroaryl having 1 ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms; or

NR^9R^{10}, taken in combination, form a monocyclic or bicyclic 4 to 9 member heterocycle having one ring nitrogen atom and 0 or 1 additional ring heteroatom selected from N, O or S, which ring sulfur may be optionally oxidized, which heterocycle is optionally substituted with 0, 1 or 2 substitutents

selected from halogen, oxo, hydroxy, cyano, C_1-C_6alkyl, halo C_1-C_6alkyl, hydroxyC_1-C_6alkyl, C_1-C_6alkoxy, $S(O)_qC_1$-C_6alkyl, CO_2H, $C(O)C_1$-C_6alkyl, or $C(O)NH_2$;

q is 0, 1 or 2;

Z^1 is N or CR^{11};

Z^2 is N or CR^{12};

Z^3 is N or CR^{13};

Z^4 is N or CR^{14},

Z^5 and Z^6 are each independently N or C;

wherein 0, 1 or 2 of Z^1, Z^2, Z^3, Z^4, Z^5 and Z^6 are N;

each of R^{11}, R^{12}, R^{13} and R^{14} is independently selected from the group consisting of hydrogen, halogen, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, C_1-C_6alkoxy, haloC_1-C_6alkyl, haloC_1-C_6alkoxy, C_3-C_7cycloalkyl, cyano, SO_2C_1-C_6alkyl, phenyl, and saturated, partially unsaturated or aromatic 5 or 6 member heterocycle having 1 or 2 ring heteroatoms independently selected from N, O and S, which heterocycle is optionally substituted with 1 or 2 substituents independently selected from C_1-C_6alkyl and halogen; and with the proviso that compounds of Formula I do not include 1- [7-fluoro-6-methoxy-1-[[2-(trifluoromethyl)phenyl]methyl]-1*H*-benzimidazol-2-yl]-3-piperidinamine.

3. The compound of claim 1 or claim 2, wherein p is 0; R^1 and R^3, taken in combination, form a fused C_3-C_6cycloalkyl ring or a fused 4 to 6 member azacycle ring, which cycloalkyl or azacycle is optionally substituted with amino; and R^2 and R^4 are hydrogen.
4. The compound of claim 1 or claim 2, wherein p is 1, R^1 is NHR^{1a}; R^{1a} is hydrogen, C_1-C_4alkyl, C_3-C_7cycloalkyl or 4 to 6 member heterocycloalkyl having one ring heteroatom selected from N, O or S; R^2 is hydrogen or C_1-C_4alkyl; R^3 is hydrogen, halogen, C_1-C_4alkyl, C_1-C_4alkoxy, or hydroxy; and R^4 is hydrogen, halogen or C_1-C_4alkyl
5. The compound of claim 4, wherein R^1 is NHR^{1a}; R^{1a} is hydrogen, methyl, ethyl, propyl, isopropyl or cyclopropyl; R^2 is hydrogen or methyl; R^3 is hydrogen, halogen, methyl, ethyl, methoxy, ethoxy, or hydroxy; and R^4 is hydrogen, halogen, methyl or ethyl.
6. The compound of claim 4 or claim 5, wherein R^1 is NH_2; R^2 is hydrogen; R^3 is hydrogen, fluorine, methyl, or hydroxy; and R^4 is hydrogen, fluorine or methyl.
7. The compound of any one of claims 1 to 6, wherein R^6 is $–(CR^7R^8)$-A.
8. The compound of either claim 7, wherein R^7 is hydrogen or methyl; and R^8 is hydrogen.
9. The compound of claim 7 or claim 8, wherein A is 5 or 6 member heteroaryl, which heteroaryl comprises one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms, which heteroaryl is optionally substituted with 0, 1, or 2 groups independently selected from halogen, cyano, C_1-C_6alkyl, C_2-C_6alkenyl, C_2-C_6alkynyl, haloC_1-C_6alkyl, C_1-C_6alkoxy, haloC_1-C_6alkoxy, $C(O)NH_2$, $C(O)NHC_1$-C_6alkyl, phenyl or 5 or 6 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms, wherein the optional heteroaryl or phenyl substituent is further substituted with 0, 1 or 2 C_1-C_6alkyl.

10. The compound of claim 9, wherein A is pyridin-2-yl, pyridin-3-yl, pyrimidin-2-yl, or pyrazin-2-yl, each of which is substituted with 1 to 3 groups independently selected from the group consisting of halogen, cyano, C_1-C_4alkyl, haloC_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkoxy, $C(O)NH_2$, $C(O)NHC_1$-C_4alkyl, phenyl or 5 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms, wherein the optional heteroaryl or phenyl substituent is further substituted with 0, 1 or 2 C_1-C_6alkyl.
11. The compound of claim 7 or claim 8, wherein A is phenyl substituted with one substituent selected from the group consisting of halogen, C_1-C_4alkyl, haloC_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkoxy, hydroxy, cyano, or 5 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms, and wherein the phenyl group is further optionally substituted with halogen, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl or haloC_1-C_4alkoxy.
12. The compound of claim 7 or claim 8, wherein A is $C(O)NR^9R^{10}$;

R^9 is hydrogen, or C_1-C_4alkyl;

R^{10} is C_1-C_4alkyl, haloC_1-C_4alkyl, C_3-C_7cycloalkyl or 4 to 7 member heterocycle, which heterocycle has 1 or 2 ring hetero atoms selected from N, O or S, which sulfur may be optionally oxidized, and wherein each alkyl or cycloalkyl is optionally substituted with cyano, halogen, hydroxy, C_1-C_6alkoxy, $S(O)_qC_1$-C_6alkyl; or

NR^9R^{10}, taken in combination, form a monocyclic or bicyclic 4 to 9 member azacycle having one ring nitrogen atom and 0 or 1 additional ring heteroatom selected from N, O or S, which ring sulfur may be optionally oxidized, which azacycle is optionally substituted with 0, 1 or 2 substitutents selected from halogen, oxo, hydroxy, cyano, C_1-C_6alkyl, halo C_1-C_6alkyl, hydroxyC_1-C_6alkyl, C_1-C_6alkoxy, $S(O)_2C_1$-C_6alkyl, CO_2H, $C(O)C_1$-C_6alkyl, or $C(O)NH_2$.
13. The compound of claim 12, wherein R^9 is hydrogen, methyl or ethyl; and

R^{10} is C_1-C_4alkyl or haloC_1-C_4alkyl wherein each alkyl is optionally substituted with cyano, halogen, hydroxy, C_1-C_6alkoxy or $S(O)_qC_1$-C_6alkyl.
14. The compound of claim 12, wherein NR^9R^{10}, taken in combination, form a 4 to 6 member monocyclic azacycle or a 7 to 9 member bicyclic azacycle, each of which having one ring nitrogen atom and 0 or 1 additional ring heteroatom selected from N, O or S, which ring sulfur may be optionally oxidized, wherein each azacycle is optionally substituted with 0, 1 or 2 substitutents selected from halogen, oxo, hydroxy, cyano, C_1-C_6alkyl, halo C_1-C_6alkyl, hydroxyC_1-C_6alkyl, C_1-C_6alkoxy, $S(O)_2C_1$-C_6alkyl, CO_2H, $C(O)C_1$-C_6alkyl, or $C(O)NH_2$.
15. The compound of any one of claims 1 to 14, wherein

Z^1 is CR^{11};

Z^2 is CR^{12};

Z^3 is CR^{13};

Z^4 is N or CR^{14},

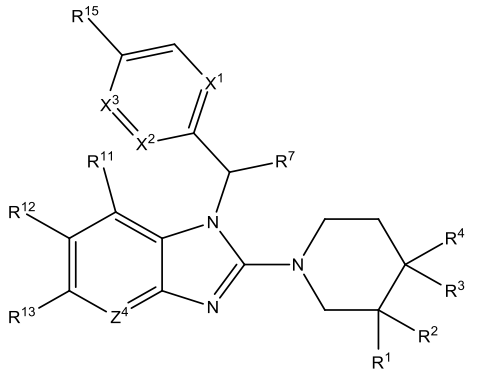
Z^5 and Z^6 are each C;

R^{11} is hydrogen, halogen, cyano or C_1-C_4alkyl;

R^{12} and R^{13} are each independently selected from the group consisting of hydrogen, halogen, cyano, C_1-C_4alkyl, haloC_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkoxy C_3-C_6cycloalkyl or 5 member saturated, partially unsaturated or aromatic 5 or 6 member heterocycle having 1 or 2 ring heteroatoms independently selected from N, O and S; and

R^{14} is hydrogen, halogen, cyano or C_1-C_4alkyl.

16. A compound of Formula III:



(III)

Wherein

X^1 is CR^{16} or N;

X^2 is CR^{17} or N;

X^3 is CR^{18} or N;

Z^4 is N or CR^{14};

R^1 is NHR^{1a};

R^{1a} is hydrogen or C_1-C_4alkyl;

R^2 is hydrogen or C_1-C_4alkyl;

R^3 is hydrogen or halogen;

R^4 is hydrogen or halogen;

R^7 is hydrogen, methyl or ethyl;

R^{11} is hydrogen, halogen, cyano or C_1-C_4alkyl;

R^{12} and R^{13} are each independently selected from the group consisting of hydrogen, halogen, cyano, C_1-C_4alkyl, haloC_1-C_4alkyl, C_1-C_4alkoxy, or haloC_1-C_4alkoxy;

R^{14} is hydrogen, halogen, cyano or C_1-C_4alkyl;

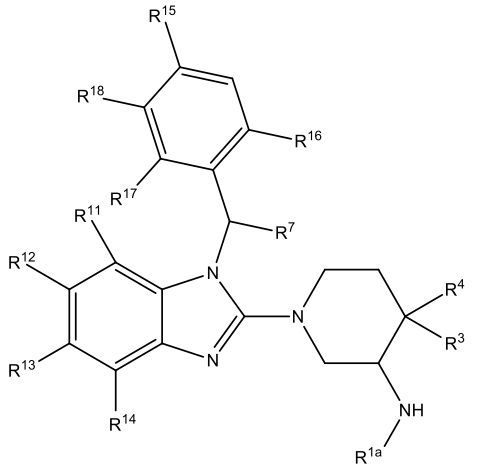
R^{15} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl, haloC_1-C_4alkoxy, $C(O)NH_2$, $C(O)NH(C_1$-C_4alkyl) or 5 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms;

R^{16} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl or haloC_1-C_4alkoxy;

R^{17} is hydrogen or halogen; and

R^{18} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl or haloC_1-C_4alkoxy, wherein at least one of R^{15}, R^{16}, R^{17} or R^{18} is not hydrogen.

17. A compound of Formula VI:



(VI)

Wherein

R^{1a} is hydrogen or C_1-C_4alkyl;

R^3 is hydrogen or halogen;

R^4 is hydrogen or halogen;

R^7 is hydrogen, methyl or ethyl;

R^{11} is hydrogen, halogen, cyano or C_1-C_4alkyl;

R^{12} and R^{13} are each independently selected from the group consisting of hydrogen, halogen, cyano, C_1-C_4alkyl, haloC_1-C_4alkyl, C_1-C_4alkoxy, or haloC_1-C_4alkoxy;

R^{14} is hydrogen, halogen, cyano or C_1-C_4alkyl;

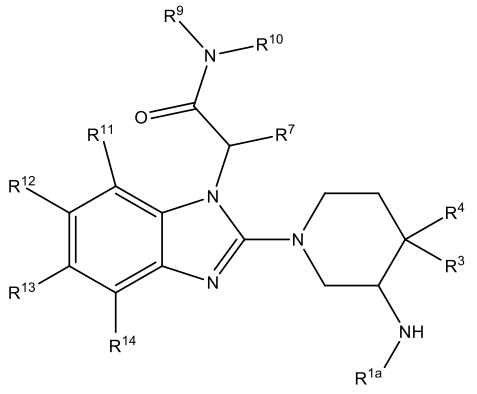
R^{15} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl, haloC_1-C_4alkoxy, $C(O)NH_2$, $C(O)NH(C_1$-C_4alkyl) or 5 member heteroaryl having one ring heteroatom selected from N, O or S and 0, 1 or 2 additional ring nitrogen atoms;

R^{16} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl or haloC_1-C_4alkoxy;

R^{17} is hydrogen or halogen; and

R^{18} is hydrogen, halogen, cyano, C_1-C_4alkyl, C_1-C_4alkoxy, haloC_1-C_4alkyl or haloC_1-C_4alkoxy, wherein at least one of R^{15}, R^{16}, R^{17} or R^{18} is not hydrogen.

18. A compound of Formula VII:



(VII)

Wherein

R^{1a} is hydrogen or C_1-C_4alkyl;

R^3 is hydrogen or halogen;

R^4 is hydrogen or halogen;

R^7 is hydrogen, methyl or ethyl;

R^9 is hydrogen, methyl or ethyl;

R^{10} is C_1-C_4alkyl or haloC_1-C_4alkyl wherein each alkyl is optionally substituted with cyano, halogen, hydroxy, C_1-C_6alkoxy or $S(O)_qC_1$-C_6alkyl; or

NR^9R^{10}, taken in combination, form a 4 to 6 member monocyclic azacycle or a 7 to 9 member bicyclic azacycle, each of which having one ring nitrogen atom and 0 or 1 additional ring heteroatom selected from N, O or S, which ring sulfur may be optionally oxidized, wherein each azacycle is optionally substituted with 0, 1 or 2 substitutents selected from halogen, oxo, hydroxy, cyano, C_1-C_6alkyl, halo C_1-C_6alkyl, hydroxyC_1-C_6alkyl, C_1-C_6alkoxy, $S(O)_2C_1$-C_6alkyl, CO_2H, $C(O)C_1$-C_6alkyl, or $C(O)NH_2$;

R^{11} is hydrogen, halogen, cyano or C_1-C_4alkyl;

R^{12} and R^{13} are each independently selected from the group consisting of hydrogen, halogen, cyano, C_1-C_4alkyl, haloC_1-C_4alkyl, C_1-C_4alkoxy, or haloC_1-C_4alkoxy; and

R^{14} is hydrogen, halogen, cyano or C_1-C_4alkyl.

19. The compound of any one of claims 16 to 18, wherein R^{11} is hydrogen.

20. The compound of any one of claims 16 to 19, wherein R^{1a} is hydrogen or methyl; R^3 is hydrogen or fluorine; and R^4 is hydrogen or fluorine.

21. A compound, selected from:

(S)-6-((2-(3-aminopiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-4-carbonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3S,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(5-amino-3,3-difluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazole-4-carbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-(trifluoromethoxy)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-(trifluoromethoxy)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-fluoro-5-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-fluoro-6-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3aR,7aR)-hexahydro-1H-pyrrolo[2,3-c]pyridin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3aR,7aS)-hexahydro-1H-pyrrolo[2,3-c]pyridin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3aS,7aS)-hexahydro-1H-pyrrolo[2,3-c]pyridin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3aS,7aR)-hexahydro-1H-pyrrolo[2,3-c]pyridin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(1,6-diazaspiro[3.5]nonan-6-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(1,6-diazaspiro[3.5]nonan-6-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(3R,4R)-1-(1-((5-chloropyridin-2-yl)methyl)-6-(methylsulfonyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-1-(1-((5-chloropyridin-2-yl)methyl)-5-(methylsulfonyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazole-4-carbonitrile;

(3R,4R)-1-(5,7-difluoro-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-1-(4,6-difluoro-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-1-(5,7-difluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-1-(4,6-difluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-fluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-4-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-fluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-4-carbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(3R,4S)-1-(1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4S)-1-(1-((5-chloropyrimidin-2-yl)methyl)-5-fluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

tert-butyl ((3R,4R)-1-(1-((5-cyanopyridin-2-yl)methyl)-5,6-dimethyl-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-yl)carbamate;

(S)-6-((2-(3-aminopiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(S)-6-((2-(3-aminopiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(S)-2-(3-aminopiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

(S)-2-(3-aminopiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-4,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-4,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-4,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-5,7-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,7-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-4,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5,7-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-5,7-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((1R,5S)-1-(aminomethyl)-3-azabicyclo[3.1.0]hexan-3-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((1S,5R)-1-(aminomethyl)-3-azabicyclo[3.1.0]hexan-3-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3aR,4R,6aS)-4-aminohexahydrocyclopenta[c]pyrrol-2(1H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3aS,4S,6aR)-4-aminohexahydrocyclopenta[c]pyrrol-2(1H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3aR,4S,6aS)-4-aminohexahydrocyclopenta[c]pyrrol-2(1H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3aS,4R,6aR)-4-aminohexahydrocyclopenta[c]pyrrol-2(1H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(R)-6-((2-(3-(aminomethyl)pyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(S)-6-((2-(3-(aminomethyl)pyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5,6-dichloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(R)-1-(1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4,4-difluoropiperidin-3-amine hydrochloride;

(3R,4S)-1-(1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-4-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-3H-imidazo[4,5-b]pyridin-3-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-imidazo[4,5-b]pyridin-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-imidazo[4,5-b]pyridin-1-yl)methyl)-N-(tert-butyl)nicotinamide;

6-((2-((3R,4R)-3-amino-4-hydroxypiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3S,4S)-3-amino-4-hydroxypiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-(2,6-diazaspiro[3.4]octan-6-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((4aR,7aS)-hexahydropyrrolo[3,4-b][1,4]oxazin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((4aS,7aR)-hexahydropyrrolo[3,4-b][1,4]oxazin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((4aR,7aR)-hexahydropyrrolo[3,4-b][1,4]oxazin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((4aS,7aS)-hexahydropyrrolo[3,4-b][1,4]oxazin-6(2H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-3-amino-1-(1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidine-3-carboxamide;

(R)-3-amino-1-(1-((5-cyanopyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidine-3-carboxamide;

(S)-6-((2-(3-amino-3-(hydroxymethyl)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-3-(hydroxymethyl)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-chloro-5-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-chloro-6-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-fluoro-5-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-fluoro-6-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3S)-3-(methylamino)-1-piperidinyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R)-3-(methylamino)-1-piperidinyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-(difluoromethoxy)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-(difluoromethoxy)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-4-methoxy-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-4-methyl-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

5-((2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarboxamide;

5-((2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarboxamide;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-chloro-5-(trifluoromethoxy)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-chloro-6-(trifluoromethoxy)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-chloro-5-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-chloro-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((5R)-1,7-diazaspiro[4.5]decan-7-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile, 6-((2-((5S)-1,7-diazaspiro[4.5]decan-7-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((6R)-1,8-diazaspiro[5.5]undecan-8-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((6S)-1,8-diazaspiro[5.5]undecan-8-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((4aR,8aR)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((4aS,8aS)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

5-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarboxamide;

5-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarboxamide;

6-((2-((5R)-1,7-diazaspiro[4.5]decan-7-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((5S)-1,7-diazaspiro[4.5]decan-7-yl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-5-methoxy-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-6-methoxy-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3S)-3-(methylamino)-1-piperidinyl)-6-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3S)-3-(methylamino)-1-piperidinyl)-5-(trifluoromethyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

6-((2-((3S)-3-amino-3-methyl-1-piperidinyl)-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile 2,2,2-trifluoroacetate;

(S)-6-((2-(3-aminopiperidin-1-yl)-5-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile 2,2,2-trifluoroacetate;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4-chloro-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile 2,2,2-trifluoroacetate;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5-methoxy-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazole-4-carbonitrile;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-5-fluoro-1H-benzo[d]imidazole-7-carbonitrile;

(R)-2-(3-amino-4,4-difluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazole-4-carbonitrile;

6-((2-((3R,4R)-3-amino-4-hydroxypiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-hydroxypiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-4-((2-(3-amino-4,4-difluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-hydroxypiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile compound with 4-((2-((3S,4S)-3-amino-4-hydroxypiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile (1:1) dihydrochloride;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,7-difluoro-1H-benzimidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-4,6-difluoro-1H-benzimidazol-1-yl)methyl)benzonitrile;

2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-1-(4-cyanobenzyl)-1H-benzimidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-1-(4-cyanobenzyl)-1H-benzimidazole-5-carbonitrile;

2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-1-(4-cyanobenzyl)-1H-benzimidazole-6-carbonitrile;

2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-1-(4-cyanobenzyl)-1H-benzimidazole-5-carbonitrile;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-methylpiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-(3-(aminomethyl)-3-methylpyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3S,4R)-3-amino-4-phenylpyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile & 4-((2-((3R,4S)-3-amino-4-phenylpyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(S)-4-((2-(3-aminopyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(S)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-(6-amino-2-azaspiro[4.4]nonan-2-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-(4-aminohexahydrocyclopenta[c]pyrrol-2(1H)-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3S,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3S,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-(aminomethyl)-3-fluoropyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(S)-4-((2-(3-(aminomethyl)-3-fluoropyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(R)-4-((2-(3-(aminomethyl)-3-hydroxypyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(S)-4-((2-(3-(aminomethyl)-3-hydroxypyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(S)-4-((2-(3-(aminomethyl)pyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-(aminomethyl)pyrrolidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3S,4S)-3-amino-4-methylpiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

4-((2-((3S,4R)-3-amino-4-methylpiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

4-((2-((3R,4S)-3-amino-4-methylpiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

4-((2-((1S,5R)-1-(aminomethyl)-3-azabicyclo[3.1.0]hexan-3-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((1R,5S)-1-(aminomethyl)-3-azabicyclo[3.1.0]hexan-3-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-aminopiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-aminopiperidin-1-yl)-5-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

(3R,4R)-4-fluoro-1-(1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(3R,4R)-4-fluoro-1-(1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

(3R,4R)-1-(1-((5-bromopyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-4-fluoro-1-(1-((5-(trifluoromethyl)pyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(3R,4R)-4-fluoro-1-(1-((5-methoxypyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(3R,4R)-1-(1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-cyanopyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-bromopyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-bromopyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

5-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)pyrazine-2-carbonitrile;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile;

(3R,4R)-3-amino-1-(1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazol-2-yl)piperidin-4-ol;

(3R,4R)-3-amino-1-(1-((5-chloropyrimidin-2-yl)methyl)-5-fluoro-1H-benzo[d]imidazol-2-yl)piperidin-4-ol;

6-((2-((3R,4R)-3-amino-4-hydroxypiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-hydroxypiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-1-(1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(S)-5-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)picolinonitrile;

(3R,4R)-1-(1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyridin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile hydrochloride;

(3R,4R)-1-(1-((R)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(1-((S)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(1-((R)-1-(5-chloropyridin-2-yl)ethyl)-5,6-difluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(1-((S)-1-(5-chloropyridin-2-yl)ethyl)-5,6-difluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(5-chloro-1-((R)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(5-chloro-1-((S)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(6-chloro-1-((R)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(6-chloro-1-((S)-1-(5-chloropyridin-2-yl)ethyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((R)-1-(5-cyanopyridin-2-yl)ethyl)-1H-benzo[d]imidazole-6-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((R)-1-(5-cyanopyridin-2-yl)ethyl)-1H-benzo[d]imidazole-5-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((S)-1-(5-cyanopyridin-2-yl)ethyl)-1H-benzo[d]imidazole-6-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((S)-1-(5-cyanopyridin-2-yl)ethyl)-1H-benzo[d]imidazole-5-carbonitrile hydrochloride;

(3R,4R)-1-(1-((5-chloropyridin-2-yl)methyl)-5,6-difluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(3R,4R)-1-(5,6-difluoro-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine hydrochloride;

(R)-1-(1-((5-chloropyridin-2-yl)methyl)-5,7-difluoro-1H-benzo[d]imidazol-2-yl)-4,4-difluoropiperidin-3-amine hydrochloride;

(R)-1-(1-((5-chloropyridin-2-yl)methyl)-4,6-difluoro-1H-benzo[d]imidazol-2-yl)-4,4-difluoropiperidin-3-amine hydrochloride;

(R)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)-2,3-dihydro-1H-indene-5-carbonitrile hydrochloride;

(S)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)-2,3-dihydro-1H-indene-5-carbonitrile hydrochloride;

(R)-5-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)pyrazine-2-carbonitrile;

(R)-5-((2-(3-amino-4,4-difluoropiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)pyrazine-2-carbonitrile;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-N-isopropylacetamide;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(azetidin-1-yl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-N-(2-cyanopropyl)-N-ethylacetamide;

3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-methylpyrrolidin-2-one;

3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-phenylpiperidin-2-one;

3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(4-chlorophenyl)pyrrolidin-2-one;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-methoxypyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-methoxypyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((6-(trifluoromethyl)pyridin-3-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile hydrochloride;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((6-(trifluoromethyl)pyridin-3-yl)methyl)-1H-benzo[d]imidazole-5-carbonitrile hydrochloride;

(S)-3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-methylpyrrolidin-2-one;

(R)-3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-methylpyrrolidin-2-one;

(S)-3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(4-chlorophenyl)pyrrolidin-2-one;

(R)-3-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(4-chlorophenyl)pyrrolidin-2-one;

2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-1-((5-cyano-2-pyrazinyl)methyl)-1H-benzimidazole-6-carbonitrile;

2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-1-((5-cyano-2-pyrazinyl)methyl)-1H-benzimidazole-5-carbonitrile;

5-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-4,6-difluoro-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarbonitrile;

5-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,7-difluoro-1H-benzimidazol-1-yl)methyl)-2-pyrazinecarbonitrile;

(3S)-1-(1-((5-fluoro-2-pyridinyl)methyl)-1H-benzimidazol-2-yl)-N-methyl-3-piperidinamine;

(3S)-1-(1-((5-chloro-2-pyridinyl)methyl)-1H-benzimidazol-2-yl)-N-methyl-3-piperidinamine;

6-((1R)-1-(2-((3S)-3-(methylamino)-1-piperidinyl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1S)-1-(2-((3S)-3-(methylamino)-1-piperidinyl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

(3R,4R)-1-(1-((5-chloro-2-pyrimidinyl)methyl)-5,7-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((5-chloro-2-pyrimidinyl)methyl)-4,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1-methyl-1H-indazol-4-yl)methyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(5-quinolinylmethyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1R)-1-(8-quinolinyl)ethyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1S)-1-(8-quinolinyl)ethyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((3-(3-chlorophenyl)-1,2-oxazol-5-yl)methyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1-methyl-1H-indazol-7-yl)methyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(2,6-dichlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

1-(1-azetidinyl)-2-(2-((3S)-3-(methylamino)-1-piperidinyl)-1H-benzimidazol-1-yl)ethanone;

6-((1R)-1-(4,6-difluoro-2-((4aR,8aR)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1R)-1-(4,6-difluoro-2-((4aS,8aS)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1S)-1-(4,6-difluoro-2-((4aS,8aS)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1S)-1-(4,6-difluoro-2-((4aR,8aR)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1R)-1-(5,7-difluoro-2-((4aR,8aR)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1R)-1-(5,7-difluoro-2-((4aS,8aS)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1S)-1-(5,7-difluoro-2-((4aS,8aS)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

6-((1S)-1-(5,7-difluoro-2-((4aR,8aR)-hexahydro-2H-pyrido[4,3-b][1,4]oxazin-6(5H)-yl)-1H-benzimidazol-1-yl)ethyl)-3-pyridinecarbonitrile;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-N-methylacetamide;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-1-(4-morpholinyl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-1-(1-pyrrolidinyl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-N,N-dimethylacetamide;

(2R)-2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-N,N-dimethylpropanamide;

(2S)-2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-N,N-dimethylpropanamide;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-1-(1-piperidinyl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)-N-ethylacetamide;

1-((5-chloro-2-pyrimidinyl)methyl)-2-((3R,4R)-4-fluoro-3-(methylamino)-1-piperidinyl)-1H-benzimidazole-6-carbonitrile;

1-((5-chloro-2-pyrimidinyl)methyl)-2-((3R,4R)-4-fluoro-3-(methylamino)-1-piperidinyl)-1H-benzimidazole-5-carbonitrile;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-chloro-1H-benzimidazol-1-yl)-1-(1-azetidinyl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5-chloro-1H-benzimidazol-1-yl)-1-(1-azetidinyl)ethanone;

2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-1-(2-(1-azetidinyl)-2-oxoethyl)-1H-benzimidazole-6-carbonitrile;

2-((3R,4S)-3-amino-4-fluoro-1-piperidinyl)-1-(2-(1-azetidinyl)-2-oxoethyl)-1H-benzimidazole-5-carbonitrile;

(3R,4R)-1-(1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4R)-1-(1-((5-chloropyrimidin-2-yl)methyl)-5-fluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(R)-6-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-5-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)picolinonitrile 2,2,2-trifluoroacetate;

(R)-1-(1-(isoquinolin-7-ylmethyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-((1-methyl-1H-indazol-7-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

6-((R)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile hydrochloride;

6-((S)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile hydrochloride;

6-((R)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile hydrochloride;

6-((S)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile hydrochloride;

6-((R)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)propyl)nicotinonitrile hydrochloride;

6-((S)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)propyl)nicotinonitrile hydrochloride;

(3R,4R)-1-(5,6-difluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

3-(1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile;

(3R,4R)-1-(5,6-difluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4S)-1-(5,6-difluoro-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

(3R,4S)-4-fluoro-1-(1-((5-fluoropyrimidin-2-yl)methyl)-6-(trifluoromethyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(3R,4S)-4-fluoro-1-(1-((5-fluoropyrimidin-2-yl)methyl)-5-(trifluoromethyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(5,6-difluoro-1-((5-fluoropyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4,4-difluoropiperidin-3-amine;

2-(2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)-1-(azetidin-1-yl)ethan-1-one;

2-(2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-5-(trifluoromethyl)-1H-benzo[d]imidazol-1-yl)-1-(azetidin-1-yl)ethan-1-one;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(2,2-dimethylpyrrolidin-1-yl)ethan-1-one;

6-((2-((3R,4S)-3-amino-4-hydroxypiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4S)-3-amino-4-hydroxypiperidin-1-yl)-5-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

4-((R)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

4-((S)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

(S)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-3-fluorobenzonitrile hydrochloride;

(S)-1-(1-(4-chlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine hydrochloride;

4-((R)-1-(2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

4-((S)-1-(2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

4-((R)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

4-((S)-1-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile hydrochloride;

(S)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-3-chlorobenzonitrile hydrochloride;

(3R,4R)-1-(1-((1R)-1-(2,4-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(2,4-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(2-chlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(2-chlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(3-chlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(3-chlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(2,5-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(2,5-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(2,4-difluorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(2,4-difluorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(3,4-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(3,4-dichlorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1R)-1-(2,5-difluorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-((1S)-1-(2,5-difluorophenyl)ethyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1R)-1-(4-(trifluoromethyl)phenyl)ethyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-((1R)-1-(4-(trifluoromethoxy)phenyl)ethyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(5-chloro-2-(trifluoromethoxy)benzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(4-(1H-1,2,4-triazol-1-yl)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

2-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-5-chlorobenzonitrile;

(3R,4R)-1-(1-(2,4-dichlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-3-(difluoromethoxy)benzonitrile;

(3R,4R)-1-(1-(2,5-dichlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(4-(1,1-difluoroethyl)benzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-2-methylbenzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-2-chlorobenzonitrile;

2-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)-4-chlorobenzonitrile;

(3R,4R)-1-(1-(2-(difluoromethoxy)benzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(3-chloro-4-fluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(4-chloro-2-methoxybenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(2,4-difluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(2-(trifluoromethyl)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

2-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)benzonitrile;

(3R,4R)-1-(1-(2-chlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(2-chloro-4-fluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(4-fluoro-2-(trifluoromethyl)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(3,4-difluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(4-chloro-2-fluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(3,4-dichlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(4-chloro-3-fluorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(4-(trifluoromethyl)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(4-(trifluoromethoxy)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(1-(4-(difluoromethyl)benzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(3-(trifluoromethoxy)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(3R,4R)-1-(5,6-difluoro-1-(3-(trifluoromethyl)benzyl)-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

3-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-5,6-difluoro-1H-benzimidazol-1-yl)methyl)benzonitrile;

(3R,4R)-1-(1-(3-chlorobenzyl)-5,6-difluoro-1H-benzimidazol-2-yl)-4-fluoro-3-piperidinamine;

(S)-1-(1-(4-fluorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(S)-1-(1-(4-(1,2,4-oxadiazol-3-yl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-(methylsulfonyl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-(1H-1,2,4-triazol-1-yl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-2-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-1-(1-(2,6-dichlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(2-chlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-(trifluoromethyl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-(trifluoromethoxy)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-chlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(3-chlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-(1,1-difluoroethyl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-2-(4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)phenyl)-2-methylpropanenitrile;

(R)-1-(1-(4-(difluoromethyl)benzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-N-methylbenzamide;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-3-fluorobenzonitrile;

(R)-2-(4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)phenoxy)acetonitrile;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-N,N-dimethylbenzenesulfonamide;

(R)-1-(1-(4-methylbenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-fluorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-((1-methyl-1H-indazol-7-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(2,4-difluorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(3,4-difluorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(4-chloro-3-fluorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-((3-(3-chlorophenyl)isoxazol-5-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-1-(1-(3-chloro-4-methoxybenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-3-chlorobenzonitrile;

(R)-1-(1-(2,4-dichlorobenzyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

(R)-4-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-3-methoxybenzonitrile;

(R)-2-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)-5-chlorobenzonitrile;

4-((R)-1-(2-((R)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile;

4-(1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)benzonitrile;

(R)-3-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile hydrochloride;

(S)-4-((2-(3-aminopiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile hydrochloride;

4-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(S)-4-((2-(3-aminopiperidin-1-yl)-5-methoxy-3H-imidazo[4,5-b]pyridin-3-yl)methyl)benzonitrile hydrochloride;

(R)-4-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-4-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-4-methoxy-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-imidazo[4,5-c]pyridin-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-3H-imidazo[4,5-c]pyridin-3-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-6-ethoxy-1H-benzimidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-1H-imidazo[4,5-b]pyridin-1-yl)methyl)benzonitrile;

4-((2-((3R)-3-amino-4,4-difluoro-1-piperidinyl)-6-fluoro-1H-benzimidazol-1-yl)methyl)benzonitrile;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-imidazo[4,5-b]pyridin-1-yl)methyl)benzonitrile;

(S)-4-((2-(3-aminopiperidin-1-yl)-4-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile 2,2,2-trifluoroacetate;

(S)-4-((2-(3-aminopiperidin-1-yl)-3H-imidazo[4,5-b]pyridin-3-yl)methyl)benzonitrile hydrochloride;

4-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile hydrochloride;

(S)-4-((2-(3-aminopiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(S)-4-((2-(3-aminopiperidin-1-yl)-5-chloro-1H-benzo[d]imidazol-1-yl)methyl)benzonitrile;

(R)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)-2,3-dihydro-1H-indene-5-carbonitrile;

(S)-1-(2-((S)-3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)-2,3-dihydro-1H-indene-5-carbonitrile;

(3R,4R)-4-fluoro-1-(1-((5-methoxypyridin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine;

1-(2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)acetyl)azetidine-3-carbonitrile;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(3-(tert-butoxy)azetidin-1-yl)ethan-1-one;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(3,3-difluoroazetidin-1-yl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(3-isopropylazetidin-1-yl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(6,6-difluoro-2-azaspiro[3.3]heptan-2-yl)ethanone;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)-1-(7-oxa-2-azaspiro[3.5]nonan-2-yl)ethanone;

(R)-6-((2-(4,4-difluoro-3-(methylamino)piperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(4,4-difluoro-3-((2-hydroxyethyl)amino)piperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(S)-6-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinic acid;

(S)-6-((2-(3-aminopiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinamide;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinamide;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-5,6-difluoro-1H-benzo[d]imidazol-1-yl)acetic acid;

6-((R)-1-(4,6-difluoro-2-((3R,4R)-4-fluoro-3-(methylamino)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile;

6-((S)-1-(4,6-difluoro-2-((3R,4R)-4-fluoro-3-(methylamino)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile;

6-((R)-1-(5,7-difluoro-2-((3R,4R)-4-fluoro-3-(methylamino)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile; and

6-((S)-1-(5,7-difluoro-2-((3R,4R)-4-fluoro-3-(methylamino)piperidin-1-yl)-1H-benzo[d]imidazol-1-yl)ethyl)nicotinonitrile.

22. A compound, selected from:

6-((2-((3R,4S)-3-amino-4-fluoropiperidin-1-yl)-6-chloro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazole-4-carbonitrile;

(3R,4R)-1-(4,6-difluoro-1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine;

6-((2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-4,6-difluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile hydrochloride;

(R)-6-((2-(3-amino-4,4-difluoropiperidin-1-yl)-6-fluoro-1H-benzo[d]imidazol-1-yl)methyl)nicotinonitrile;

6-((2-((3R,4R)-3-amino-4-fluoro-1-piperidinyl)-4-methoxy-1H-benzimidazol-1-yl)methyl)-3-pyridinecarbonitrile;

2-(2-((3R,4R)-3-amino-4-fluoropiperidin-1-yl)-1-((5-chloropyrimidin-2-yl)methyl)-1H-benzo[d]imidazole-6-carbonitrile;

(3R,4R)-4-fluoro-1-(1-((5-fluoropyrimidin-2-yl)methyl)-1H-benzo[d]imidazol-2-yl)piperidin-3-amine; and

(3R,4R)-1-(1-((5-chloropyrimidin-2-yl)methyl)-6-fluoro-1H-benzo[d]imidazol-2-yl)-4-fluoropiperidin-3-amine.

23. The compound of any one of claims 1 to 22 in a form of a pharmaceutically acceptable salt.

24. A pharmaceutical composition comprising a pharmaceutically acceptable excipient, carrier or adjuvant and at least one compound of any one of claims 1 to 23.

25. Use of at least one compound of any one of claims 1 to 23, or a pharmaceutical salt thereof or a pharmaceutical composition thereof in the manufacture of a medicament for treating a disease or disorder mediated by TRPC6 in a mammal, wherein the disease or disorder mediated by TRPC6 is selected from the group consisting of nephrotic syndrome, minimal change disease, focal segmental glomerulosclerosis, collapsing glomerulopathy, membranous nephropathy, membranoproliferative glomerulonephritis, IGA nephropathy, acute renal failure, chronic renal failure, diabetic nephropathy, sepsis, pulmonary hypertension, acute lung disorder, acute respiratory distress syndrome (ARDS), heart failure, stroke, malignant tumor, and muscular dystrophy.

26. A compound of any one of claims 1 to 23 for use as a medicament.