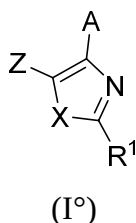


Claims

1. A compound having the structure of formula (I°):



or a pharmaceutically acceptable salt, or *N*-oxide thereof, or a solvate or hydrate thereof, wherein

X is -N(R')-;

R' is hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, C₁-C₆alkyloxy, -(C₀-C₁₂alkyl)-Cak or -(C₀-C₆alkyl)-Hca, each optionally substituted with 1 to 3 moieties that are each independently C₁-C₆alkyl, halogen, C₁-C₆haloalkyl, -OR^{S0}, C₁-C₆alkyl-OR^{S0}, -C(O)OR^{S0}, -C(O)R^{S0}, -C(O)NR^{S0}₂, -R^{S0} or cyano;

wherein each R^{S0} is independently hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, -(C₀-C₆alkyl)-Ar, -(C₀-C₆alkyl)-Het, -(C₀-C₆alkyl)-Cak, or -(C₀-C₆alkyl)-Hca, wherein Ar, Het, Cak, Hca, alkyl, and haloalkyl are optionally substituted with C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or cyano;

R¹ is hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, C₁-C₆alkyloxy, -OR^{S1}, -NR^{S1}₂, -SR^{S1} or -N(R^{S1})C(O)R^{S1}, each optionally substituted with 1 to 3 moieties that are each independently C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or cyano;

wherein each R^{S1} is independently hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, -(C₀-C₆alkyl)-Ar, -(C₀-C₆alkyl)-Het, -(C₀-C₆alkyl)-Cak, or -(C₀-C₆alkyl)-Hca, wherein Ar, Het, Cak, Hca, alkyl, and haloalkyl are optionally substituted with C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or cyano;

or R' and R¹ combined with the atoms to which they are attached form a five- to eight-membered ring;

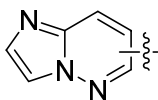
A is phenyl optionally substituted with one to five R² groups, wherein

each R² is independently halogen, -C₁-C₆alkyl, -C₁-C₆haloalkyl, -C₁-C₆alkoxy, -C₁-C₆haloalkoxy, -NO₂, -N(R^{S2})C(O)R^{S2}, -OR^{S2}, -C(O)NR^{S2}₂, -N(R^{S2})S(O)₂R^{S2}, -S(O)₂R^{S2}, -(C₀-C₆alkyl)-Ar or -CN, wherein each alkyl,

haloalkyl and alkoxy are optionally substituted with 1, 2, 3, or 4 groups that are each independently halogen, cyano, nitro, $-OR^{S2}$, $-SR^{S2}$, $-NR^{S2}_2$, $-C(O)OR^{S2}$, $-C(O)NR^{S2}_2$, $-C(O)R^{S2}$, $-S(O)R^{S2}$, $-S(O)_2R^{S2}$, $-S(O)OR^{S2}$, $-S(O)_2OR^{S2}$, $-S(O)NR^{S2}_2$, $-S(O)_2NR^{S2}_2$, $-OC(O)R^{S2}$, $-OC(O)OR^{S2}$, $-OC(O)NR^{S2}_2$, $-N(R^{S2})C(O)R^{S2}$, $-N(R^{S2})C(O)OR^{S2}$, $-N(R^{S2})C(O)NR^{S2}_2$, $-N(R^{S2})S(O)R^{S2}$, $-N(R^{S2})S(O)_2R^{S2}$, C_1 - C_6 alkyl, or C_1 - C_6 haloalkyl;

wherein each R^{S2} is independently hydrogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, $-(C_0$ - C_6 alkyl)-Ar, $-(C_0$ - C_6 alkyl)-Het, $-(C_0$ - C_6 alkyl)-Cak, or $-(C_0$ - C_6 alkyl)-Hca, wherein Ar, Het, Cak, Hca, alkyl, and haloalkyl are optionally substituted with C_1 - C_6 alkyl, halogen, C_1 - C_6 haloalkyl or cyano;

Z is



wherein

Z is optionally substituted by one or two $-R^Z$ groups that are each independently halogen, cyano, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, $-C_1$ - C_6 alkoxy, $-OR^{S3}$, $-SR^{S3}$, $-C(O)R^{S3}$, $-C(O)OR^{S3}$, $-C(O)NR^{S3}_2$, $-S(O)_2NR^{S3}_2$, $-S(O)_2R^{S3}$, $-OC(O)R^{S3}$, $-OC(O)OR^{S3}$, $-OC(O)NR^{S3}_2$, $-N(R^{S3})C(O)OR^{S3}$, $-N(R^{S3})S(O)_2R^{S3}$, $-OP(O)(OR^{S3})_2$ or $-CH_2-OP(O)(OR^{S3})$, wherein each alkyl, haloalkyl and alkoxy is optionally substituted by one or two $-R^{Z2}$ groups;

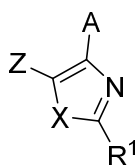
wherein each R^{S3} is independently hydrogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, $-(C_0$ - C_6 alkyl)-Ar, $-(C_0$ - C_6 alkyl)-Het, $-(C_0$ - C_6 alkyl)-Cak, or $-(C_0$ - C_6 alkyl)-Hca, wherein Ar, Het, Cak, Hca, alkyl, and haloalkyl are optionally substituted with C_1 - C_6 alkyl, halogen, C_1 - C_6 haloalkyl, or cyano; and

each $-R^{Z2}$ is independently halogen, cyano, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, $-C_1$ - C_6 alkoxy, $-OR^{S4}$, $-SR^{S4}$, $-NR^{S4}_2$, $-C(O)R^{S4}$, $-C(O)OR^{S4}$, $-C(O)NR^{S4}_2$, $-S(O)_2NR^{S4}_2$, $-S(O)_2R^{S4}$, $-OC(O)R^{S4}$, $-N(R^{S4})C(O)R^{S4}$, $-OC(O)OR^{S4}$, $-OC(O)NR^{S4}_2$, $-N(R^{S4})C(O)OR^{S4}$,

-N(R^{S4})C(O)NR^{S4}₂, -N(R^{S4})S(O)₂R^{S4}, -OP(O)(OR^{S4})₂ or -CH₂-OP(O)(OR^{S4}); and

wherein each R^{S4} is independently hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, -(C₀-C₆alkyl)-Ar, -(C₀-C₆alkyl)-Het, -(C₀-C₆alkyl)-Cak, or -(C₀-C₆alkyl)-Hca, wherein Ar, Het, Cak, Hca, alkyl, and haloalkyl are optionally substituted with one or two C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or cyano.

2. A compound according to claim 1 having the structure of formula (I):



(I)

or a pharmaceutically acceptable salt, or *N*-oxide thereof, or a solvate or hydrate thereof, wherein

X is -N(R')-;

R' is hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, C₁-C₆alkyloxy, each optionally substituted with 1 to 3 moieties that are each independently C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or cyano;

R¹ is hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, C₁-C₆alkyloxy, -OR^{S1}, -NR^{S1}₂, -SR^{S1}, each optionally substituted with 1 to 3 moieties that are each independently C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or cyano;

wherein each R^{S1} is independently hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, -(C₀-C₆alkyl)-Ar, -(C₀-C₆alkyl)-Het, -(C₀-C₆alkyl)-Cak, or -(C₀-C₆alkyl)-Hca, wherein Ar, Het, Cak, Hca, alkyl, and haloalkyl are optionally substituted with C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or cyano;

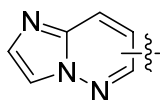
A is phenyl optionally substituted with one to five R² groups, wherein

each R² is independently halogen, -C₁-C₆alkyl, -C₁-C₆haloalkyl, -C₁-C₆alkoxy, -NO₂ or -CN, wherein each alkyl, haloalkyl and alkoxy are optionally substituted with 1, 2, 3, or 4 groups that are each independently halogen, cyano, nitro, -OR^{S2}, -SR^{S2}, -NR^{S2}₂, -C(O)OR^{S2}, -C(O)NR^{S2}₂, -C(O)R^{S2},

-S(O)R^{S2}, -S(O)₂R^{S2}, -S(O)OR^{S2}, -S(O)₂OR^{S2}, -S(O)NR^{S2}₂, -S(O)₂NR^{S2}₂,
 -OC(O)R^{S2}, -OC(O)OR^{S2}, -OC(O)NR^{S2}₂, -N(R^{S2})C(O)R^{S2},
 -N(R^{S2})C(O)OR^{S2}, -N(R^{S2})C(O)NR^{S2}₂, -N(R^{S2})S(O)R^{S2}, -N(R^{S2})S(O)₂R^{S2},
 C₁-C₆alkyl, or C₁-C₆haloalkyl;

wherein each R^{S2} is independently hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl,
 -(C₀-C₆alkyl)-Ar, -(C₀-C₆alkyl)-Het, -(C₀-C₆alkyl)-Cak, or -(C₀-
 C₆alkyl)-Hca, wherein Ar, Het, Cak, Hca, alkyl, and haloalkyl are
 optionally substituted with C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or
 cyano;

Z is



wherein

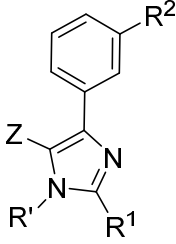
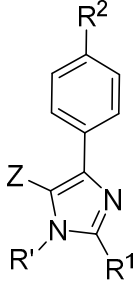
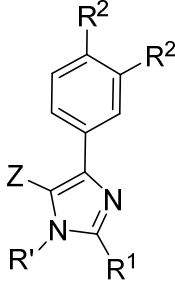
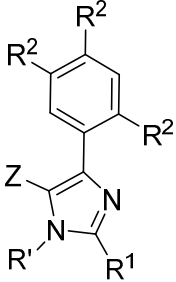
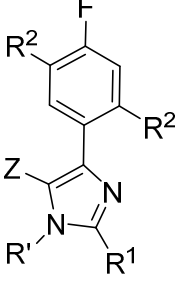
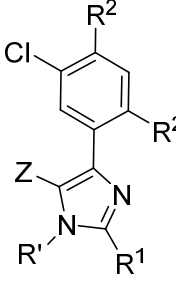
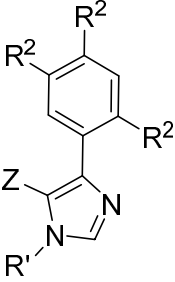
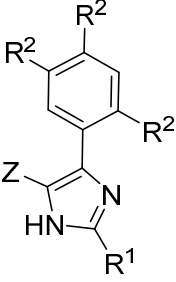
Z is optionally substituted by one or two -R^Z groups that are each independently
 halogen, cyano, C₁₋₆alkyl, C₁₋₆haloalkyl, -C₁-C₆alkoxy, -OR^{S3}, -SR^{S3},
 -C(O)R^{S3}, -C(O)OR^{S3}, -C(O)NR^{S3}₂, -S(O)₂NR^{S3}₂, -S(O)₂R^{S3}, -OC(O)R^{S3},
 -OC(O)OR^{S3}, -OC(O)NR^{S3}₂, -N(R^{S3})C(O)OR^{S3}, -N(R^{S3})S(O)₂R^{S3}, -
 OP(O)(OR^{S3})₂ or -CH₂-OP(O)(OR^{S3}), wherein each alkyl, haloalkyl and
 alkoxy is optionally substituted by one or two -R^{Z2} groups;

wherein each R^{S3} is independently hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl,
 -(C₀-C₆alkyl)-Ar, -(C₀-C₆alkyl)-Het, -(C₀-C₆alkyl)-Cak, or -(C₀-
 C₆alkyl)-Hca, wherein Ar, Het, Cak, Hca, alkyl, and haloalkyl are
 optionally substituted with C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or
 cyano; and

each -R^{Z2} is independently halogen, cyano, C₁₋₆alkyl, C₁₋₆haloalkyl, -C₁-
 C₆alkoxy, -OR^{S4}, -SR^{S4}, -NR^{S4}₂, -C(O)R^{S4}, -C(O)OR^{S4},
 -C(O)NR^{S4}₂, -S(O)₂NR^{S4}₂, -S(O)₂R^{S4}, -OC(O)R^{S4},
 -N(R^{S4})C(O)R^{S4}, -OC(O)OR^{S4}, -OC(O)NR^{S4}₂, -N(R^{S4})C(O)OR^{S4},
 -N(R^{S4})C(O)NR^{S4}₂, -N(R^{S4})S(O)₂R^{S4}, -OP(O)(OR^{S4})₂ or -CH₂-
 OP(O)(OR^{S4}); and

wherein each R^{S4} is independently hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, -(C₀-C₆alkyl)-Ar, -(C₀-C₆alkyl)-Het, -(C₀-C₆alkyl)-Cak, or -(C₀-C₆alkyl)-Hca, wherein Ar, Het, Cak, Hca, alkyl, and haloalkyl are optionally substituted with C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or cyano.

3. The compound of claim 1 or 2, wherein the compound has the structure of one of the following formulae:

 (Ie)	 (If)	 (Ig)	 (Ii)
 (IIa)	 (IIc)	 (IId) or	 (IIe)

4. A compound according to claim 1 that is:

6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(4-fluorophenyl)-1-*cis*-3-hydroxycyclobutyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(1-(3,3-difluorocyclobutyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(4-fluorophenyl)-1-(3,3,3-trifluoropropyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(1-(3,3-difluorocyclopentyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

(*S*)-6-(4-(4-fluorophenyl)-1-(1-hydroxybutan-2-yl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-cyclopropyl-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(4,4-difluorocyclohexyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(2-fluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-ethyl-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-(2-*isopropoxyethyl*)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-(3-hydroxy-3-methylbutyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-(oxetan-3-yl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-(2-hydroxyethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-(3-hydroxypropyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(1-cyclopropyl-2-methoxyethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-(2-hydroxycyclohexyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-methyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(3,3-difluoropropyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-(3-fluoropropyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(2,2-difluoropropyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(2-fluoro-2-methylpropyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-isopropyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(bicyclo[1.1.1]pentan-1-yl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-(2-hydroxy-2-methylpropyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-(3-(hydroxymethyl)cyclobutyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

(*R*)-6-(4-(4-fluorophenyl)-1-(4,4,4-trifluoro-1-hydroxybutan-2-yl)-1*H*-imidazol-5-
yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

(*S*)-6-(4-(4-fluorophenyl)-1-(4,4,4-trifluoro-1-hydroxybutan-2-yl)-1*H*-imidazol-5-
yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-(*tert*-pentyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-
carbonitrile,

6-(4-(4-fluorophenyl)-1-((tetrahydrofuran-2-yl)methyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-(2-hydroxyethyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-(2,2-difluoroethyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-(2-fluoroethyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-(3,3,3-trifluoropropyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-cyclopropyl-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-(3-hydroxy-3-methylbutyl)-1*H*-imidazol-5-
yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-(3-hydroxypropyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-((*cis*)-3-hydroxycyclobutyl)-1*H*-imidazol-5-
yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-(2-cyclobutylethyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-(1-methylcyclopropyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

(*S*)-6-(4-(3-chloro-4-fluorophenyl)-1-((tetrahydrofuran-2-yl)methyl)-1*H*-imidazol-5-
yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-(3-methyloxetan-3-yl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-(3-chloropropyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carbonitrile,

6-(4-(3-chloro-4-fluorophenyl)-1-((3-methyloxetan-3-yl)methyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-(tetrahydrofuran-3-yl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-(2-methoxyethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-(tetrahydro-2*H*-pyran-4-yl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-isopentyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-methyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-isopropyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-ethyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-(3,3-difluorocyclobutyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-(3-fluoropropyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-(3,3,3-trifluoro-2-hydroxypropyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-(2,2-difluoropropyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-(2-fluoro-2-methylpropyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-cyclobutyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(1-(bicyclo[1.1.1]pentan-1-yl)-4-(3-chloro-4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-(2-chloroethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-(2-cyclopropylethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-((1-methylcyclopropyl)methyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 (*R*)-6-(4-(3-chloro-4-fluorophenyl)-1-(3,3-difluorocyclopentyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

(S)-6-(4-(3-chloro-4-fluorophenyl)-1-(3,3-difluorocyclopentyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(1-(3-fluorocyclobutyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 (S)-6-(1-(1-fluorobutan-2-yl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3-chloro-4-fluorophenyl)-1-(3-fluorocyclobutyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(1-(3,3-difluorocyclobutyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(4-fluorophenyl)-1-(3,3,3-trifluoropropyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(1-(3,3-difluorocyclopentyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(1-cyclopropyl-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(1-(4,4-difluorocyclohexyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(1-(2-fluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(1-ethyl-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-(2,2-difluoroethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-(2-fluoroethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-(3,3,3-trifluoropropyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-isopropyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-ethyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-(3,3-difluorocyclobutyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(4-fluorophenyl)-1-*cis*-3-hydroxycyclobutyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,

6-(4-(4-fluorophenyl)-1-(2-isopropoxyethyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

(*S*)-6-(4-(4-fluorophenyl)-1-(1-hydroxybutan-2-yl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

6-(4-(4-fluorophenyl)-1-(oxetan-3-yl)-1*H*-imidazol-5-yl)imidazo[1,2-b]pyridazine-3-
carboxamide,

6-(1-(3-fluorocyclobutyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

(*S*)-6-(1-(1-fluorobutan-2-yl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

6-(1-(1,3-dihydroxypropan-2-yl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

6-(1-(1-cyclopropyl-2-methoxyethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

6-(4-(4-fluorophenyl)-1-(3-hydroxy-3-methylbutyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

6-(4-(4-fluorophenyl)-1-(3-hydroxypropyl)-1*H*-imidazol-5-yl)imidazo[1,2-b]pyridazine-
3-carboxamide,

6-(4-(4-fluorophenyl)-1-(2-hydroxyethyl)-1*H*-imidazol-5-yl)imidazo[1,2-b]pyridazine-3-
carboxamide,

6-(4-(4-fluorophenyl)-1-methyl-1*H*-imidazol-5-yl)imidazo[1,2-b]pyridazine-3-
carboxamide,

6-(4-(4-fluorophenyl)-1-isopropyl-1*H*-imidazol-5-yl)imidazo[1,2-b]pyridazine-3-
carboxamide,

6-(1-(bicyclo[1.1.1]pentan-1-yl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

6-(1-(2,2-difluoropropyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

6-(4-(3-chloro-4-fluorophenyl)-1-(2-hydroxyethyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

6-(4-(3-chloro-4-fluorophenyl)-1-(3-hydroxy-3-methylbutyl)-1*H*-imidazol-5-
yl)imidazo[1,2-b]pyridazine-3-carboxamide,

6-(4-(3-chloro-4-fluorophenyl)-1-((1*S*,3*S*)-3-hydroxycyclobutyl)-1*H*-imidazol-5-
yl)imidazo[1,2-b]pyridazine-3-carboxamide,

6-(4-(3-chloro-4-fluorophenyl)-1-(3-fluorocyclobutyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

6-(4-(3-chloro-4-fluorophenyl)-1-(3-hydroxypropyl)-1*H*-imidazol-5-yl)imidazo[1,2-
b]pyridazine-3-carboxamide,

6-(4-(3-chloro-4-fluorophenyl)-1-(2-(pyrrolidin-1-yl)ethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-(tetrahydro-2*H*-pyran-4-yl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 (*S*)-6-(4-(3-chloro-4-fluorophenyl)-1-((tetrahydrofuran-2-yl)methyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-(tetrahydrofuran-3-yl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-(2-methoxyethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-isopentyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-(3-chloropropyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-(2-cyclobutylethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(4-(3-chloro-4-fluorophenyl)-1-(2,2-difluoropropyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 1-(4-(4-fluorophenyl)-5-(imidazo[1,2-*b*]pyridazin-6-yl)-1*H*-imidazol-1-yl)cyclopropanecarbonitrile,
 6-(1-(1-(difluoromethyl)cyclopropyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine,
 methyl 3-(5-(3-cyanoimidazo[1,2-*b*]pyridazin-6-yl)-4-(4-fluorophenyl)-1*H*-imidazol-1-yl)azetidine-1-carboxylate,
 6-(1-(1-(acetylazetidin-3-yl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(1-(1-(cyclopropanecarbonyl)azetidin-3-yl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
N-(*tert*-butyl)-3-(5-(3-cyanoimidazo[1,2-*b*]pyridazin-6-yl)-4-(4-fluorophenyl)-1*H*-imidazol-1-yl)azetidine-1-carboxamide,
 6-(1-(1-(cyanomethyl)azetidin-3-yl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(1-(1-(*tert*-butylcarbonyl)azetidin-3-yl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 (6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)methanamine,
N-((6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)methyl)acetamide,

N-((6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)methyl)cyclopropanecarboxamide,
 1-(*tert*-butyl)-3-((6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)methyl)urea,
 methyl ((6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)methyl)carbamate,
 isopropyl ((6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)methyl)carbamate,
N-((6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)methyl)pivalamide,
 2-(6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)propan-2-ol,
 6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)-*N*-methylimidazo[1,2-*b*]pyridazine-3-carboxamide,
 6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)-*N,N*-dimethylimidazo[1,2-*b*]pyridazine-3-carboxamide,
N-cyclopropyl-6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,
 (6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)methanol,
 methyl (6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)carbamate,
 1-(6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)-2,2,2-trifluoroethanol,
 1-(6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)ethanol,
 6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)-3-(difluoromethyl)imidazo[1,2-*b*]pyridazine,
 2-(6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)ethanol,
 6-(4-(3-cyanophenyl)-1-(2,2-difluoroethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(1-(2,2-difluoroethyl)-4-phenyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
 6-(4-(3,5-dichlorophenyl)-1-(2,2-difluoroethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,
N-(2-(5-(3-cyanoimidazo[1,2-*b*]pyridazin-6-yl)-1-(2,2-difluoroethyl)-1*H*-imidazol-4-yl)phenyl)methanesulfonamide,

6-(1-(2,2-difluoroethyl)-4-(*p*-tolyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(2,2-difluoroethyl)-4-(4-methoxyphenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(2,2-difluoroethyl)-4-(3-(trifluoromethyl)phenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(2,2-difluoroethyl)-4-(4-(trifluoromethyl)phenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

N-(3-(5-(3-cyanoimidazo[1,2-*b*]pyridazin-6-yl)-1-(2,2-difluoroethyl)-1*H*-imidazol-4-yl)phenyl)acetamide,

6-(1-(2,2-difluoroethyl)-4-(2-(trifluoromethyl)phenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(2,2-difluoroethyl)-4-(2-hydroxyphenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(2,2-difluoroethyl)-4-(3-hydroxyphenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(2,2-difluoroethyl)-4-(4-hydroxyphenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

2-(5-(3-cyanoimidazo[1,2-*b*]pyridazin-6-yl)-1-(2,2-difluoroethyl)-1*H*-imidazol-4-yl)benzamide,

N-(3-(5-(3-cyanoimidazo[1,2-*b*]pyridazin-6-yl)-1-(2,2-difluoroethyl)-1*H*-imidazol-4-yl)phenyl)methanesulfonamide,

6-(1-(2,2-difluoroethyl)-4-(2-(hydroxymethyl)phenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(2,2-difluoroethyl)-4-(3-(methylsulfonyl)phenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

3-(5-(3-cyanoimidazo[1,2-*b*]pyridazin-6-yl)-1-(2,2-difluoroethyl)-1*H*-imidazol-4-yl)benzamide,

6-(1-(2,2-difluoroethyl)-4-(3-(hydroxymethyl)phenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-([1,1'-biphenyl]-3-yl)-1-(2,2-difluoroethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile ,

6-(4-(4-cyanophenyl)-1-(2,2-difluoroethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile ,

6-(1-(2,2-difluoroethyl)-4-(3-(trifluoromethoxy)phenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile ,

6-(1-(2,2-difluoroethyl)-4-(4-fluoro-3-(trifluoromethyl)phenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile ,

6-(1-(2,2-difluoroethyl)-4-(4-fluoro-2-(trifluoromethyl)phenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile ,

6-(1-(2,2-difluoroethyl)-4-(4-fluoro-3-methoxyphenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile ,

6-(1-(2,2-difluoroethyl)-4-(4-isopropoxyphenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile ,

6-(1-(2,2-difluoroethyl)-4-(3-(2-hydroxypropan-2-yl)phenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile ,

6-(4-(3-cyano-4-fluorophenyl)-1-(2,2-difluoroethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile ,

6-(1-(1-cyanocyclopropyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(1-(2-cyanoethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-((1*r*,3*s*,5*R*,7*S*)-3-hydroxyadamantan-1-yl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

6-(4-(4-fluorophenyl)-1-neopentyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

2-(6-(1-ethyl-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)propan-2-ol,

2-(6-(1-cyclopropyl-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)propan-2-ol,

6-(1-(azetidin-3-yl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,

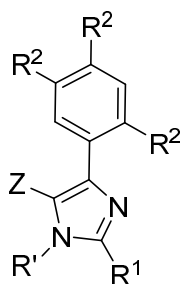
tert-butyl 3-(5-(3-carbamoylimidazo[1,2-*b*]pyridazin-6-yl)-4-(4-fluorophenyl)-1*H*-imidazol-1-yl)azetidine-1-carboxylate,

6-(1-(azetidin-3-yl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,

(6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)methanamine, or

6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)-3-vinylimidazo[1,2-*b*]pyridazine.

5. A compound according to claim 1 having the structure of formula (II°):



(II°)

or a pharmaceutically acceptable salt, or *N*-oxide thereof, or solvate or hydrate thereof, wherein

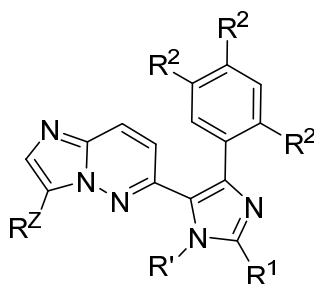
R' is hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, -(C₀-C₁₂alkyl)-Cak or -(C₀-C₆alkyl)-Hca, each optionally substituted with 1 to 3 moieties that are each independently C₁-C₆alkyl, halogen, C₁-C₆haloalkyl, C₁-C₆alkyl-OR^{S0}, -OR^{S0}, -R^{S0} or cyano; wherein each R^{S0} is independently hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, -(C₀-C₆alkyl)-Ar, -(C₀-C₆alkyl)-Het, -(C₀-C₆alkyl)-Cak, or -(C₀-C₆alkyl)-Hca, wherein Ar, Het, Cak, Hca, alkyl, and haloalkyl are optionally substituted with C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or cyano;

R¹ is hydrogen or C₁-C₆alkyl;

or R' and R¹ combined with the atoms to which they are attached form a five- to eight-membered Hca; and

each R² is independently hydrogen, halogen, -C₁-C₆alkyl, -C₁-C₆alkyl-OR^{S2} or -OR^{S2}.

6. A compound according to claim 1 having the structure of formula (III°):



(III°)

or a pharmaceutically acceptable salt, or *N*-oxide thereof, or solvate or hydrate thereof, wherein

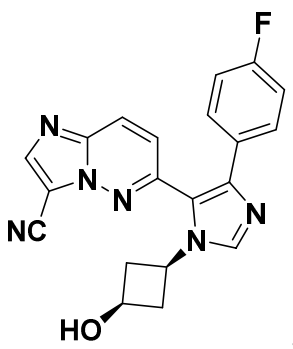
R' is hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, -(C₀-C₁₂alkyl)-Cak or -(C₀-C₆alkyl)-Hca, each optionally substituted with 1 to 3 moieties that are each independently C₁-C₆alkyl, halogen, C₁-C₆haloalkyl, C₁-C₆alkyl-OR^{S0}, -OR^{S0}, -R^{S0} or cyano; wherein each R^{S0} is independently hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, -(C₀-C₆alkyl)-Ar, -(C₀-C₆alkyl)-Het, -(C₀-C₆alkyl)-Cak, or -(C₀-C₆alkyl)-Hca, wherein Ar, Het, Cak, Hca, alkyl, and haloalkyl are optionally substituted with C₁-C₆alkyl, halogen, C₁-C₆haloalkyl or cyano;

R¹ is hydrogen or C₁-C₆alkyl;

or R' and R¹ combined with the atoms to which they are attached form a five- to eight-membered Hca; and

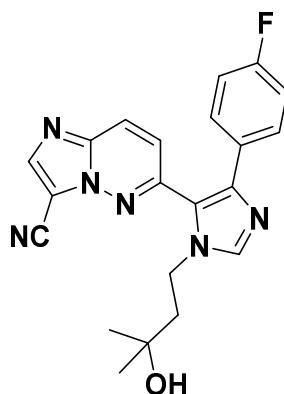
each R² is independently hydrogen, halogen, -C₁-C₆alkyl, -C₁-C₆alkyl-OR^{S2} or -OR^{S2}.

7. The compound according to claim 1 that is 6-(4-(4-fluorophenyl)-1-*cis*-3-hydroxycyclobutyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,



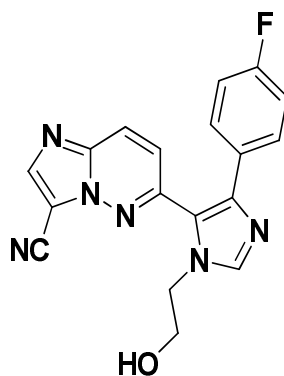
or a pharmaceutically acceptable salt thereof;

6-(4-(4-fluorophenyl)-1-(3-hydroxy-3-methylbutyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,



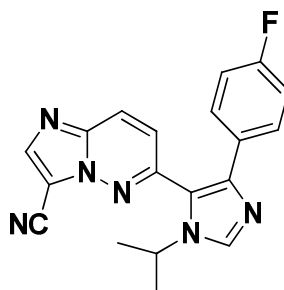
or a pharmaceutically acceptable salt thereof;

6-(4-(4-fluorophenyl)-1-(2-hydroxyethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,



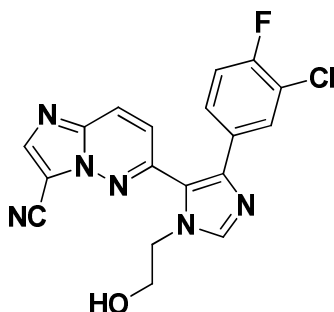
or a pharmaceutically acceptable salt thereof; or

6-(4-(4-fluorophenyl)-1-isopropyl-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,



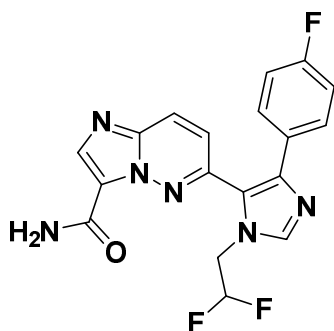
or a pharmaceutically acceptable salt thereof.

8. The compound according to claim 1 that is 6-(4-(3-chloro-4-fluorophenyl)-1-(2-hydroxyethyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carbonitrile,



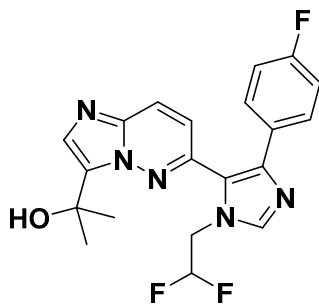
or a pharmaceutically acceptable salt thereof.

9. The compound according to claim 1 that is 6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazine-3-carboxamide,



or a pharmaceutically acceptable salt thereof; or

2-(6-(1-(2,2-difluoroethyl)-4-(4-fluorophenyl)-1*H*-imidazol-5-yl)imidazo[1,2-*b*]pyridazin-3-yl)propan-2-ol,



or a pharmaceutically acceptable salt thereof.

10. A pharmaceutical composition comprising a pharmaceutically acceptable diluent, carrier, or excipient and a compound according to any one of claims 1 –9.
11. A compound according to any of claims 1 –9, for use in therapy.
12. The compound for use of claim 11, wherein the disease or condition is mediated by or involves GDF-8, or wherein the disease or condition is mediated by or involves TGF- β .
13. The compound of claim 11 or claim 12, for use in treating pulmonary hypertension, chronic renal disease, acute renal disease, wound healing, arthritis, osteoporosis, kidney disease, congestive heart failure, ulcer, ocular disorder, corneal wound, diabetic nephropathy, impaired neurological function, Alzheimer's disease, atherosclerosis, peritoneal or sub-dermal adhesion, kidney fibrosis, lung fibrosis, idiopathic pulmonary fibrosis, liver fibrosis, hepatitis B, hepatitis C, alcohol-induced hepatitis, cancer, haemochromatosis, primary biliary cirrhosis, restenosis, retroperitoneal fibrosis, mesenteric fibrosis, endometriosis, keloids, abnormal bone function, inflammatory disorder, scarring or photoaging of the skin; or

for use in treating benign or malignant tumor, carcinoma of the brain, kidney, liver, adrenal gland, bladder, breast, stomach, gastric tumors, ovaries, colon, rectum, prostate, pancreas, lung, vagina or thyroid, sarcoma, glioblastomas, multiple myeloma or gastrointestinal cancer, colon carcinoma or colorectal adenoma, tumor of the neck and head, epidermal hyperproliferation, melanoma, psoriasis, prostate hyperplasia, neoplasia, neoplasia of epithelial character, leukemias, lymphomas, mammary carcinoma or leukemia; or

for use in treating Cowden syndrome, Lhermitte-Duclos disease, Bannayan-Zonana syndrome, or other disease in which the PI3K/PKB pathway is aberrantly activated.
14. The compound according to any of claims 1 to 9, for use in the treatment of cancer wherein the compound is used in combination with one or more chemotherapeutic agents independently selected from the group consisting of antimetabolites, alkylating agents, coordination compounds, platinum complexes, DNA cross-linking compounds, inhibitors of transcription enzymes, tyrosine kinase inhibitors, protein kinase inhibitors, topoisomerase inhibitors, DNA minor-groove binding compounds, vinca alkaloids,

taxanes, antitumor antibiotics, hormones, aromatase inhibitors, enzymes, growth factor receptors antibodies, cytokines, cell surface markers antibodies, HDAC inhibitors, HSP 90 inhibitors, BCL-2 inhibitors, B-raf inhibitors, MEK inhibitors, mTOR inhibitors, proteasome inhibitors and monoclonal antibodies.

15. The compound for use according to claim 14 , wherein the one or more chemotherapeutic agents is independently selected from the group consisting of mechlorothamine, cyclophosphamide, ifosfamide, melphalan, chlorambucil, ethyleneimines, methylmelamines, procarbazine, dacarbazine, temozolomide, busulfan, carmustine, lomustine, methotrexate, fluorouracil, capecitabine, cytarabine, gemcitabine, cytosine arabinoside, mecaptopurine, fludarabine, cladribine, thioguanine, azathioprine, vinblastine, vincristine, paclitaxel, docetaxel, colchicine, actinomycin D, daunorubicin, bleomycin, L-asparaginase, cisplatin, carboplatin, oxaliplatin, prednisone, dexamethasone, amino glutethimide, formestane, anastrozole, hydroxyprogesterone caproate, medroxyprogesterone, tamoxifen, amsacrine, mitoxantrone, topotecan, irinotecan, camptothecin, afatinib, axitinib, bosutinib, bortezomib, carfilzomib, cabozantinib, cediranib, crizotinib, dasatinib, dabrafenib, evorolimus, ibrutinib, LDK378, LGX818, MEK162, regorafenib, ruxolitinib, selumetinib, sorafenib, trametinib, vemurafenib, erlotinib, gefitinib, imatinib, lapatinib, lestaurtinib, nilotinib, palbociclib, pazopanib, pomatinib, semaxanib, sirolimus, sunitinib, temsirolimus, vatalanib, vandetanib, anti Her2 antibodies, interferon- α , interferon- γ , interleukin 2, GM CSF, anti CTLA 4 antibodies, rituximab, anti CD33 antibodies, MGCD0103, vorinostat, 17-AAG, thalidomide, lenalidomide, rapamycin, CCI-779, doxorubicine, gemcitabine, melphalan, NPI052, gemtuzumab, alemtuzumab, cetuximab, ibritumomab tiuxetan, tositumomab, iodine-131 tositumomab, trastuzumab, ado-trastuzumab emtansine, obinutuzumab, bevacizumab, rituximab, and anti-TRAIL death receptor antibodies.
16. A compound according to any of claims 1-9, for use in treating cancer wherein the compound is administered in combination with a therapeutically effective amount of one or more immuno-oncology agents.
17. A compound of any of claims 1-9, for use in treating cancer wherein the compound is administered in conjunction with an anti-cancer agent which is an antibody or an antigen-

binding portion thereof that binds specifically to a Programmed Death-1 (PD-1) receptor and inhibits PD-1 activity.

18. The compound for use according to claim 17, wherein the anti-PD-1 antibody is nivolumab.