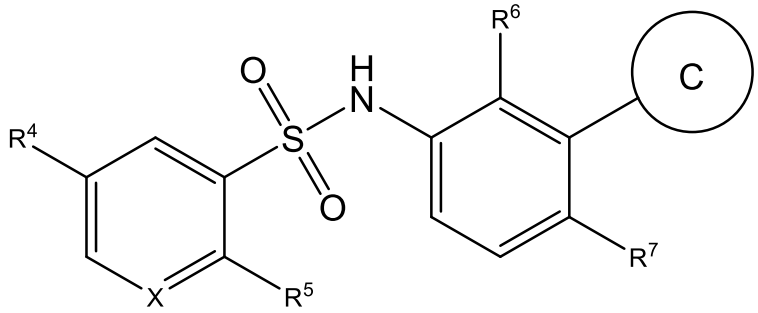
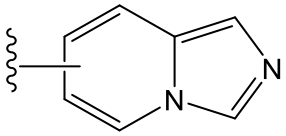
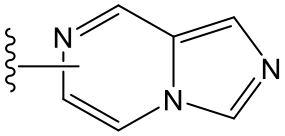
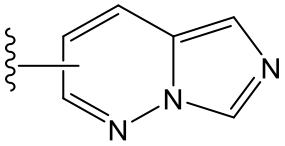
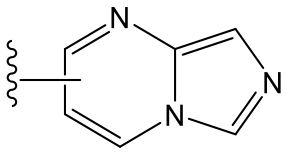
SUMMARY

[003a] In an aspect of the present disclosure, there is provided a compound represented by Formula (Ia):



(Ia)

or a pharmaceutically acceptable salt thereof, wherein:

C is selected from 9-membered bicyclic heteroaryl selected from the group consisting of , , , and , 7-10 membered bicyclic heterocyclyl, or 8-membered bicyclic heteroaryl, wherein the 9-membered bicyclic heteroaryl, 7-10 membered bicyclic heterocyclyl, or 8-membered bicyclic heteroaryl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^3; wherein the 7-10 membered bicyclic heterocyclyl is partially unsaturated and contains at least two nitrogen atoms; wherein the 8-membered bicyclic heteroaryl contains at least two nitrogen atoms; wherein, if the 9-membered bicyclic heteroaryl, 7-10 membered bicyclic heterocyclyl, or 8-membered bicyclic heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by $C_{1\text{-}6}$alkyl;

X is selected from the group consisting of CH, C(R^8), and N;

R^3 is independently, for each occurrence, selected from the group consisting of halogen, $C_{1\text{-}6}$alkyl, $C_{3\text{-}6}$cycloalkyl, cyano, $C_{1\text{-}6}$alkoxyl, hydroxyl, oxo, phenyl, -C(O)N(R^A)(R^B), -N(R^A)(R^B), 5-10 membered heterocyclyl, and 5-10 membered heteroaryl, wherein the $C_{1\text{-}6}$alkyl, 5-10 membered heteroaryl, or 5-10 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{3a}; and wherein, if the 5-10 membered

heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^4 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{4a};

R^5 is selected from the group consisting of hydrogen, halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{5a};

R^6 is selected from the group consisting of halogen, C_{1-6}alkyl, cyano, C_{1-6}alkoxyl, and C_{3-6}cycloalkyl, wherein the C_{1-6}alkyl and C_{3-6}cycloalkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{6a};

R^7 is selected from the group consisting of fluoro, chloro, methyl, and cyano;

R^8 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{8a};

or when X is C(R^8), R^8 and R^5 may optionally combine together with the atoms to which they are attached to form a 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl, wherein the 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl may be optionally substituted on one or more available carbons by one, two, three, or more hydroxyl substituents; wherein, if the 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^A is hydrogen or C_{1-6}alkyl;

R^B is selected from the group consisting of hydrogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, phenyl, 5-6 membered heterocyclyl, and 5-6 membered heteroaryl, wherein the C_{1-6}alkyl or

phenyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^e; and wherein, if the 5-6 membered heteroaryl or 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{3a} is independently, for each occurrence, selected from the group consisting of halogen, cyano, hydroxyl, C_{1-6}alkyl, phenyl, C_{3-6}cycloalkyl, 5-6 membered heterocyclyl, and $-CO_2(C_{1-6}$alkyl), wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from halogen, hydroxyl, and phenyl; and wherein, if the 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{4a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

R^{5a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

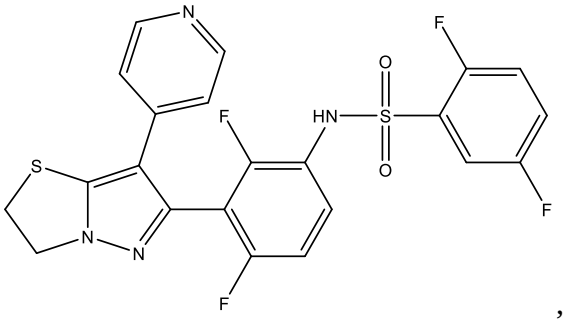
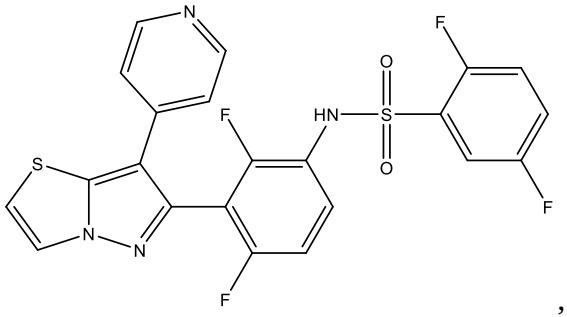
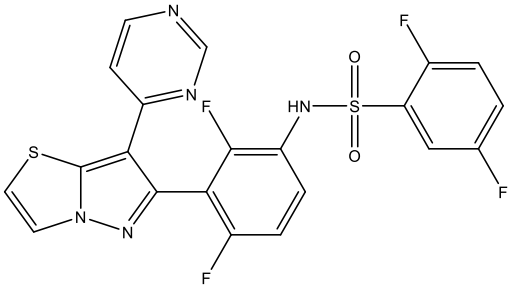
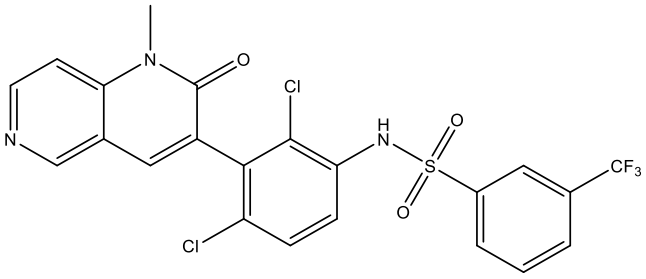
R^{6a} is independently, for each occurrence, halogen;

R^{8a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

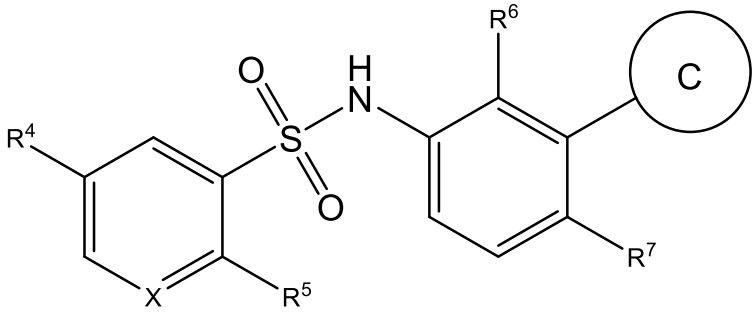
R^e is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, C_{1-6}alkyl, 3-6 membered cycloalkyl, 5-6 membered heterocyclyl, $-N(R^C)(R^D)$, and $-S(O)_2C_{1-6}$alkyl, wherein C_{1-6}alkyl or 5-6 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from oxo and $-N(R^C)(R^D)$; and

R^C and R^D are each independently selected from hydrogen and C_{1-6}alkyl;

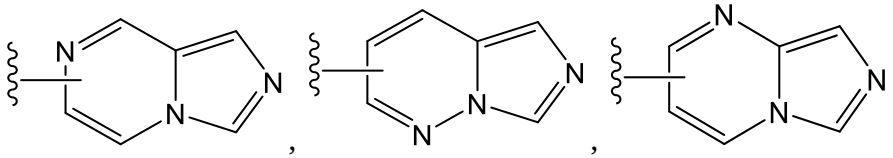
wherein the compound of Formula (Ia) is not

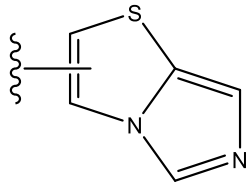

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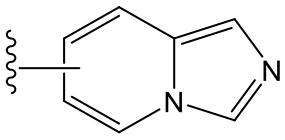
[003b] In another aspect of the present disclosure, there is provided a compound represented by Formula (Ia):


(Ia)

or a pharmaceutically acceptable salt thereof, wherein:

C is selected from 8-9 membered bicyclic heteroaryl selected from the group consisting of

,
,
,



, and 

and 9-membered bicyclic heterocyclyl, wherein the 8-9 membered bicyclic heteroaryl or 9-membered bicyclic heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^3; wherein the 9-membered bicyclic heterocyclyl is partially unsaturated and contains at least two nitrogen atoms; wherein, if the 8-9 membered bicyclic heteroaryl or 9-membered bicyclic heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

X is selected from the group consisting of CH, C(R^8), and N;

R^3 is independently, for each occurrence, selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, C_{1-6}alkoxyl, hydroxyl, oxo, phenyl, -C(O)N(R^A)(R^B), -N(R^A)(R^B), 5-10 membered heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-6}alkyl, 5-10 membered heteroaryl, or 5-10 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{3a}; and wherein, if the 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^4 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{4a};

R^5 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{5a};

R^6 is selected from the group consisting of halogen, C_{1-6}alkyl, cyano, C_{1-6}alkoxyl, and C_{3-6}cycloalkyl, wherein the C_{1-6}alkyl and C_{3-6}cycloalkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{6a};

R^7 is selected from the group consisting of fluoro, chloro, methyl, and cyano;

R^8 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{8a};

or when X is C(R^8), R^8 and R^5 may optionally combine together with the atoms to which they are attached to form a 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl, wherein the 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl may be optionally substituted on one or more available carbons by one, two, three, or more hydroxyl substituents; wherein, if the 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^A is hydrogen or C_{1-6}alkyl;

R^B is selected from the group consisting of hydrogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, phenyl, 5-6 membered heterocyclyl, and 5-6 membered heteroaryl, wherein the C_{1-6}alkyl or phenyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^e; and wherein, if the 5-6 membered heteroaryl or 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{3a} is independently, for each occurrence, selected from the group consisting of halogen, cyano, hydroxyl, C_{1-6}alkyl, phenyl, C_{3-6}cycloalkyl, 5-6 membered heterocyclyl, and -CO_2(C_{1-6}alkyl), wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from halogen, hydroxyl, and phenyl; and wherein, if the 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{4a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

R^{5a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

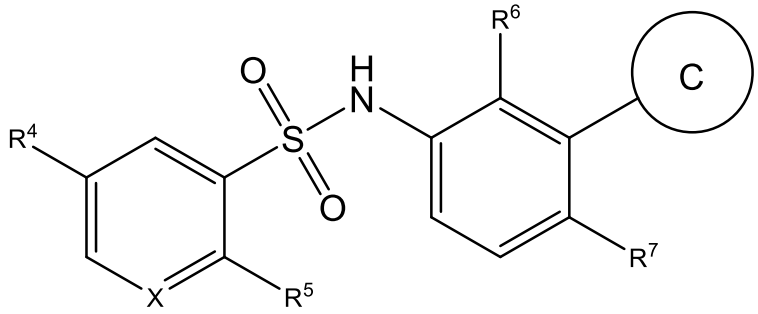
R^{6a} is independently, for each occurrence, halogen;

R^{8a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

R^e is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, C_{1-6}alkyl, 3-6 membered cycloalkyl, 5-6 membered heterocyclyl, -$N(R^C)(R^D)$, and -$S(O)_2C_{1-6}$alkyl, wherein C_{1-6}alkyl or 5-6 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from oxo and -$N(R^C)(R^D)$; and

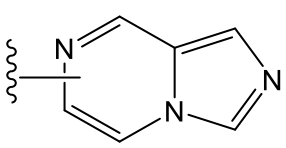
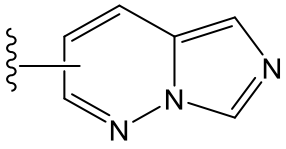
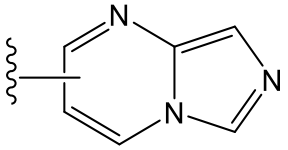
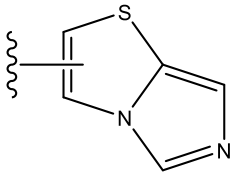
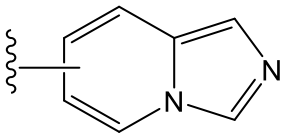
R^C and R^D are each independently selected from hydrogen and C_{1-6}alkyl.

[003c] In a further aspect of the present disclosure, there is provided a compound represented by Formula (Ia):



(Ia)

or a pharmaceutically acceptable salt thereof, wherein:

C is selected from 8-9 membered bicyclic heteroaryl selected from the group consisting of , , and , , and  and 9-membered bicyclic heterocyclyl, wherein the 8-9 membered bicyclic heteroaryl or 9-membered bicyclic heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^3; wherein the 9-membered bicyclic heterocyclyl is partially unsaturated and contains at least two nitrogen atoms; wherein, if the 8-9 membered bicyclic heteroaryl or 9-membered bicyclic heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

X is selected from the group consisting of CH, $C(R^8)$, and N;

R^3 is independently, for each occurrence, selected from the group consisting of halogen, C_{1-6}alkyl, C_{1-6}alkoxyl, oxo, -$C(O)N(R^A)(R^B)$, -$N(R^A)(R^B)$, 5-10 membered

heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-6}alkyl, 5-10 membered heteroaryl, or 5-10 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{3a}; and wherein, if the 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^4 is selected from the group consisting of halogen, C_{1-6}alkyl, and cyano, wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{4a};

R^5 is selected from the group consisting of C_{1-6}alkyl, cyano, hydroxyl, C_{1-6}alkoxyl, and -O-C_{3-6}cycloalkyl, wherein the C_{1-6}alkyl and C_{1-6}alkoxyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{5a};

R^8 is cyano;

or when X is C(R^8), R^8 and R^5 may optionally combine together with the atoms to which they are attached to form a 3-7 membered carbocyclyl, wherein the 3-7 membered carbocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more hydroxyl substituents;

R^6 is selected from the group consisting of hydrogen, halogen, C_{1-6}alkyl, and cyano, wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{6a};

R^7 is halogen;

R^A is hydrogen;

R^B is selected from the group consisting of hydrogen, C_{1-6}alkyl, phenyl, 5-6 membered heterocyclyl, and 5-6 membered heteroaryl, wherein the C_{1-6}alkyl or phenyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^e; and wherein, if the 5-6 membered heteroaryl or 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{3a} is independently, for each occurrence, selected from the group consisting of halogen, cyano, hydroxyl, C_{1-6}alkyl, phenyl, C_{3-6}cycloalkyl, 5-6 membered heterocyclyl, and -CO_2(C_{1-6}alkyl), wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from halogen, hydroxyl, and phenyl; and wherein, if the 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{4a} is independently, for each occurrence, halogen;

R^{5a} is independently, for each occurrence, selected from halogen and phenyl;

R^{6a} is halogen;

R^{e} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, C_{1-6}alkyl, 3-6 membered cycloalkyl, 5-6 membered heterocyclyl, -$N(R^C)(R^D)$, and -$S(O)_2C_{1-6}$alkyl, wherein the C_{1-6}alkyl or 5-6 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from oxo and -$N(R^C)(R^D)$; and

R^C and R^D are each independently selected from hydrogen and C_{1-6}alkyl.

[003d] In another aspect of the present disclosure, there is provided a compound selected from the group consisting of:

6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;

5-chloro-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;

6-[3-(5-chloro-2-methoxypyridine- 3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;

2-[3-(5-Chloro-2-methoxypyridine- 3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo [1,5-b]pyridazine-5-carboxamide;

2-[3-(5-chloro-2-methylpyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-b]pyridazine-5-carboxamide;

6-[2,6-difluoro-3-(5-fluoro-2-methylpyridine-3-sulfonamido)phenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;

6-[2,6-difluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;

6-[3-(5-cyano-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;

6-[3-(5-cyano-2-methylpyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo [1,5-a]pyridine-1-carboxamide;

6-[2,6-difluoro-3-(6-fluoro-1-hydroxy-2,3-dihydro-1H-indene-4-sulfonamido)phenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;

6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,5-dimethyl imidazo[1,5-a]pyridine-1-carboxamide;

2-[2,6-difluoro-3-(5-fluoro-2-methylpyridine-3-sulfonamido)phenyl]-N-methylimidazo[1,5-b]pyridazine-5-carboxamide;
6-[2,6-difluoro-3-[2-methoxy-5-(trifluoromethyl)pyridine-3-sulfonamido]phenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-5-fluoro-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-5-methoxy- N-methylimidazo[1,5-a]pyridine-1-carboxamide;
3-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrimidine-8-carboxamide;
3-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-2- methoxy-N-methylimidazo[1,5-a] pyrimidine-8-carboxamide;
N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
7-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-8-fluoro-N-methylimidazo[1,5-a]pyridine-3-carboxamide;
3-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,1-dimethyl-2-oxoimidazo[1,5-a] pyrimidine-8-carboxamide;
6-[3-[3-cyano-5-(trifluoromethyl)benzenesulfonamido]-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methyl-5-(methylamino)imidazo[1,5-a]pyridine-1-carboxamide;
5-chloro-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
5-chloro-N-[3,5-difluoro-4-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]pyridin-2-yl]-2-methoxypyridine-3-sulfonamide;
(6R)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
(6S)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;

N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-6-fluoro-1-hydroxy-2,3-dihydro-1H-indene-4-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
7-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyridine-3-carboxamide;
5-chloro-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(2H-pyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
(6R)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,7-dimethyl-5H,6H,8H-imidazo[1,5-a]pyrazine-1-carboxamide;
(6S)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,7-dimethyl-5H,6H,8H-imidazo[1,5-a]pyrazine-1-carboxamide;
5-chloro-N-[2,4-difluoro-3-[1-(3H-1,2,3-triazol-4-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]- 2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1-methylpyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2-cyano-4-fluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
6-cyano-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-1-hydroxy-2,3-dihydro-1H-indene-4-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[8-fluoro-3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[8-fluoro-3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-(3-(1-(4-cyano-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl)-2,4-difluorophenyl)-2-methoxypyridine-3-sulfonamide;

N-[3-[1-(4-cyano-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl] -5-fluoro-2-methylpyridine-3-sulfonamide;
N-[3-[1-(4-chloro-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl] -5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1-methylpyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[8-fluoro-3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(4-methyl-3H-imidazol-2-yl)imidazo[1,5-a]pyridine -6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-(2,4-difluoro-3-[1-[4-(hydroxymethyl)-3H-imidazol-2-yl]imidazo[1,5-a] pyridin-6-yl]phenyl)-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(4-methyl-3H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl] -5-fluoro-2-methylpyridine-3-sulfonamide;
N-(2,4-difluoro-3-[1-[4-(hydroxymethyl)-3H-imidazol-2-yl]imidazo[1,5-a] pyridin-6-yl]phenyl)-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[3-[1-(4-chloro-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl]-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(1-methylpyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1-methylpyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1,2,3-triazol-1-yl)imidazo[1,5-a]pyridin-6-yl] phenyl] -2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1,2,3-triazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(4-methyl-3H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;

N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
5-chloro-N-(2,4-difluoro-3-(1-(1-methyl-1H-pyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl)phenyl)-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1,2,3,4-tetrazol-1-yl)imidazo[1,5-a]pyridin-6-yl]phenyl] -2-methoxypyridine-3-sulfonamide;
(R)-N-(3-(3-(1H-imidazol-2-yl)-5,6,7,8-tetrahydroimidazo[1,5-a]pyridin-7-yl)-2,4-difluorophenyl)-5-chloro-2-methoxypyridine-3-sulfonamide ;
(S)-N-(3-(3-(1H-imidazol-2-yl)-5,6,7,8-tetrahydroimidazo[1,5-a]pyridin-7-yl)-2,4-difluorophenyl)-5-chloro-2-methoxypyridine-3-sulfonamide ;
5-chloro-N-[2,4-difluoro-3-[1-(4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl] -2-methylpyridine-3-sulfonamide;
N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl] -5-cyano-2-methoxypyridine-3-sulfonamide;
(R)-6-(2,6-difluoro-3-((5-fluoro-2-methoxypyridine)-3-sulfonamido)phenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
(S)-6-(2,6-difluoro-3-((5-fluoro-2-methoxypyridine)-3-sulfonamido)phenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
(R)-6-(3-((5-cyano-2-methoxypyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
(S)-6-(3-((5-cyano-2-methoxypyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
5-cyano-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a] pyrazin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro -2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-7-methyl-5H,6H,8H- imidazo[1,5-a]pyrazin-6-yl]phenyl] -2-methoxypyridine-3-sulfonamide;

5-chloro-N-[2,4-difluoro- 3-[(6S)-1-(1H-imidazol-2-yl)-7-methyl-5H,6H,8H-imidazo[1,5-a]pyrazin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1,2,3,4-tetrazol -1-yl)imidazo[1,5-a]pyridin-6-yl]phenyl] -5-fluoro-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(1,2,3,4-tetrazol-1-yl)imidazo [1,5-a]pyridin-6-yl]phenyl] -2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1,2,3,4-tetrazol-1-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]- 5-fluoro-2 -methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1,2,3,4-tetrazol-1-yl)imidazo [1,5-a]pyridin-6-yl] phenyl]- 2-methylpyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl] phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6S)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6S)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6S)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[(6S)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl] -2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo [1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6S)-1- (1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;

5-chloro-N-[2,4-difluoro-3-[5-(1H- imidazol-2-yl)imidazo[1,5-b]pyridazin-2-yl]phenyl] -2-methoxypyridine-3-sulfonamide;
(R)-6-(2,6-difluoro-3-((5-fluoro-2-methylpyridine)-3-sulfonamido)phenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
(S)-6-(2,6-difluoro-3-((5-fluoro-2-methylpyridine)-3-sulfonamido)phenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
5-chloro-N-[3-[1-(5-cyclopropyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]- 2,4-difluorophenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(5-isopropyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a] pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
(R)-6-(3-((5-chloro-2-methylpyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
(S)-6-(3-((5-chloro-2-methylpyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
6-[2,6-difluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methylimidazo [1,5-a]pyrazine-1-carboxamide;
6-[2,6-difluoro-3-(5-fluoro-2-methylpyridine-3-sulfonamido)phenyl]-N-methylimidazo [1,5-a]pyrazine-1-carboxamide;
6-[3-(5-cyano-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methylpyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
5-chloro-N-(2,4-difluoro-3-(1-(hydroxymethyl)imidazo[1,5-a]pyridin-6-yl)phenyl)-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[5-(1H-imidazol-2-yl)imidazo[1,5-b]pyridazin-2-yl]phenyl] -2-methylpyridine-3-sulfonamide;
(5S,6R)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,5-dimethyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
(5R,6S)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,5-dimethyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
5-cyano-N-[2,4-difluoro-3-[5-(1H-imidazol- 2-yl)imidazo[1,5-b]pyridazin-2-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[5-(1H-imidazol-2-yl)imidazo[1,5-b]pyridazin- 2-yl]phenyl]-5-fluoro -2-methoxypyridine-3-sulfonamide;

5-chloro-N-(2,4-difluoro-3-(1-(isoxazol-5-yl)imidazo[1,5-a]pyridin-6-yl)phenyl)-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1-hydroxyethyl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
6-(2-chloro-3-((5-chloro-2-methoxypyridine)-3-sulfonamido)-6-fluorophenyl)-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
5-chloro-N-(2,4-difluoro-3-[1-[5-(trifluoromethyl)-4H-1,2,4-triazol-3-yl]imidazo[1,5-a]pyridin-6-yl]phenyl)-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2-chloro-4-fluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[5-fluoro-1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl] phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[5-fluoro-1-(2H-pyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
6-[2-chloro-3-(5-chloro-2-methoxypyridine-3-sulfonamido)-6-fluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
N-[2,4-difluoro-3-[5-fluoro-1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl] -5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[5-fluoro-1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl] -5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[5-fluoro-1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridine -6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl] -5-chloro-2-methoxypyridine-3-sulfonamide;
N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl] -5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl] -5-cyano-2-methoxypyridine-3-sulfonamide;
N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl]-5-chloro-2-methylpyridine-3-sulfonamide;
N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
N-[3-[1-(4-chloro-1H-imidazol-2-yl)-5-fluoroimidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;

5-chloro-N-[3-[1-(4-chloro-1H-imidazol-2-yl)-5-fluoroimidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl]-2-methoxypyridine-3-sulfonamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2-cyano-6-fluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
N-[2,4-difluoro-3-[1-(1,2-oxazol-5-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(1,2-oxazol-5-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
2-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[4,3-b][1,3]thiazole-7-carboxamide;
5-chloro-N-[2,4-difluoro-3-[1-(1,2-oxazol-5-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-6-fluoro-2-methylphenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
5-cyano-N-[2,4-difluoro-3-[1-(4,5,6,7-tetrahydro-1H-1,3-benzodiazol-2-yl)imidazo [1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1,2-oxazol-5-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-cyano-N-[3-[1-(4,5-dimethyl-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6S)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6R)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6S)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;

N-[2,4-difluoro-3-[(6R)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
6-(3-((5-chloro-2-oxo-1,2-dihydropyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
5-chloro-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6S)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6R)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[(6S)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[(6R)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6S)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6R)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
6-[6-chloro-3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2-fluorophenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
2-[6-chloro-3-(5-chloro-2-methylpyridine-3-sulfonamido)-2-fluorophenyl]-N-methylimidazo[1,5-b]pyridazine-5-carboxamide;
2-[2-chloro-3-(5-chloro-2-methylpyridine-3-sulfonamido)-6-fluorophenyl]-N-methylimidazo[1,5-b]pyridazine-5-carboxamide;
6-(2-fluoro-5-((5-fluoro-2-methoxypyridine)-3-sulfonamido)phenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
6-(6-chloro-3-((5-chloro-2-methoxypyridine)-3-sulfonamido)-2-fluorophenyl)-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
N-[4-chloro-2-fluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-chloro-N-(3-(1-(4,5-dimethyl-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl)-2,4-difluorophenyl)-2-methoxypyridine-3-sulfonamide;
N-(3-(1-(4,5-dimethyl-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl)- 2,4-difluorophenyl)-5-fluoro-2-methoxypyridine-3-sulfonamide;

N-(3-(1-(4,5-dimethyl-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl)-2,4-difluorophenyl)-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-(3-(1-(4,5-dimethyl-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl) -2,4-difluorophenyl)-2-methylpyridine-3-sulfonamide;
5-chloro-N-(2,4-difluoro-3-(1-(4,5,6,7-tetrahydro-1H-benzo[d]imidazol-2-yl) imidazo[1,5-a]pyridin-6-yl)phenyl)-2-methoxypyridine-3-sulfonamide;
N-(2,4-difluoro-3-(1-(4,5,6,7-tetrahydro-1H-benzo[d]imidazol-2-yl)imidazo [1,5-a]pyridin-6-yl)phenyl)-5-fluoro-2-methoxypyridine-3-sulfonamide;
N-(2,4-difluoro-3-(1-(4,5,6,7-tetrahydro-1H-benzo[d]imidazol-2-yl) imidazo[1,5-a]pyridin-6-yl)phenyl)-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-(2,4-difluoro-3-(1-(4,5,6,7-tetrahydro-1H-benzo[d]imidazol-2 -yl)imidazo[1,5-a]pyridin-6-yl)phenyl)-2-methylpyridine-3-sulfonamide;
N-[2-chloro-4-fluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
(6R)-6-[2-chloro-6-fluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
(6S)-6-[2-chloro-6-fluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
methyl 2-[6-[2,6-difluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]imidazo[1,5-a]pyrazin-1-yl]-3H-1,3-benzodiazole-5-carboxylate;
(6S)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methyl-5H,6H,8H-imidazo[4,3-c][1,4]oxazine-1-carboxamide;
(6R)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methyl-5H,6H,8H-imidazo[4,3-c][1,4]oxazine-1-carboxamide;
(6R)-6-[6-chloro-2-fluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
(6S)-6-[6-chloro-2-fluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
N-[2,4-difluoro-3-[1-(4-phenyl-1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-isopropylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(2-methylpropyl)imidazo[1,5-a]pyrazine-1-carboxamide;

6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(2,2,2-trifluoroethyl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-5-fluoro-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(2-hydroxyethyl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(1-methylpyrazol-4-yl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(oxan-4-ylmethyl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(2-methanesulfonylethyl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-ethylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(cyclopropylmethyl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-ethoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-isopropoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-cyclopropoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[2,6-difluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-5-fluoro-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-[3-(dimethylamino)propyl]imidazo[1,5-a]pyrazine-1-carboxamide;
(R)-6-(3-((5-chloro-2-methoxypyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-(1-methylpyrrolidin-3-yl)imidazo[1,5-a]pyrazine-1-carboxamide;
(S)-6-(3-((5-chloro-2-methoxypyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-(1-methylpyrrolidin-3-yl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(1,2-oxazol-4-yl)imidazo[1,5-a]pyrazine-1-carboxamide;

6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-[2-(morpholin-4-yl)ethyl]imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-[5-chloro-2-(2-methylpropoxy)pyridine-3-sulfonamido]-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
N-[3-[1-(5-cyclopropyl-3H-imidazol-4-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[3-[1-(4-benzyl-1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-[2-(dimethylamino)ethyl]imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-[2-(2-oxopyrrolidin-1-yl)ethyl]imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-[4-[(dimethylamino)methyl]phenyl]imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-[5-chloro-2-(2,2,2-trifluoroethoxy)pyridine-3-sulfonamido]-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-[2-(benzyloxy)-5-chloropyridine-3-sulfonamido]-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[2,6-difluoro-3-(5-fluoro-2-methylpyridine-3-sulfonamido)phenyl]-5-fluoro-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
N-(2,4-difluoro-3-[1-[5-(4-methylpiperazin-1-yl)-3H-1,3-benzodiazol-2-yl]imidazo[1,5-a]pyridin-6-yl]phenyl)-5-fluoro-2-methoxypyridine-3-sulfonamide; and
6-[3-(5-chloro-2-methylpyridine-3-sulfonamido)-2,6-difluorophenyl]-5-fluoro-N-methylimidazo [1,5-a]pyrazine-1-carboxamide
, or a pharmaceutically acceptable salt thereof.

[003e] In a further aspect of the present disclosure, there is provided a pharmaceutical composition comprising a compound as disclosed herein and a pharmaceutically acceptable carrier.

[003f] In another aspect of the present disclosure, there is provided a use of a compound as disclosed herein or a pharmaceutical composition as disclosed herein in the manufacture of a medicament for treating cancer in a subject in need thereof.

[003g] In a further aspect of the present disclosure, there is provided a use of a compound as disclosed herein or a pharmaceutical composition as disclosed herein in the manufacture of a medicament for treating a neurodegenerative disease in a subject in need thereof.

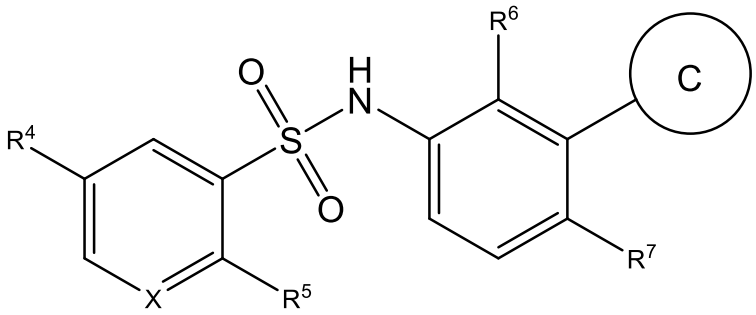
[003h] In another aspect of the present disclosure, there is provided a use of a compound as disclosed herein or a pharmaceutical composition as disclosed herein in the manufacture of a medicament for treating doxorubicin-induced cardiotoxicity in a subject in need thereof.

[003i] In a further aspect of the present disclosure, there is provided a use of a compound as disclosed herein or a pharmaceutical composition as disclosed herein in the manufacture of a medicament for modulating the activity of GCN2, wherein GCN2 is exposed to said compound or composition to modulate the activity of said GCN2.

[003j] In another aspect of the present disclosure, there is provided a compound as disclosed herein or a pharmaceutical composition as disclosed herein for use in therapy.

[004] Provided herein are compounds and compositions for the modulation of GCN2 (e.g., the activation or inhibition of GCN2). In various examples, the compounds and compositions described herein are useful for the treatment of GCN2 mediated conditions, diseases, or disorders (e.g., cancers and neurodegenerative diseases).

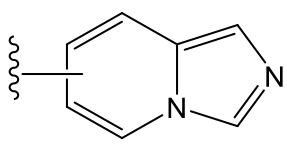
[005] In one example, provided herein is a compound represented by Formula (Ia)



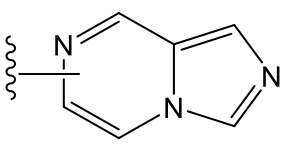
(Ia)

or a pharmaceutically acceptable salt thereof, wherein:

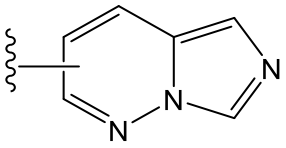
C is selected from 7-10 membered bicyclic heterocyclyl, 8 membered bicyclic heteroaryl, or 9-membered bicyclic heteroaryl selected from the group consisting of



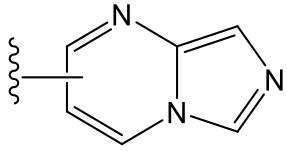
,



,



, and



, wherein the 7-10 membered bicyclic heterocyclyl, 8 membered bicyclic heteroaryl, or 9 membered bicyclic heteroaryl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^3; wherein the 7-10 membered bicyclic heterocyclyl is partially unsaturated

and contains at least two nitrogen atoms; wherein the 8 membered bicyclic heteroaryl contains at least two nitrogen items; wherein, if the 7-10 membered bicyclic heterocyclyl, 8 membered bicyclic heteroaryl, or 9 membered bicyclic heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

X is selected from the group consisting of CH, C(R^8) and N;

R^3 is independently, for each occurrence, selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, C_{1-6}alkoxyl, hydroxyl, oxo, phenyl, -C(O)N(R^A)(R^B), -N(R^A)(R^B), 5-10 membered heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-}

R^B is independently, for each occurrence, selected from the group consisting of hydrogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, phenyl, 5-6 membered heterocyclyl, and 5-6 membered heteroaryl, wherein the C_{1-6}alkyl or phenyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^e; and wherein, if the 5-6 membered heteroaryl or 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{3a} is independently, for each occurrence, selected from the group consisting of halogen, cyano, hydroxyl, C_{1-6}alkyl, phenyl, C_{3-6}cycloalkyl, 5-6 membered heterocyclyl, and $-CO_2(C_{1-6}$alkyl), wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from halogen, hydroxyl, and phenyl; and wherein, if the 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{4a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

R^{5a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

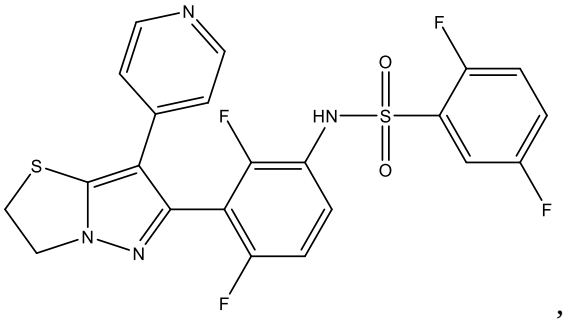
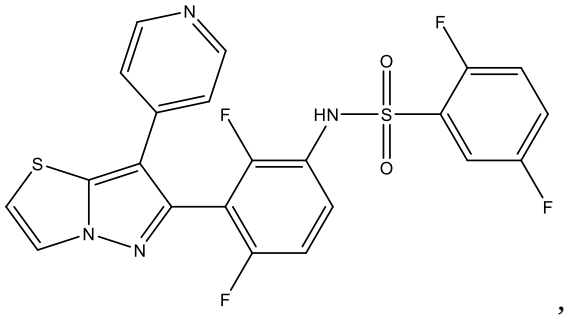
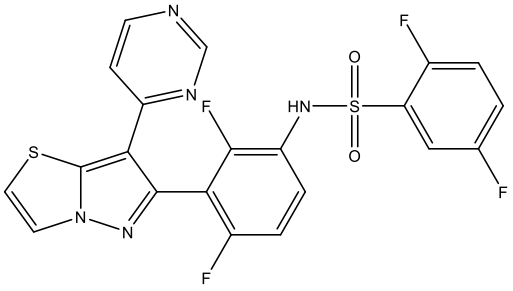
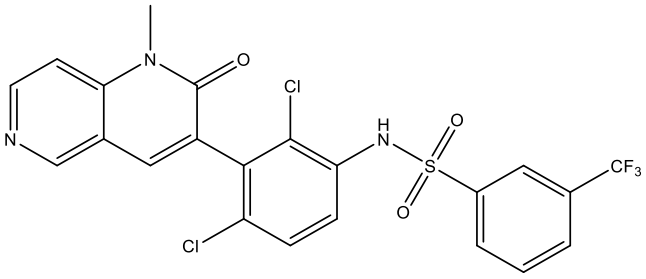
R^{6a} is independently, for each occurrence, halogen;

R^{8a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

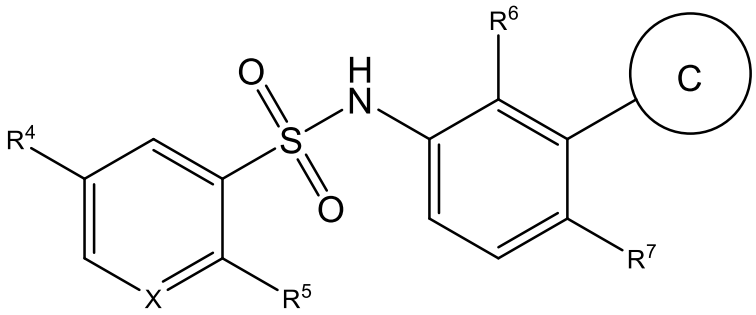
R^e is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, C_{1-6}alkyl, 3-6 membered cycloalkyl, 5-6 membered heterocyclyl, $-N(R^C)(R^D)$, and $-S(O)_2C_{1-6}$alkyl, wherein C_{1-6}alkyl or 5-6 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from oxo and $-N(R^C)(R^D)$; and

R^C and R^D are each independently selected from hydrogen and C_{1-6}alkyl;

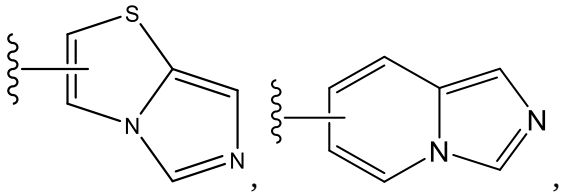
wherein the compound of Formula (Ia) is not




, or

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[006] In another example, provided herein is a compound represented by Formula (Ia)


(Ia)

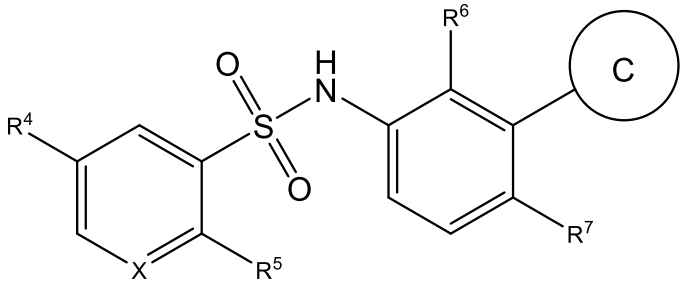
or a pharmaceutically acceptable salt thereof, wherein:

C is selected from 9-membered bicyclic heterocyclyl and 8-9 membered bicyclic heteroaryl selected from the group consisting of 
,

R^e is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, C_{1-6}alkyl, 3-6 membered cycloalkyl, 5-6 membered heterocyclyl, -$N(R^C)(R^D)$, and -$S(O)_2C_{1-6}$alkyl, wherein C_{1-6}alkyl or 5-6 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from oxo and -$N(R^C)(R^D)$; and

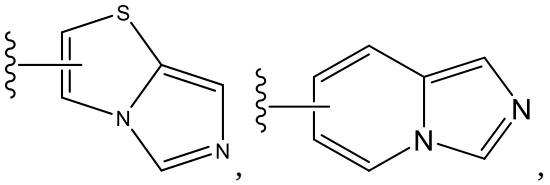
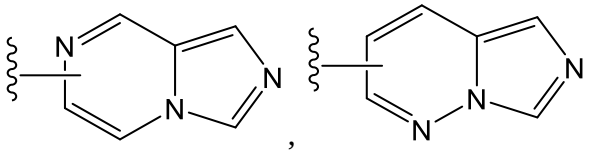
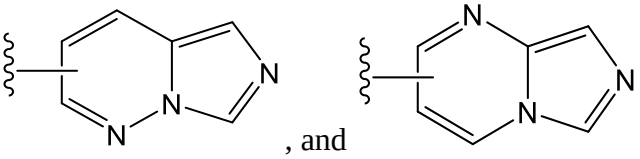
R^C and R^D are each independently selected from hydrogen and C_{1-6}alkyl.

[007] In another example, provided herein is a compound represented by Formula (Ia)



(Ia)

or a pharmaceutically acceptable salt thereof, wherein:

C is selected from 9-membered bicyclic heterocyclyl and 8-9 membered bicyclic heteroaryl selected from the group consisting of , , , and , wherein the 9-membered bicyclic heterocyclyl or 8-9 membered bicyclic heteroaryl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^3; wherein the 9membered bicyclic heterocyclyl is partially unsaturated and contains at least two nitrogen atoms; wherein, if the 9membered bicyclic heterocyclyl or 8-9 membered bicyclic heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

X is selected from the group consisting of CH, $C(R^8)$ and N;

R^3 is independently, for each occurrence, selected from the group consisting of halogen, C_{1-6}alkyl, C_{1-6}alkoxyl, oxo, -$C(O)N(R^A)(R^B)$, -$N(R^A)(R^B)$, 5-10 membered heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-6}alkyl, 5-10 membered heteroaryl, or 5-10 membered heterocyclyl may be optionally substituted on one or more available carbons by

R^{5a} is independently, for each occurrence, selected from halogen and phenyl;

R^{6a} is halogen;

R^{e} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, C_{1-6}alkyl, 3-6 membered cycloalkyl, 5-6 membered heterocyclyl, $-N(R^{C})(R^{D})$, and $-S(O)_2C_{1-6}$alkyl, wherein the C_{1-6}alkyl or 5-6 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from oxo and $-N(R^{C})(R^{D})$; and

R^{C} and R^{D} are each independently selected from hydrogen and C_{1-6}alkyl.

[008] In another example, provided herein is a compound of selected from any compound set forth in Table 1, or a pharmaceutically acceptable salt thereof.

[009] In another example, provided herein is a pharmaceutical composition comprising a compound of any example and a pharmaceutically acceptable carrier.

[010] In another example, provided herein is a method of treating cancer in a subject in need thereof, comprising administering to the subject a therapeutically effective amount of a compound of any example.

[011] In some examples, the cancer is colon cancer, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, lung cancer, bladder cancer, stomach cancer, cervical cancer, testicular cancer, skin cancer, rectal cancer, sweat gland carcinoma, sebaceous gland carcinoma, thyroid cancer, kidney cancer, uterus cancer, esophagus cancer, liver cancer, head cancer, neck cancer, throat cancer, mouth cancer, bone cancer, chest cancer, lymph node cancer, eye cancer, mesothelioma, an acoustic neuroma, oligodendroglioma, meningioma, neuroblastoma, retinoblastoma, leukemia, lymphoma, or any combination thereof.

[012] In another example, provided herein is a method of treating a neurodegenerative disease in a subject in need thereof, comprising administering to the subject a therapeutically effective amount of a compound of any example or a pharmaceutical composition of any example. In some examples, the neurodegenerative disease is Alzheimer's disease, Parkinson's Disease, Huntington's Disease, amyotrophic lateral sclerosis, or spinocerebellar ataxia.

[013] In another example, provided herein is a method of treating doxorubicin-induced cardiotoxicity in a subject in need thereof, comprising administering to the subject a therapeutically effective amount of a compound of any example or a pharmaceutical composition of any example.

[014] In another example, provided herein is a method of modulating the activity of GCN2, comprising exposing GCN2 to an effective amount of a compound of any example or a pharmaceutical composition of any example to modulate the activity of said GCN2.

DETAILED DESCRIPTION OF THE INVENTION

[015] The invention provides GCN2-interacting compounds and related compounds, pharmaceutical compositions, and their use in the treatment of medical conditions, such as cancer, neurodegenerative diseases, and doxorubicin-induced cardiotoxicity, and in modulating (inhibiting/activating) GCN2 activity. The practice of the present invention employs, unless otherwise indicated, conventional techniques of organic chemistry, pharmacology, molecular biology (including recombinant techniques), cell biology, biochemistry, and immunology. Such techniques are explained in the literature, such as in "Comprehensive Organic Synthesis" (B.M. Trost & I. Fleming, eds., 1991-1992); "Handbook of experimental immunology" (D.M. Weir & C.C. Blackwell, eds.); "Current protocols in molecular biology" (F.M. Ausubel *et al.*, eds., 1987, and periodic updates); and "Current protocols in immunology" (J.E. Coligan *et al.*, eds., 1991), each of which is herein incorporated by reference in its entirety.

[016] Various aspects of the invention are set forth below in sections; however, aspects of the invention described in one particular section are not to be limited to any particular section. Further, when a variable is not accompanied by a definition, the previous definition of the variable controls.

Definitions

[017] The terms used herein have their ordinary meaning and the meaning of such terms is independent at each occurrence thereof. That notwithstanding and except where stated otherwise, the following definitions apply throughout the specification and claims. Chemical names, common names, and chemical structures may be used interchangeably to describe the same structure. If a chemical compound is referred to using both a chemical structure and a chemical name, and an ambiguity exists between the structure and the name, the structure predominates. These definitions apply regardless of whether a term is used by itself or in combination with other terms, unless otherwise indicated. Hence, the definition of "alkyl" applies to "alkyl" as well as the "alkyl" portions of "-O-alkyl" etc.

[018] The term "alkyl" refers to a saturated straight or branched hydrocarbon, such as a straight or branched group of 1-12, 1-10, or 1-6 carbon atoms, referred to herein as C_1-C_{12} alkyl, C_1-C_{10} alkyl, and C_1-C_6 alkyl, respectively. Exemplary alkyl groups include, but are

membered heteroaryl, wherein the 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl may be optionally substituted on one or more available carbons by one, two, three, or more hydroxyl substituents; wherein, if the 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^A is hydrogen or C_{1-6}alkyl;

R^B is selected from the group consisting of hydrogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, phenyl, 5-6 membered heterocyclyl, and 5-6 membered heteroaryl, wherein the C_{1-6}alkyl or phenyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^e; and wherein, if the 5-6 membered heteroaryl or 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{3a} is independently, for each occurrence, selected from the group consisting of halogen, cyano, hydroxyl, C_{1-6}alkyl, phenyl, C_{3-6}cycloalkyl, 5-6 membered heterocyclyl, and -CO_2(C_{1-6}alkyl), wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from halogen, hydroxyl, and phenyl; and wherein, if the 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{4a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

R^{5a} is , for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

R^{6a} is independently, for each occurrence, halogen;

R^{8a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

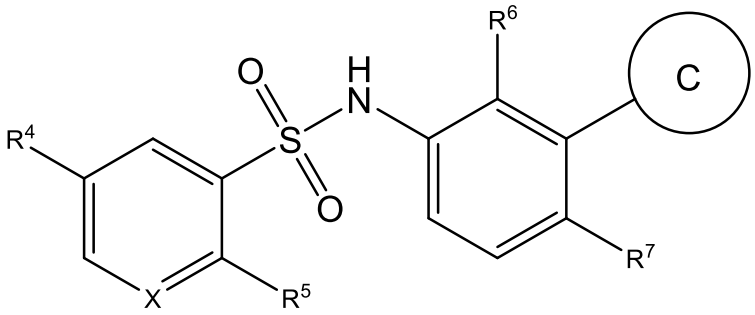
R^e is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, C_{1-6}alkyl, 3-6 membered cycloalkyl, 5-6 membered heterocyclyl, -$N(R^C)(R^D)$, and -$S(O)_2C_{1-6}$alkyl, wherein C_{1-6}alkyl or 5-6 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from oxo and -$N(R^C)(R^D)$; and

R^C and R^D are each independently selected from hydrogen and C_{1-6}alkyl;

wherein the compound of Formula (Ia) is not

What is claimed:

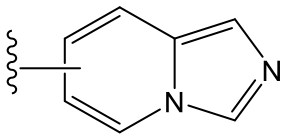
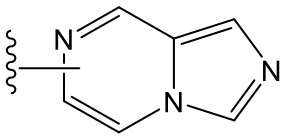
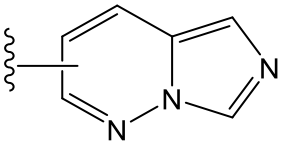
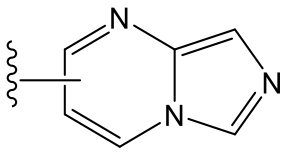
1. A compound represented by Formula (Ia):



(Ia)

or a pharmaceutically acceptable salt thereof, wherein:

C is selected from 9-membered bicyclic heteroaryl selected from the group consisting of


, 
, 
, and 
, 7-10 membered bicyclic heterocyclyl, or 8-membered bicyclic heteroaryl, wherein the 9-membered bicyclic heteroaryl, 7-10 membered bicyclic heterocyclyl, or 8-membered bicyclic heteroaryl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^3; wherein the 7-10 membered bicyclic heterocyclyl is partially unsaturated and contains at least two nitrogen atoms; wherein the 8-membered bicyclic heteroaryl contains at least two nitrogen atoms; wherein, if the 9-membered bicyclic heteroaryl, 7-10 membered bicyclic heterocyclyl, or 8-membered bicyclic heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

X is selected from the group consisting of CH, C(R^8), and N;

R^3 is independently, for each occurrence, selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, C_{1-6}alkoxyl, hydroxyl, oxo, phenyl, -C(O)N(R^A)(R^B), -N(R^A)(R^B), 5-10 membered heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-6}alkyl, 5-10 membered heteroaryl, or 5-10 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{3a}; and wherein, if the 5-10 membered heteroaryl contains a

substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^4 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{4a};

R^5 is selected from the group consisting of hydrogen, halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{5a};

R^6 is selected from the group consisting of halogen, C_{1-6}alkyl, cyano, C_{1-6}alkoxyl, and C_{3-6}cycloalkyl, wherein the C_{1-6}alkyl and C_{3-6}cycloalkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{6a};

R^7 is selected from the group consisting of fluoro, chloro, methyl, and cyano;

R^8 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{8a};

or when X is C(R^8), R^8 and R^5 may optionally combine together with the atoms to which they are attached to form a 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl, wherein the 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl may be optionally substituted on one or more available carbons by one, two, three, or more hydroxyl substituents; wherein, if the 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^A is hydrogen or C_{1-6}alkyl;

R^B is selected from the group consisting of hydrogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, phenyl, 5-6 membered heterocyclyl, and 5-6 membered heteroaryl, wherein the C_{1-6}alkyl or phenyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^e; and wherein, if the 5-6 membered

heteroaryl or 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{3a} is independently, for each occurrence, selected from the group consisting of halogen, cyano, hydroxyl, C_{1-6}alkyl, phenyl, C_{3-6}cycloalkyl, 5-6 membered heterocyclyl, and -CO_2(C_{1-6}alkyl), wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from halogen, hydroxyl, and phenyl; and wherein, if the 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{4a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

R^{5a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

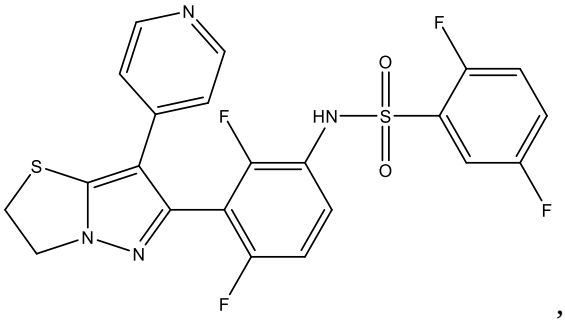
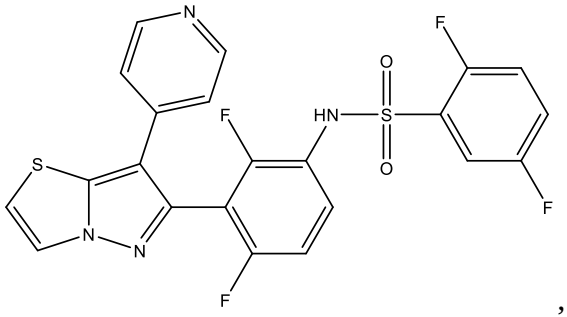
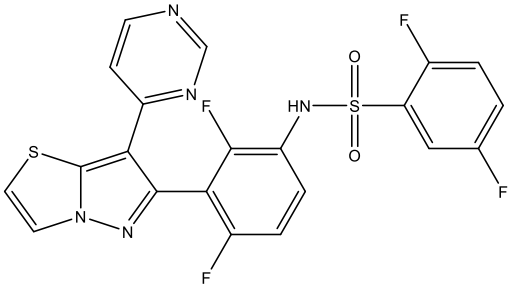
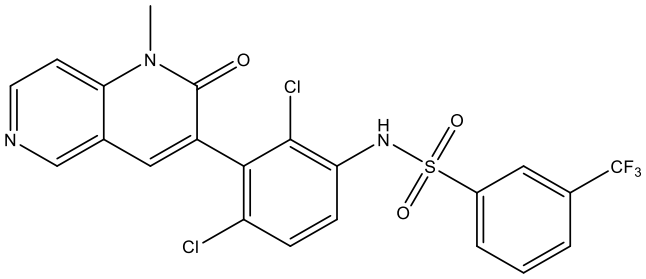
R^{6a} is independently, for each occurrence, halogen;

R^{8a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

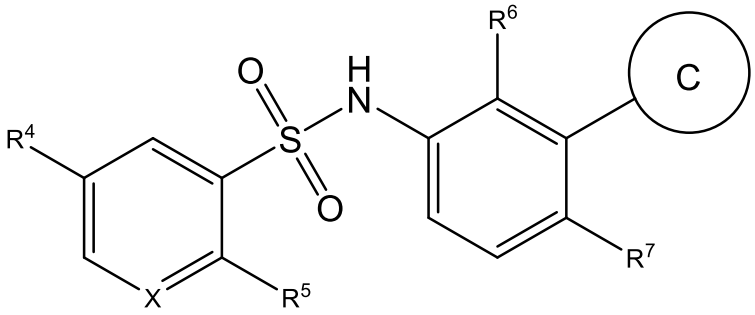
R^{e} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, C_{1-6}alkyl, 3-6 membered cycloalkyl, 5-6 membered heterocyclyl, -$N(R^C)(R^D)$, and -$S(O)_2C_{1-6}$alkyl, wherein C_{1-6}alkyl or 5-6 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from oxo and -$N(R^C)(R^D)$; and

R^C and R^D are each independently selected from hydrogen and C_{1-6}alkyl;

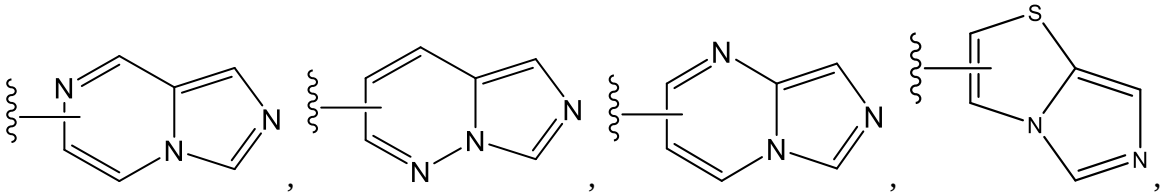
wherein the compound of Formula (Ia) is not

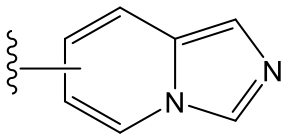

,

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, or

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2. A compound represented by Formula (Ia):


(Ia)

or a pharmaceutically acceptable salt thereof, wherein:

C is selected from 8-9 membered bicyclic heteroaryl selected from the group consisting of

,

and  and 9-membered bicyclic heterocyclyl, wherein the 8-9 membered bicyclic heteroaryl or 9-membered bicyclic heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^3; wherein the 9-membered bicyclic heterocyclyl is partially unsaturated and contains at least two nitrogen atoms; wherein, if the 8-9 membered bicyclic heteroaryl or 9-membered bicyclic heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

X is selected from the group consisting of CH, C(R^8), and N;

R^3 is independently, for each occurrence, selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, C_{1-6}alkoxyl, hydroxyl, oxo, phenyl, -C(O)N(R^A)(R^B), -N(R^A)(R^B), 5-10 membered heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-6}alkyl, 5-10 membered heteroaryl, or 5-10 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{3a}; and wherein, if the 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^4 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{4a};

R^5 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{5a};

R^6 is selected from the group consisting of halogen, C_{1-6}alkyl, cyano, C_{1-6}alkoxyl, and C_{3-6}cycloalkyl, wherein the C_{1-6}alkyl and C_{3-6}cycloalkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{6a};

R^7 is selected from the group consisting of fluoro, chloro, methyl, and cyano;

R^8 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, cyano, hydroxyl, oxo, C_{1-6}alkoxyl, -O-C_{3-6}cycloalkyl, -N(R^A)(R^B), -N(R^A)-C(O)(R^B), -(C_{1-6}alkylene)-N(R^A)(R^B), -CO_2H, -CO_2(C_{1-6}alkyl), and -S-(C_{1-6}alkyl), wherein the C_{1-6}alkyl, C_{1-6}alkoxyl, and -S-(C_{1-6}alkyl) may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{8a};

or when X is C(R^8), R^8 and R^5 may optionally combine together with the atoms to which they are attached to form a 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl, wherein the 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl may be optionally substituted on one or more available carbons by one, two, three, or more hydroxyl substituents; wherein, if the 3-7 membered carbocyclyl, 3-7 membered heterocyclyl, or 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^A is hydrogen or C_{1-6}alkyl;

R^B is selected from the group consisting of hydrogen, C_{1-6}alkyl, C_{3-6}cycloalkyl, phenyl, 5-6 membered heterocyclyl, and 5-6 membered heteroaryl, wherein the C_{1-6}alkyl or phenyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^e; and wherein, if the 5-6 membered heteroaryl or 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{3a} is independently, for each occurrence, selected from the group consisting of halogen, cyano, hydroxyl, C_{1-6}alkyl, phenyl, C_{3-6}cycloalkyl, 5-6 membered heterocyclyl, and -CO_2(C_{1-6}alkyl), wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from halogen, hydroxyl, and phenyl; and wherein, if the 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{4a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

R^{5a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

R^{6a} is independently, for each occurrence, halogen;

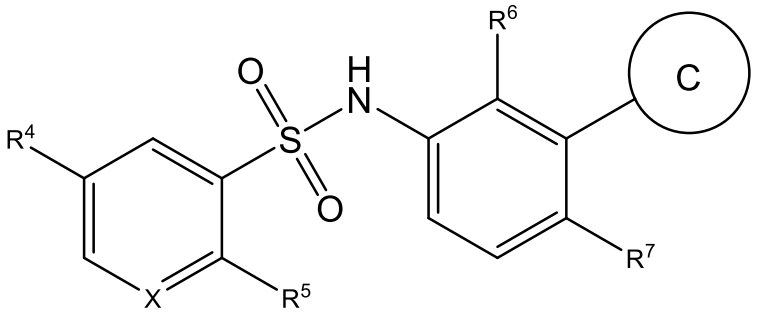
R^{8a} is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, and phenyl;

R^e is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, C_{1-6}alkyl, 3-6 membered cycloalkyl, 5-6 membered heterocyclyl, -N(R^C)(R^D), and -

$S(O)_2C_{1-6}$alkyl, wherein C_{1-6}alkyl or 5-6 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from oxo and $-N(R^C)(R^D)$; and

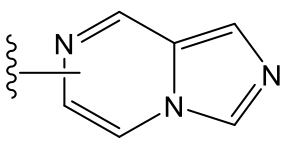
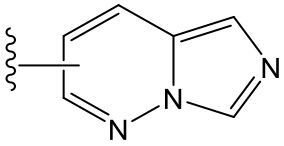
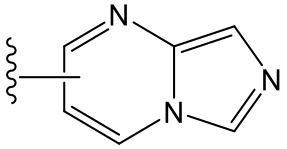
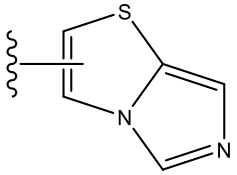
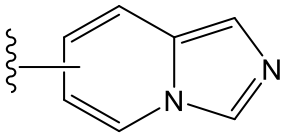
R^C and R^D are each independently selected from hydrogen and C_{1-6}alkyl.

3. A compound represented by Formula (Ia):



(Ia)

or a pharmaceutically acceptable salt thereof, wherein:

C is selected from 8-9 membered bicyclic heteroaryl selected from the group consisting of , , and , , and  and 9-membered bicyclic heterocyclyl, wherein the 8-9 membered bicyclic heteroaryl or 9-membered bicyclic heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^3; wherein the 9-membered bicyclic heterocyclyl is partially unsaturated and contains at least two nitrogen atoms; wherein, if the 8-9 membered bicyclic heteroaryl or 9-membered bicyclic heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

X is selected from the group consisting of CH, $C(R^8)$, and N;

R^3 is independently, for each occurrence, selected from the group consisting of halogen, C_{1-6}alkyl, C_{1-6}alkoxyl, oxo, $-C(O)N(R^A)(R^B)$, $-N(R^A)(R^B)$, 5-10 membered heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-6}alkyl, 5-10 membered heteroaryl, or 5-10 membered heterocyclyl may be optionally substituted on one or more available carbons by

one, two, three, or more substituents each independently selected from R^{3a}; and wherein, if the 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^4 is selected from the group consisting of halogen, C_{1-6}alkyl, and cyano, wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{4a};

R^5 is selected from the group consisting of C_{1-6}alkyl, cyano, hydroxyl, C_{1-6}alkoxyl, and -O-C_{3-6}cycloalkyl, wherein the C_{1-6}alkyl and C_{1-6}alkoxyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{5a};

R^8 is cyano;

or when X is $C(R^8)$, R^8 and R^5 may optionally combine together with the atoms to which they are attached to form a 3-7 membered carbocyclyl, wherein the 3-7 membered carbocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more hydroxyl substituents;

R^6 is selected from the group consisting of hydrogen, halogen, C_{1-6}alkyl, and cyano, wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{6a};

R^7 is halogen;

R^A is hydrogen;

R^B is selected from the group consisting of hydrogen, C_{1-6}alkyl, phenyl, 5-6 membered heterocyclyl, and 5-6 membered heteroaryl, wherein the C_{1-6}alkyl or phenyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^e; and wherein, if the 5-6 membered heteroaryl or 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

R^{3a} is independently, for each occurrence, selected from the group consisting of halogen, cyano, hydroxyl, C_{1-6}alkyl, phenyl, C_{3-6}cycloalkyl, 5-6 membered heterocyclyl, and -CO_2(C_{1-6}alkyl), wherein the C_{1-6}alkyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from halogen, hydroxyl, and phenyl; and wherein, if the 5-6 membered heterocyclyl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl;

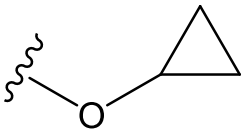
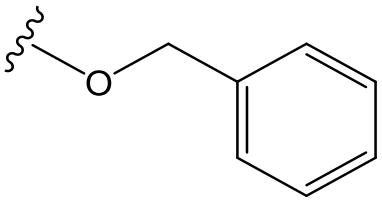
R^{4a} is independently, for each occurrence, halogen;

R^{5a} is independently, for each occurrence, selected from halogen and phenyl;

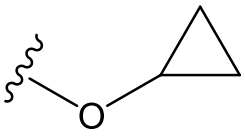
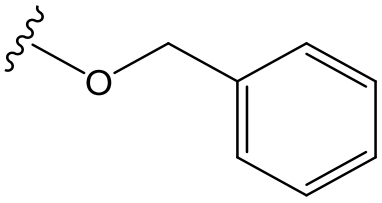
R^{6a} is halogen;

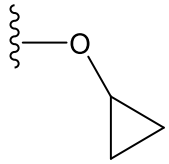
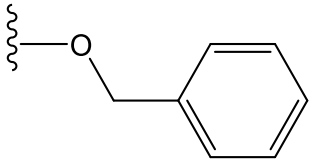
R^e is independently, for each occurrence, selected from the group consisting of halogen, hydroxyl, C_{1-6}alkyl, 3-6 membered cycloalkyl, 5-6 membered heterocyclyl, $-N(R^C)(R^D)$, and $-S(O)_2C_{1-6}$alkyl, wherein the C_{1-6}alkyl or 5-6 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from oxo and $-N(R^C)(R^D)$; and

R^C and R^D are each independently selected from hydrogen and C_{1-6}alkyl.

4. The compound of claim 1 or 2, wherein R^4 is selected from the group consisting of chloro, fluoro, cyano, hydroxyl, oxo, CH_3, CF_3, $-O-CH_3$, $-O-CH_2CH_3$, $-O-CH(CH_3)_2$, $-O-CH_2CH(CH_3)_2$, $-O-CH_2CF_3$,  , and  .

5. The compound of any one of claims 1-4, wherein R^4 is selected from the group consisting of chloro, fluoro, cyano, and CF_3.

6. The compound of claim 1 or 2, wherein R^5 is selected from the group consisting of chloro, fluoro, cyano, hydroxyl, oxo, CH_3, CF_3, $-O-CH_3$, $-O-CH_2CH_3$, $-O-CH(CH_3)_2$, $-O-CH_2CH(CH_3)_2$, $-O-CH_2CF_3$,  , and  .

7. The compound of any one of claims 1-6, wherein R^5 is selected from the group consisting of CH_3, $-O-CH_3$, $-O-CH_2-CH_3$, $-O-CH_2-CF_3$, $-O-CH_2-C(H)(CH_3)_2$, $-O-CH-(CH_3)_2$,  , and  .

8. The compound of any one of claims 1-7, wherein X is N.

9. The compound of any one of claims 1-7, wherein X is (R^8).

10. The compound of any one of claims 1-5 and 9, wherein R^8 and R^5 are taken together with the atoms to which they are attached to form a 3-7 membered carbocyclyl, wherein the 3-7 membered carbocyclyl may be optionally substituted with hydroxyl.

11. The compound of any one of claims 1-10, wherein R^6 is selected from the group consisting of halogen, C_{1-6}alkyl, and cyano.

12. The compound of any one of claims 3, 5 and 7-11, wherein R^6 is selected from the group consisting of hydrogen, chloro, fluoro, cyano, and CH_3.

13. The compound of any one of claims 1-12, wherein R^6 is fluoro.

14. The compound of any one of claims 1-13, wherein R^7 is fluoro or chloro.

15. The compound of any one of claims 1-14, wherein R^7 is fluoro.

16. The compound of any one of claims 1-10, wherein R^6 is methyl, and R^7 is fluoro.

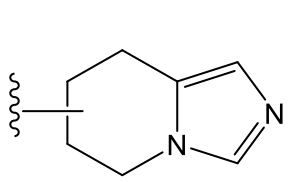
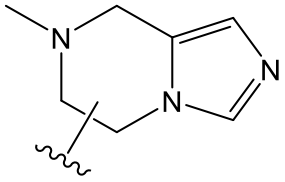
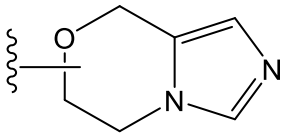
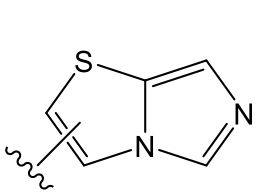
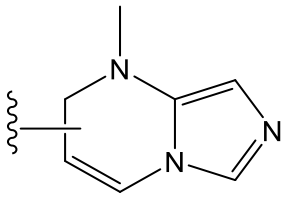
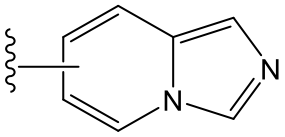
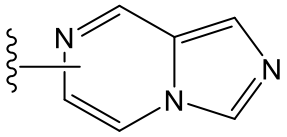
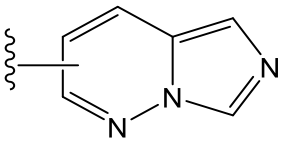
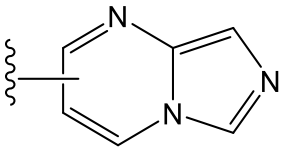
17. The compound of any one of claims 1-10, wherein R^6 is fluoro, and R^7 is fluoro.

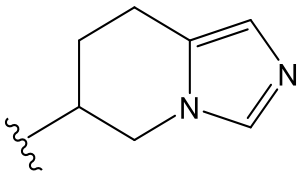
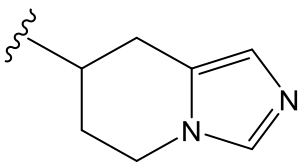
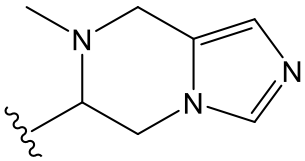
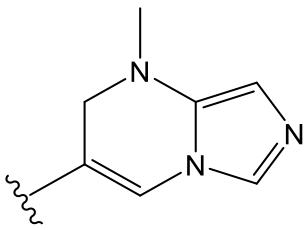
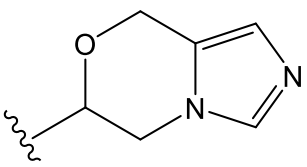
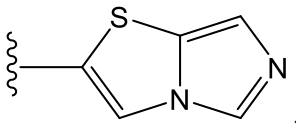
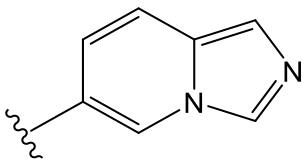
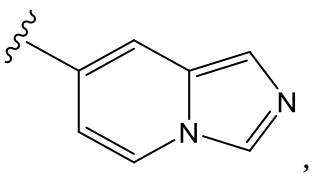
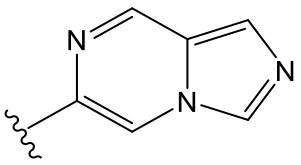
18. The compound of any one of claims 1-10, wherein R^6 is chloro, and R^7 is fluoro.

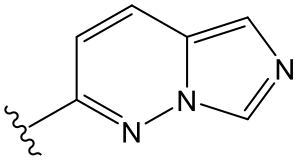
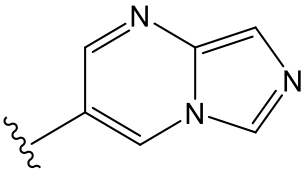
19. The compound of any one of claims 1-10, wherein R^6 is fluoro, and R^7 is chloro.

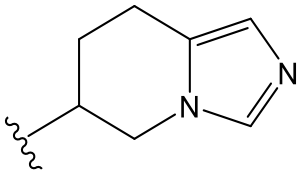
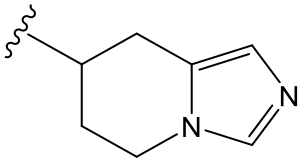
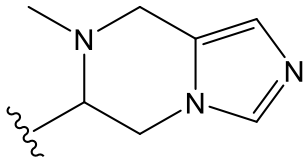
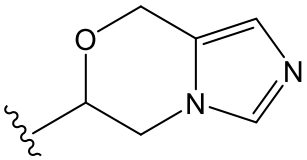
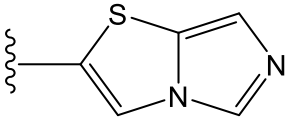
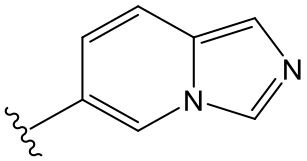
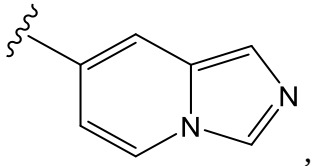
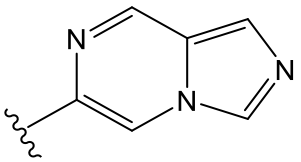
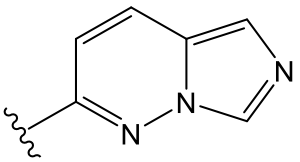
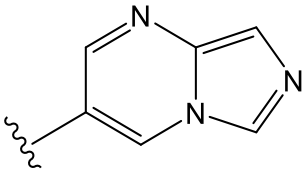
20. The compound of any one of claims 1-10, wherein R^6 is cyano, and R^7 is fluoro.

21. The compound of any one of claims 1-10, wherein R^6 is methyl, and R^7 is fluoro.

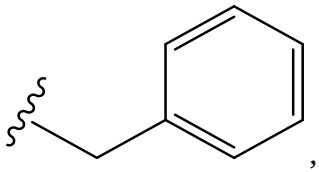
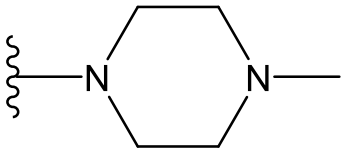
22. The compound of any one of claims 1-21, wherein C is selected from the group consisting of , , , , , , , , and , wherein C may be optionally substituted on one or more available carbons by one, two, three, or more independent R^3 substituents selected from the group consisting of halogen, C_{1-6}alkyl, C_{1-6}alkoxyl, oxo, -C(O)N(R^A)(R^B), -N(R^A)(R^B), 5-10 membered heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-6}alkyl, 5-10 membered heteroaryl, or 5-10 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{3a}; and wherein, if the 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl.

23. The compound of any one of claims 1-22, wherein C is selected from the group consisting of , , , , , , , , ,

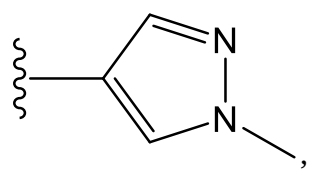
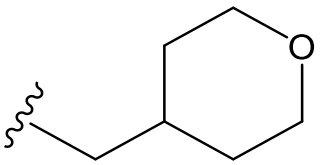
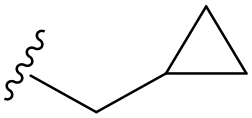
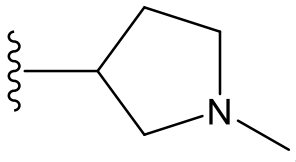
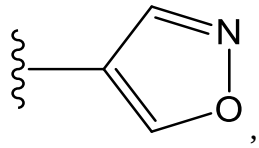
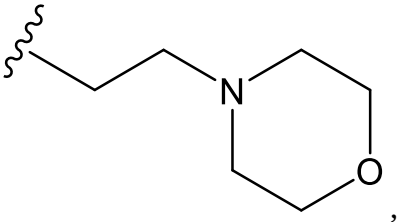
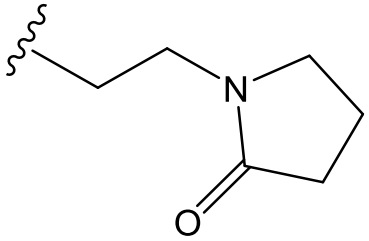
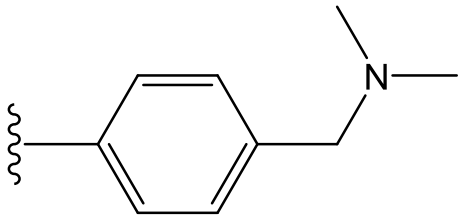

, and , wherein C may be optionally substituted on one or more available carbons by one, two, three, or more independent R^3 substituents selected from the group consisting of halogen, C_{1-6}alkyl, C_{1-6}alkoxyl, oxo, -C(O)N(R^A)(R^B), -N(R^A)(R^B), 5-10 membered heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-6}alkyl, 5-10 membered heteroaryl, or 5-10 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{3a}; and wherein, if the 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl.

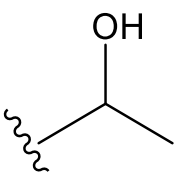
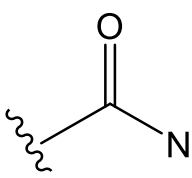
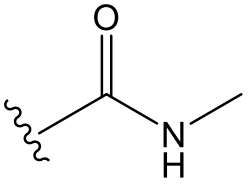
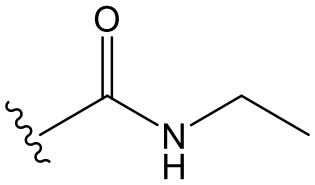
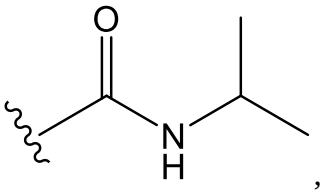
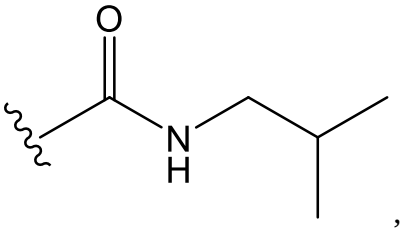
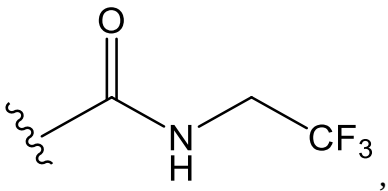
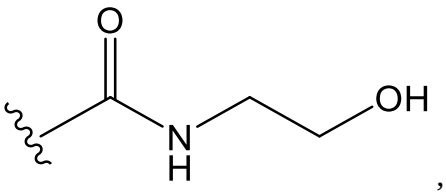
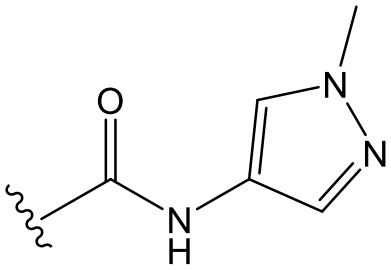
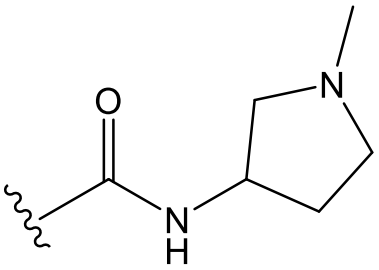
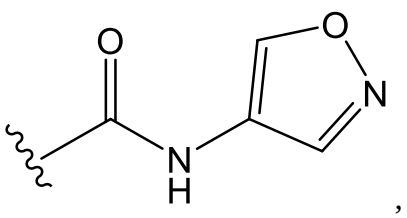
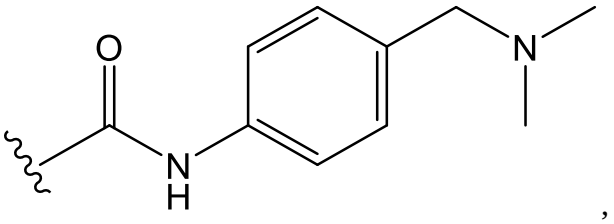
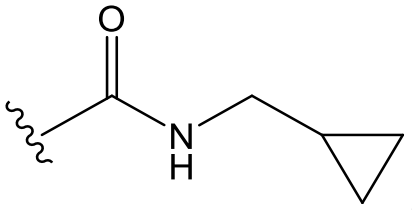
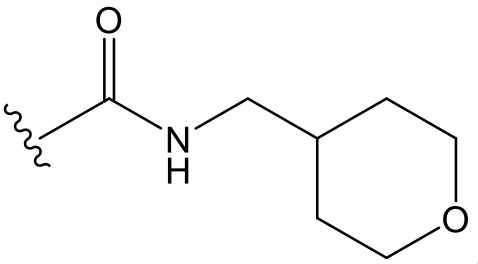
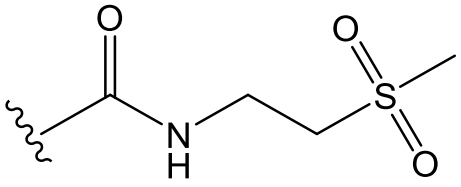
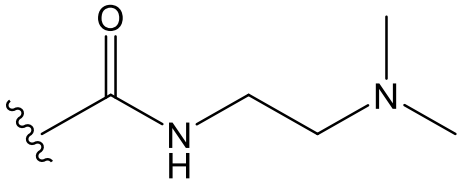
24. The compound of any one of claims 1-23, wherein C is selected from the group consisting of , , , , , , , , , and , wherein C is substituted with one R^3 substituent selected from the group consisting of halogen, C_{1-6}alkyl, C_{1-6}alkoxyl, oxo, -C(O)N(R^A)(R^B), -N(R^A)(R^B), 5-10 membered heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-6}alkyl, 5-10 membered heteroaryl, or 5-10 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{3a}; and wherein, if the 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl.

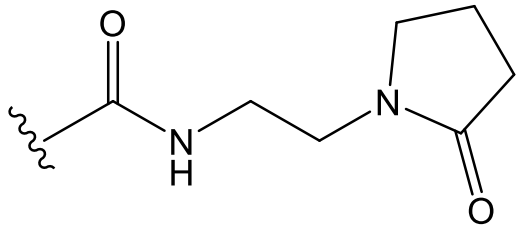
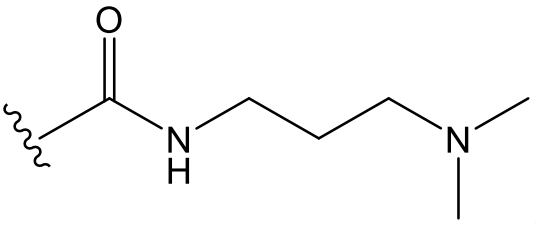
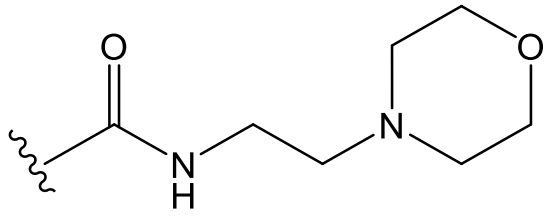
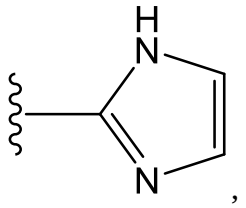
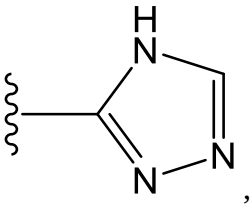
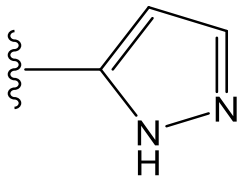
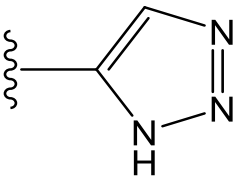
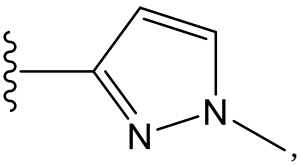
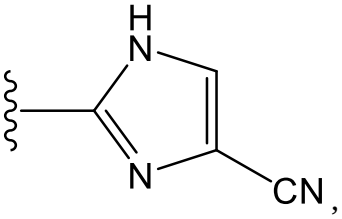
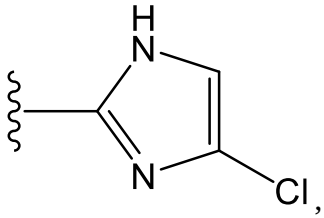
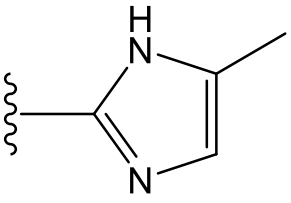
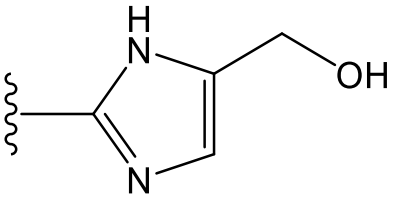
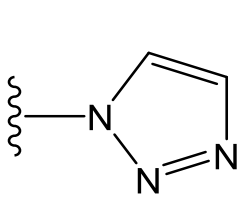
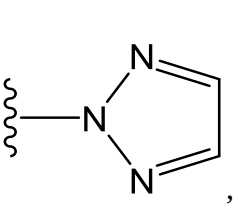
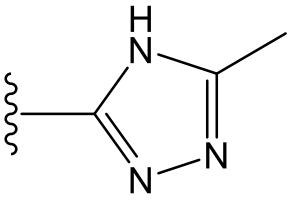
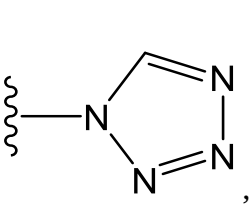
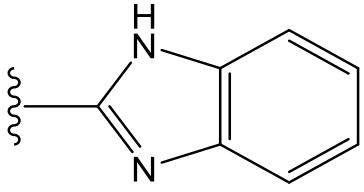
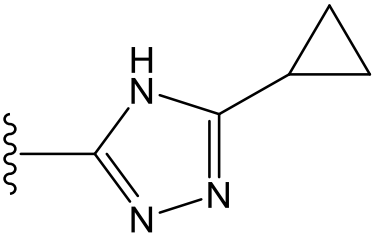
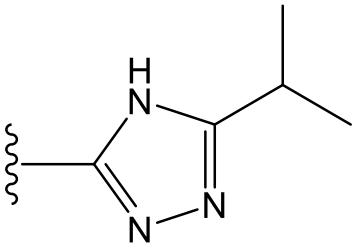
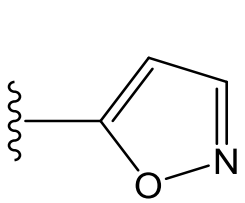
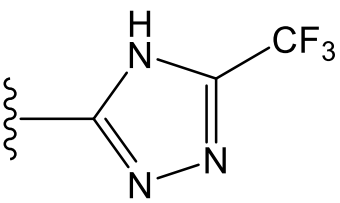
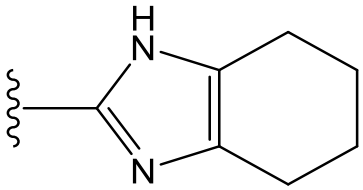
25. The compound of any one of claims 1-24, wherein R^3 is selected from the group consisting of C_{1-6}alkyl, -C(O)N(R^A)(R^B), 5-10 membered heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-6}alkyl and 5-10 membered heteroaryl may be optionally substituted on one or more available carbons by one, two, three, or more substituents, for each occurrence, independently selected from the group consisting of chloro, cyano, hydroxyl, CH_3, CF_3, -$CH_2CH(CH_3)_2$, -CH_2OH, -$C(O)OCH_3$, cyclopropyl, phenyl,

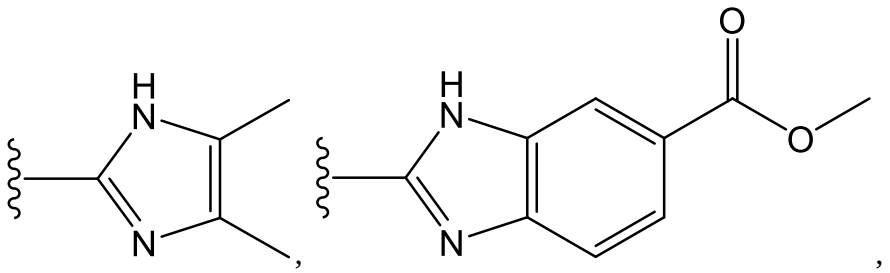
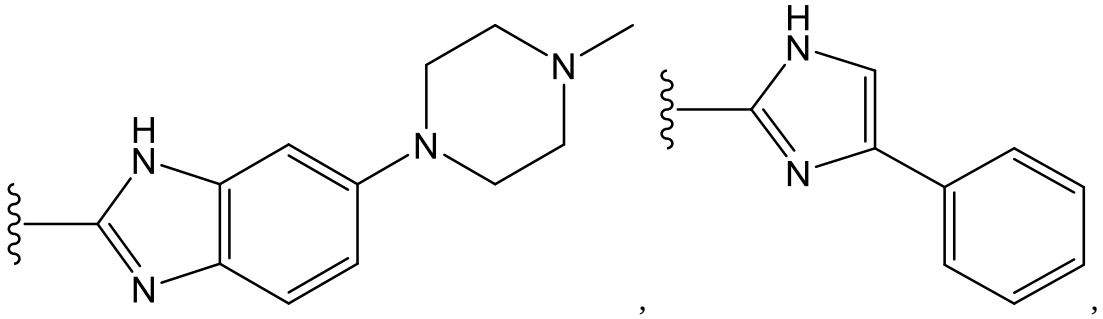
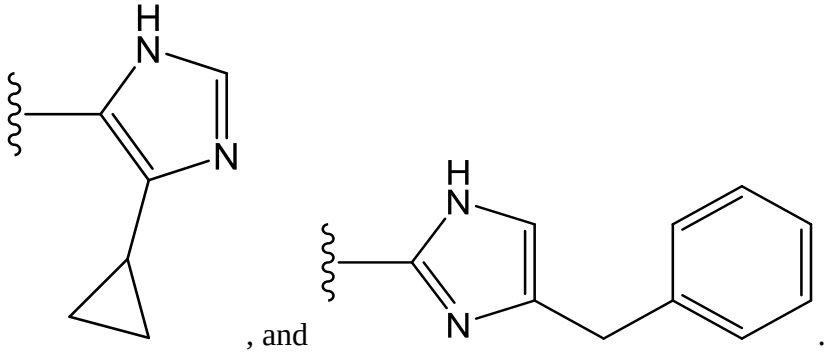

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26. The compound of any one of claims 1-25, wherein R^A is hydrogen.

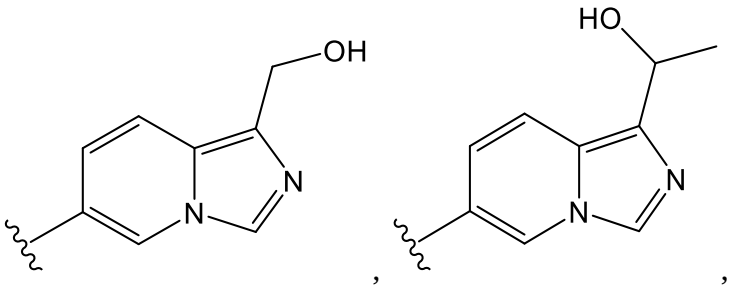
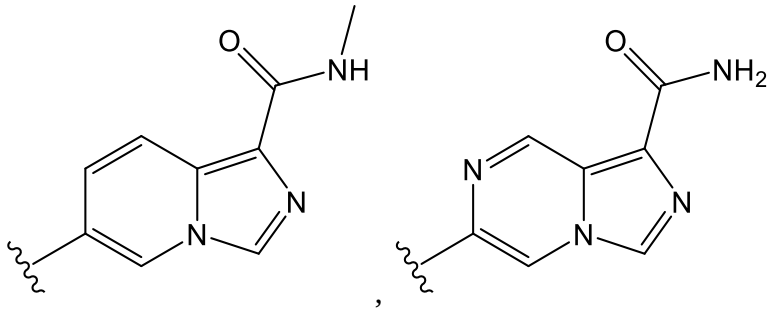
27. The compound of any one of claims 1-26, wherein R^B is hydrogen, -CH_3, -CH_2CH_3, -$CH(CH_3)_2$, -$CH_2CH(CH_3)_2$, -CH_2CF_3, CH_2CH_2OH, -$CH_2CH_2N(CH_3)_2$, -$(CH_2)_3N(CH_3)_2$, -$CH_2CH_2S(O)_2CH_3$,

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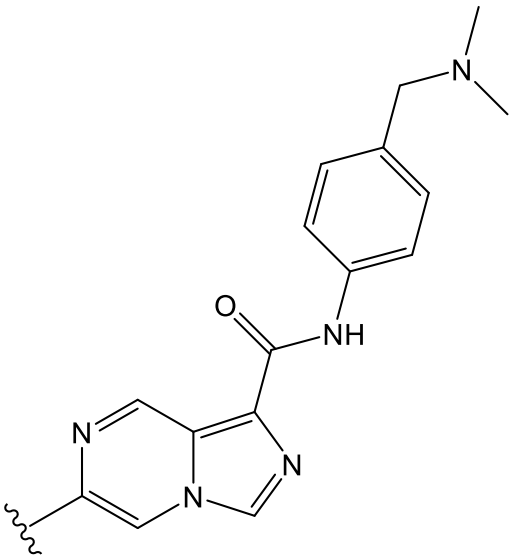
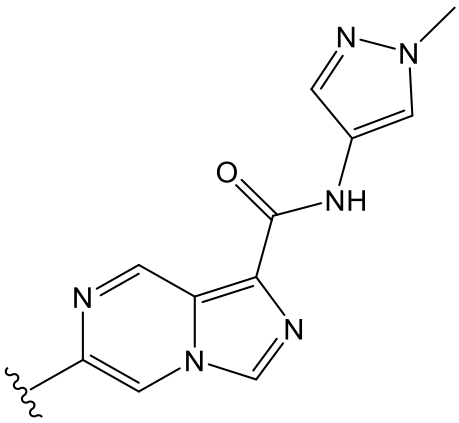
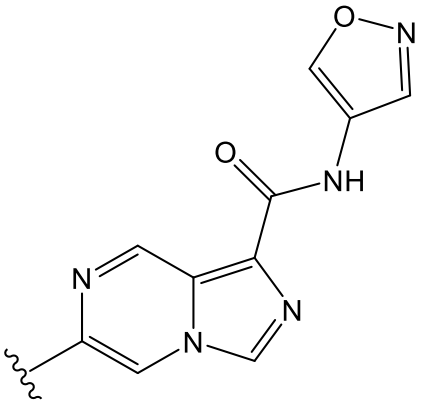
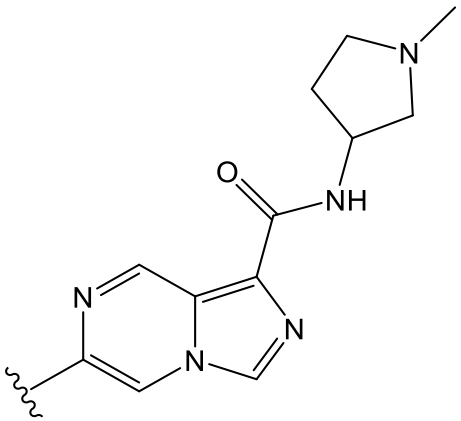
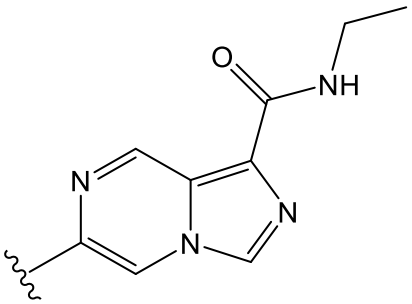
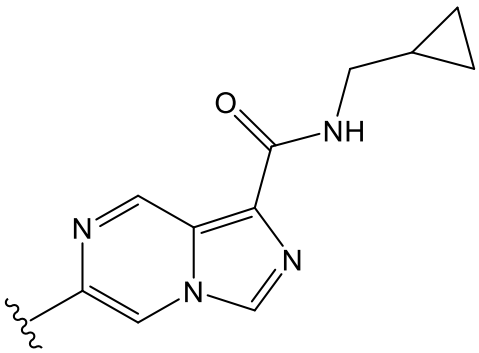
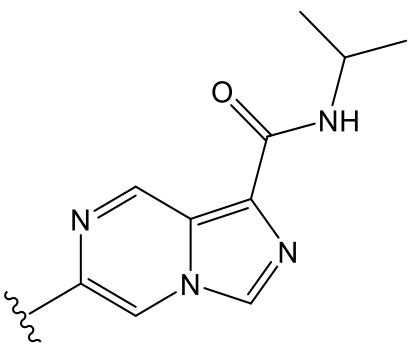
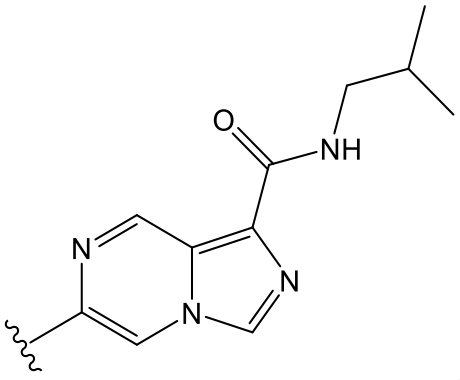
28. The compound of any one of claims 1-27, wherein R^3 is selected from the group consisting of -CH_2OH, , , , , , , , , , , , , , , , .

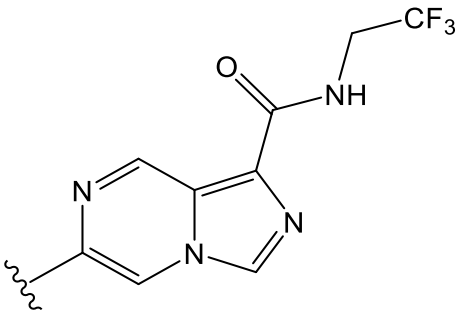
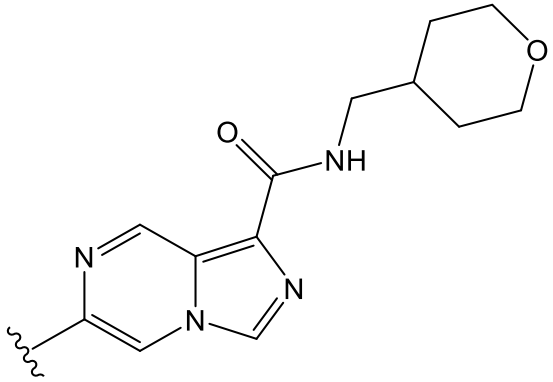
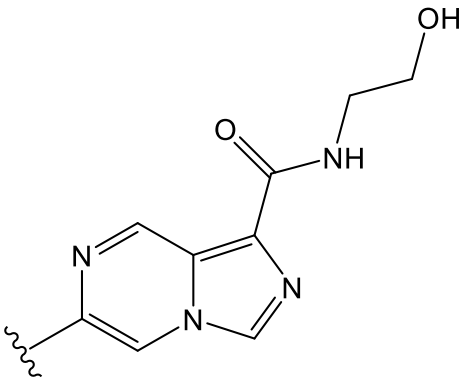
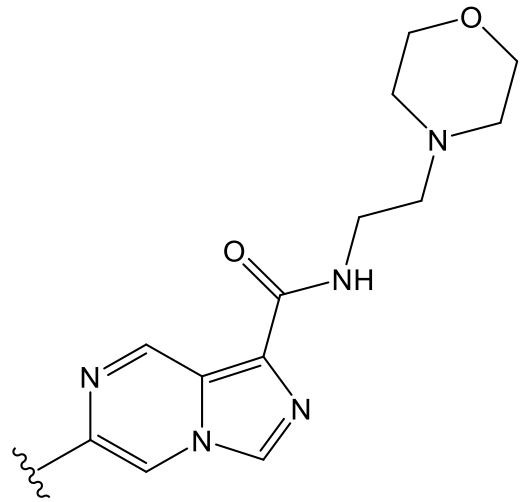
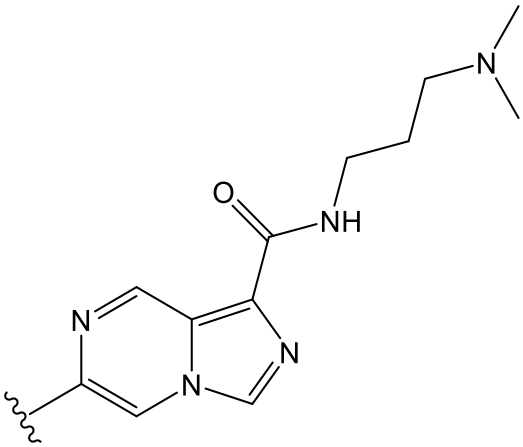
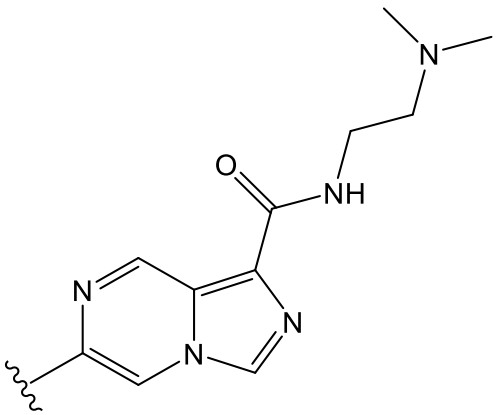

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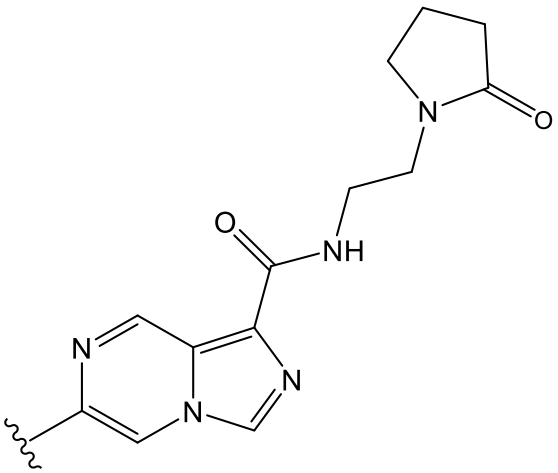
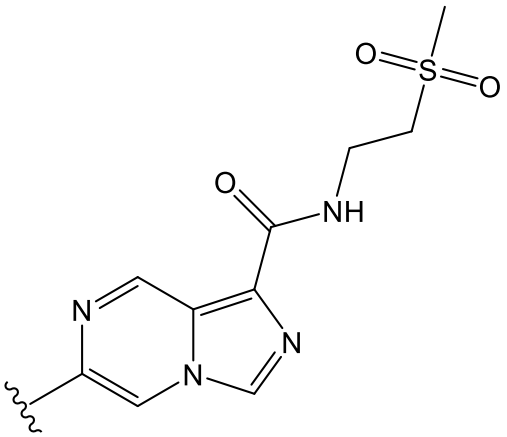
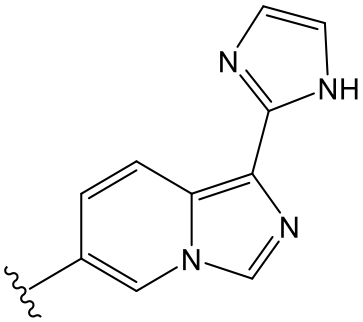
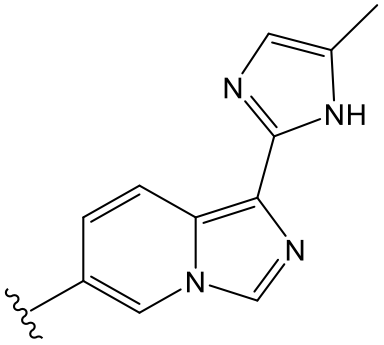
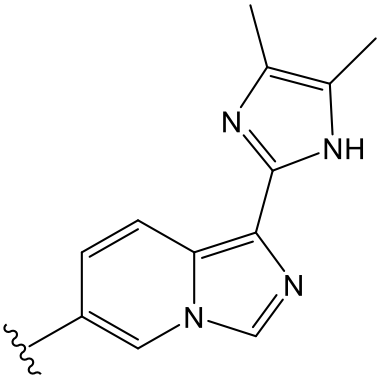
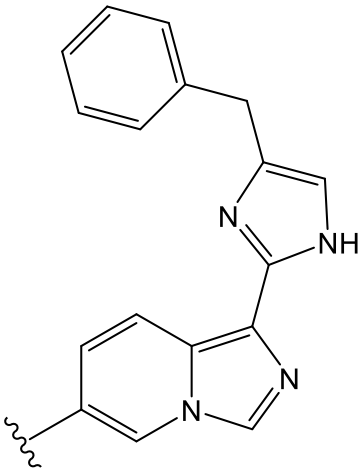
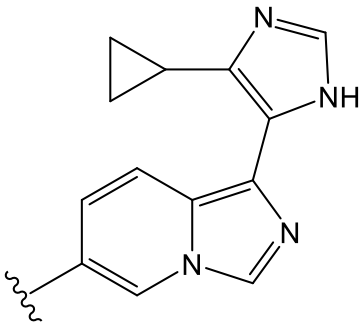
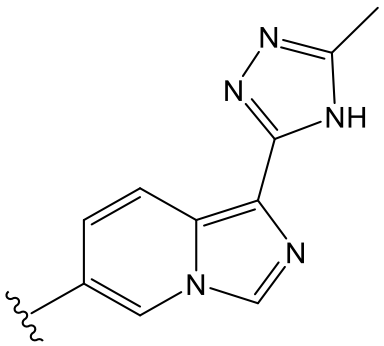
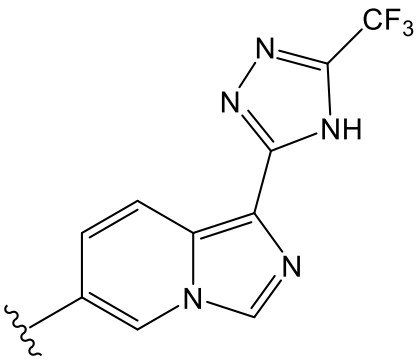
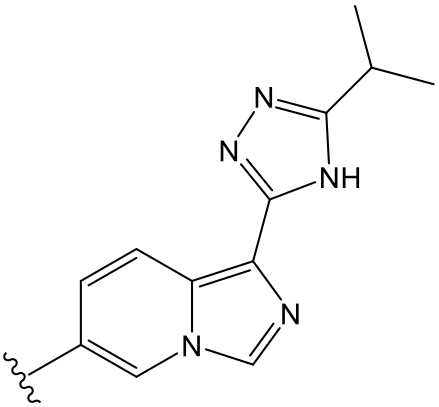



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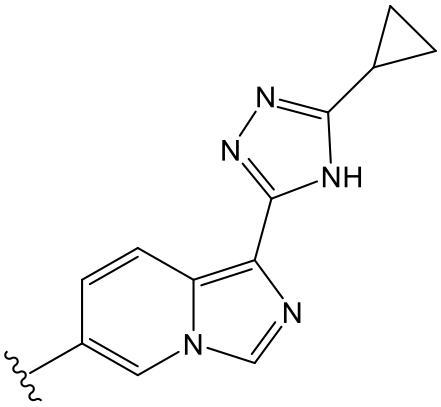
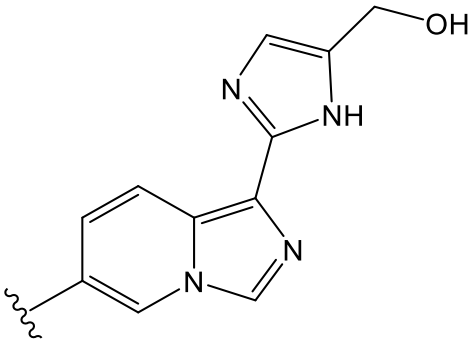
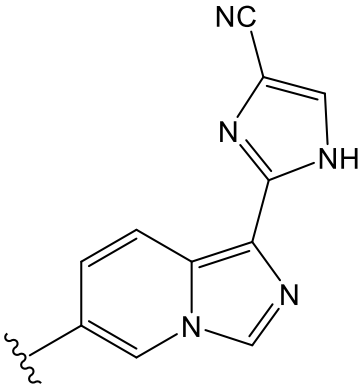
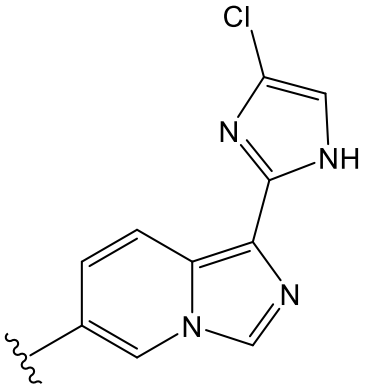
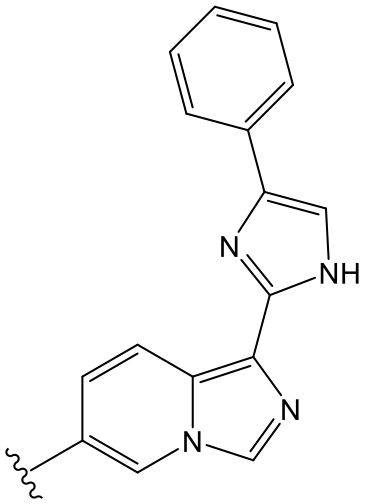
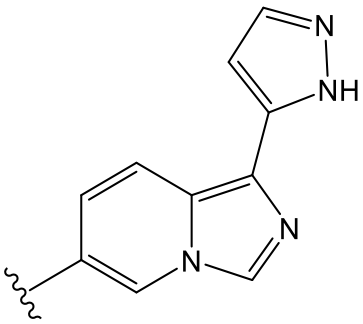
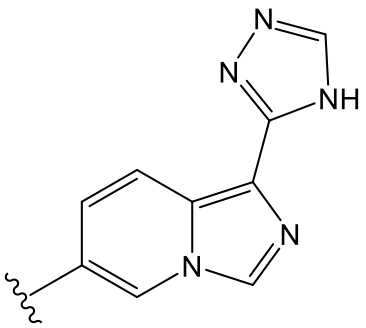
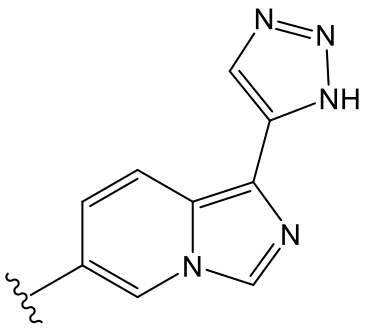
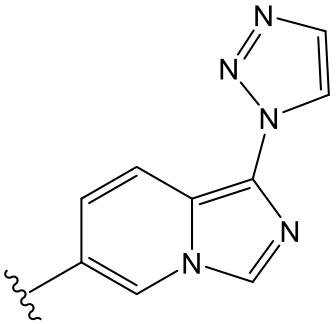
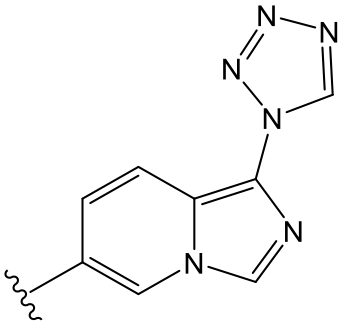
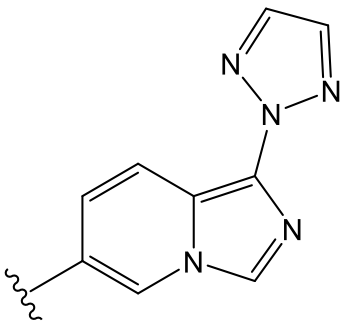
29. The compound of any one of claims 1-28, wherein C is selected from the group consisting of

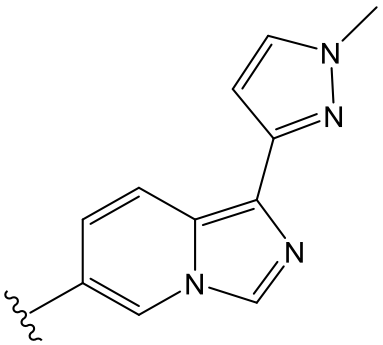
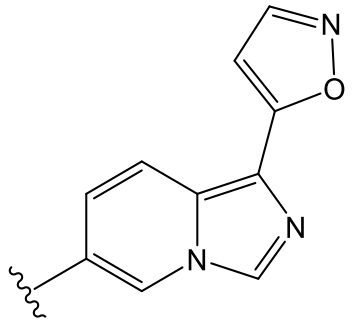
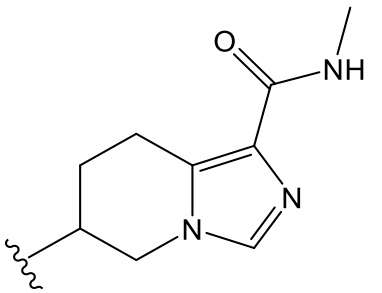
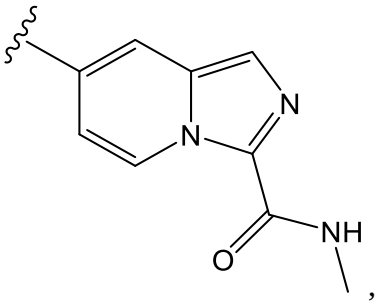
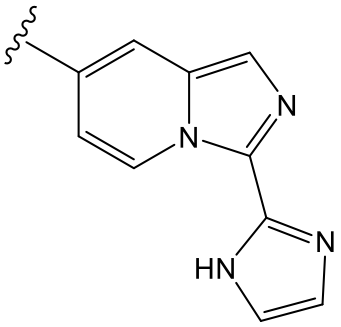
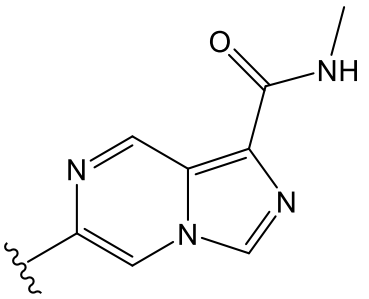
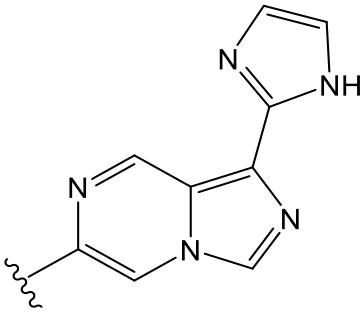
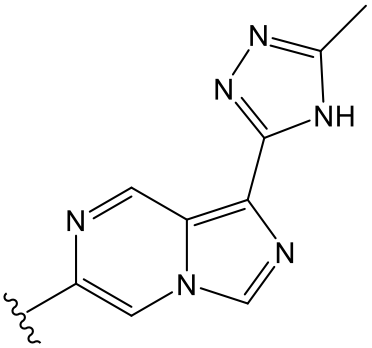
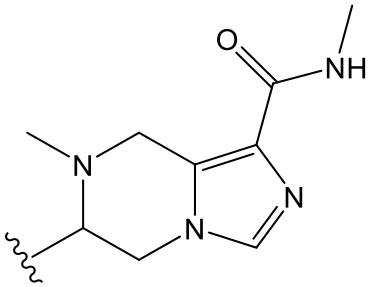
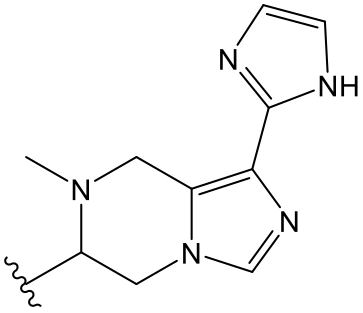
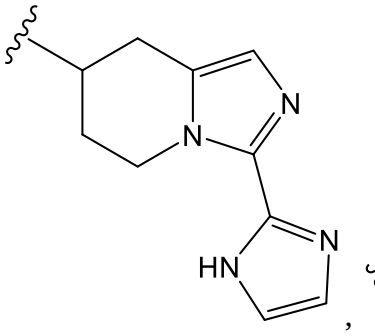
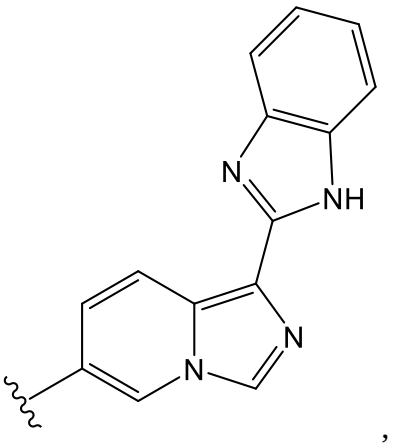



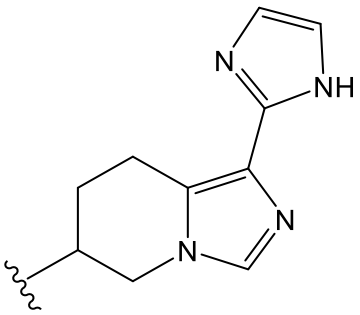
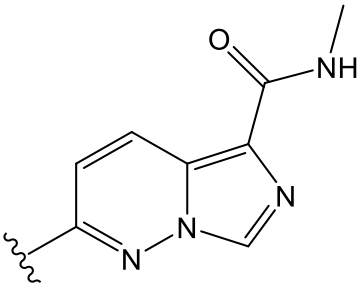
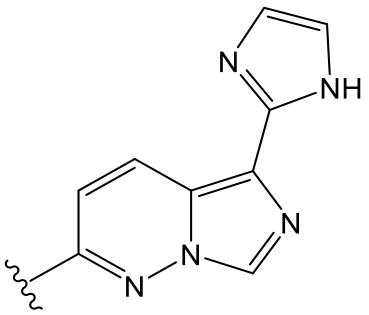
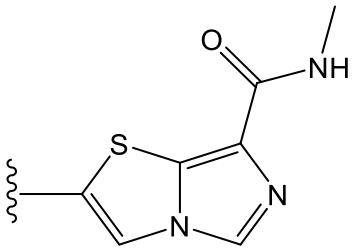
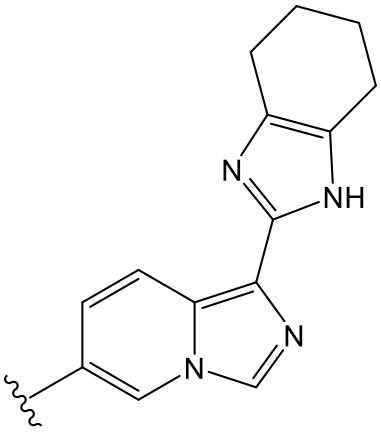
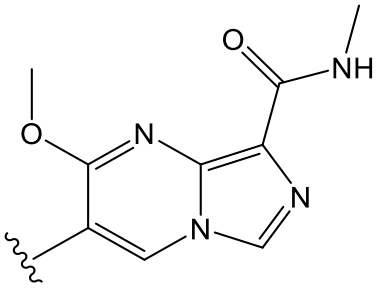









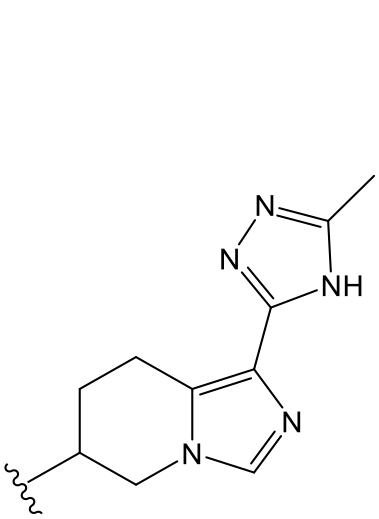
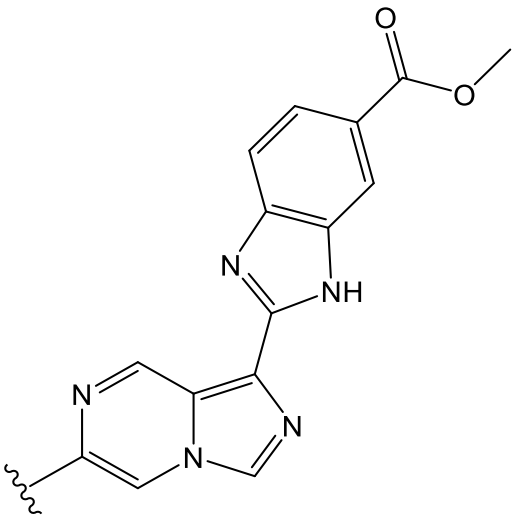
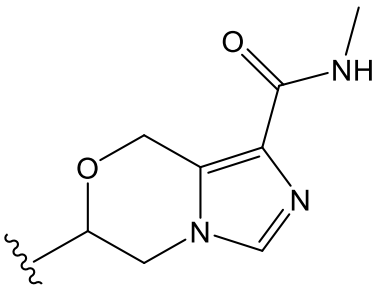
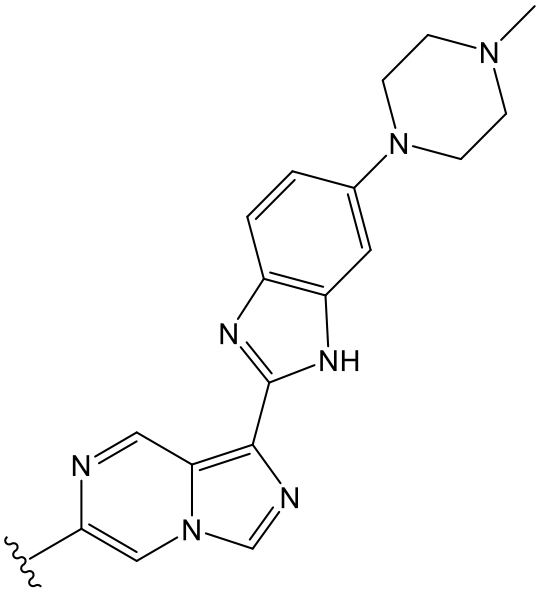







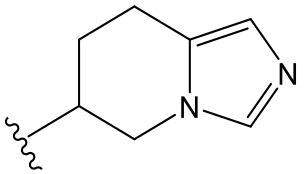
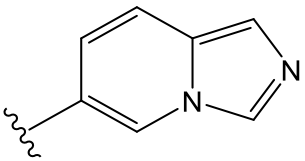
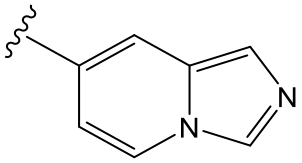
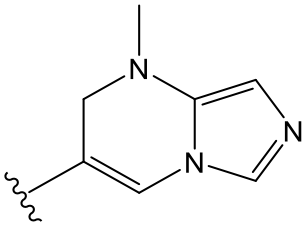
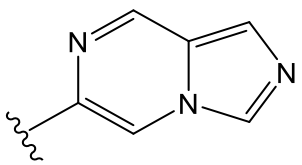
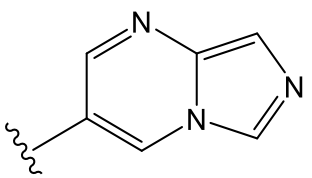












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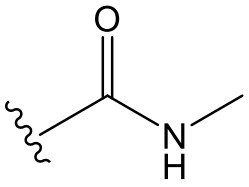
30. The compound of any one of claims 1-24, wherein C is selected from the group consisting of , , , ,  and , wherein C is substituted with two independent R^3 substituents selected from the group consisting of halogen, C_{1-6}alkyl, C_{1-6}alkoxyl, oxo, -C(O)N(R^A)(R^B), -N(R^A)(R^B), 5-10 membered

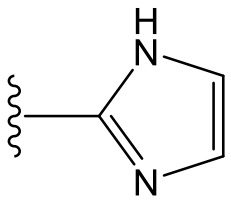
heterocyclyl, and 5-10 membered heteroaryl, wherein the C_{1-6}alkyl, 5-10 membered heteroaryl, or 5-10 membered heterocyclyl may be optionally substituted on one or more available carbons by one, two, three, or more substituents each independently selected from R^{3a}; and wherein, if the 5-10 membered heteroaryl contains a substitutable ring nitrogen atom, that ring nitrogen atom may be optionally substituted by C_{1-6}alkyl.

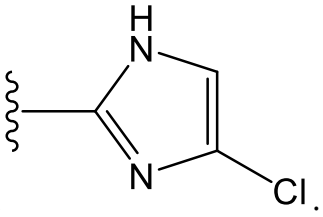
31. The compound of any one of claims 1-24 and 30, wherein R^3 is independently, for each occurrence, selected from the group consisting of halogen, oxo, C_{1-6}alkyl, C_{1-6}alkoxyl, -C(O)N(R^A)(R^B), -N(R^A)(R^B), and 5-10 membered heteroaryl, wherein the 5-10 membered heteroaryl may be optionally substituted with chloro.

32. The compound of any one of claims 1-24, 30, and 31, wherein R^A is hydrogen.

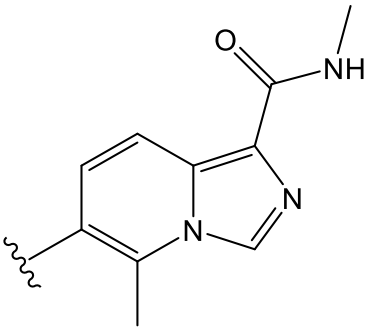
33. The compound of any one of claims 1-24 and 30-32, wherein R^B is -CH_3.

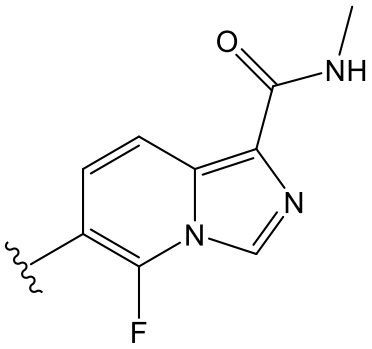
34. The compound of any one of claims 1-24 and 30-33, wherein R^3 is selected from the group consisting of fluoro, oxo, -CH_3, -O-CH_3, -NHCH$_3$, 

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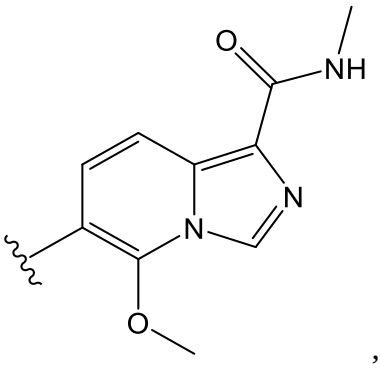
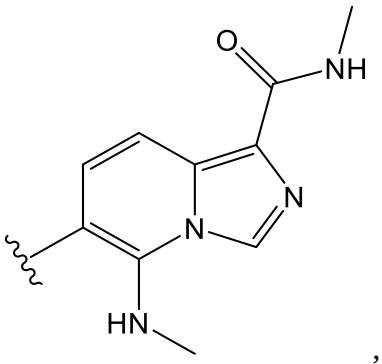
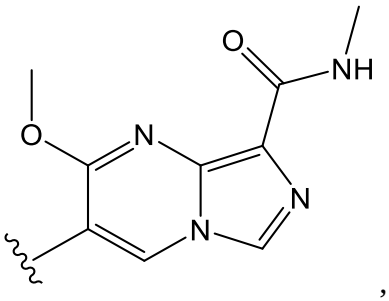
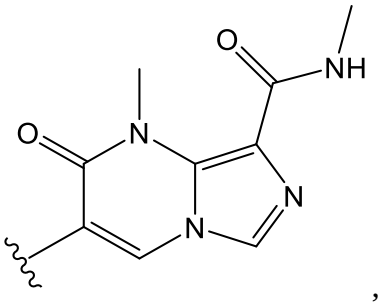
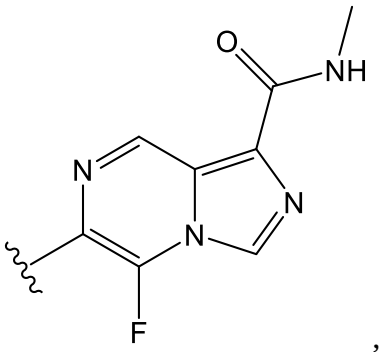
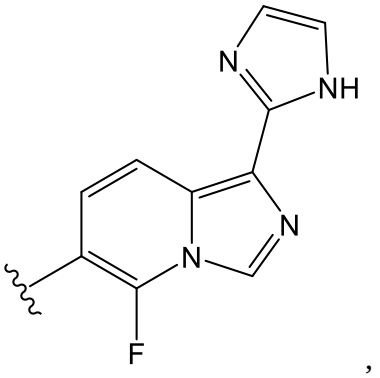
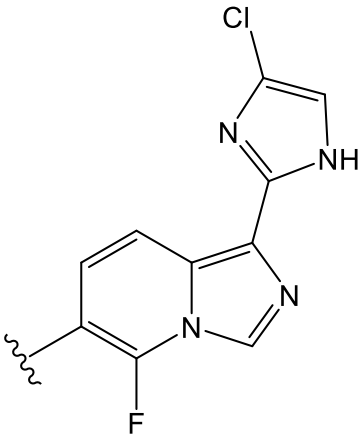
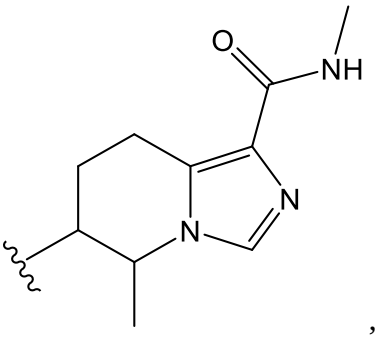
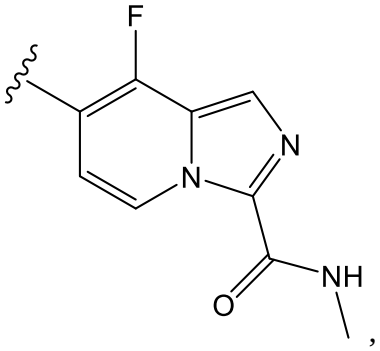
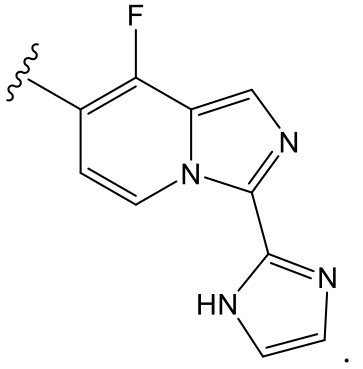
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35. The compound of any one of claims 1-24 and 30-34, wherein C is selected from the group consisting of


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36. A compound selected from the group consisting of:

6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;

5-chloro-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
6-[3-(5-chloro-2-methoxypyridine- 3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
2-[3-(5-Chloro-2-methoxypyridine- 3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo [1,5-b]pyridazine-5-carboxamide;
2-[3-(5-chloro-2-methylpyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-b]pyridazine-5-carboxamide;
6-[2,6-difluoro-3-(5-fluoro-2-methylpyridine-3-sulfonamido)phenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
6-[2,6-difluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
6-[3-(5-cyano-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
6-[3-(5-cyano-2-methylpyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo [1,5-a]pyridine-1-carboxamide;
6-[2,6-difluoro-3-(6-fluoro-1-hydroxy-2,3-dihydro-1H-indene-4-sulfonamido)phenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,5-dimethyl imidazo[1,5-a]pyridine-1-carboxamide;
2-[2,6-difluoro-3-(5-fluoro-2-methylpyridine-3-sulfonamido)phenyl]-N-methylimidazo[1,5-b]pyridazine-5-carboxamide;
6-[2,6-difluoro-3-[2-methoxy-5-(trifluoromethyl)pyridine-3-sulfonamido]phenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-5-fluoro-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-5-methoxy- N-methylimidazo[1,5-a]pyridine-1-carboxamide;
3-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrimidine-8-carboxamide;
3-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-2- methoxy-N-methylimidazo[1,5-a] pyrimidine-8-carboxamide;
N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;

N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
7-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-8-fluoro-N-methylimidazo[1,5-a]pyridine-3-carboxamide;
3-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,1-dimethyl-2-oxoimidazo[1,5-a] pyrimidine-8-carboxamide;
6-[3-[3-cyano-5-(trifluoromethyl)benzenesulfonamido]-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methyl-5-(methylamino)imidazo[1,5-a]pyridine-1-carboxamide;
5-chloro-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
5-chloro-N-[3,5-difluoro-4-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]pyridin-2-yl]-2-methoxypyridine-3-sulfonamide;
(6R)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
(6S)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-6-fluoro-1-hydroxy-2,3-dihydro-1H-indene-4-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
7-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyridine-3-carboxamide;
5-chloro-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(2H-pyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
(6R)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,7-dimethyl-5H,6H,8H-imidazo[1,5-a]pyrazine-1-carboxamide;
(6S)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,7-dimethyl-5H,6H,8H-imidazo[1,5-a]pyrazine-1-carboxamide;

5-chloro-N-[2,4-difluoro-3-[1-(3H-1,2,3-triazol-4-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]- 2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1-methylpyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2-cyano-4-fluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
6-cyano-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-1-hydroxy-2,3-dihydro-1H-indene-4-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[8-fluoro-3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[8-fluoro-3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-(3-(1-(4-cyano-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl)-2,4-difluorophenyl)-2-methoxypyridine-3-sulfonamide;
N-[3-[1-(4-cyano-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl] -5-fluoro-2-methylpyridine-3-sulfonamide;
N-[3-[1-(4-chloro-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl] -5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1-methylpyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[8-fluoro-3-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-7-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(4-methyl-3H-imidazol-2-yl)imidazo[1,5-a]pyridine -6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-(2,4-difluoro-3-[1-[4-(hydroxymethyl)-3H-imidazol-2-yl]imidazo[1,5-a] pyridin-6-yl]phenyl)-2-methoxypyridine-3-sulfonamide;
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N-(2,4-difluoro-3-[1-[4-(hydroxymethyl)-3H-imidazol-2-yl]imidazo[1,5-a] pyridin-6-yl]phenyl)-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[3-[1-(4-chloro-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl]-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(1-methylpyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1-methylpyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1,2,3-triazol-1-yl)imidazo[1,5-a]pyridin-6-yl] phenyl] -2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1,2,3-triazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(4-methyl-3H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
5-chloro-N-(2,4-difluoro-3-(1-(1-methyl-1H-pyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl)phenyl)-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1,2,3,4-tetrazol-1-yl)imidazo[1,5-a]pyridin-6-yl]phenyl] -2-methoxypyridine-3-sulfonamide;
(R)-N-(3-(3-(1H-imidazol-2-yl)-5,6,7,8-tetrahydroimidazo[1,5-a]pyridin-7-yl)-2,4-difluorophenyl)-5-chloro-2-methoxypyridine-3-sulfonamide ;
(S)-N-(3-(3-(1H-imidazol-2-yl)-5,6,7,8-tetrahydroimidazo[1,5-a]pyridin-7-yl)-2,4-difluorophenyl)-5-chloro-2-methoxypyridine-3-sulfonamide ;
5-chloro-N-[2,4-difluoro-3-[1-(4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl] -2-methylpyridine-3-sulfonamide;

N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl] -5-cyano-2-methoxypyridine-3-sulfonamide;
(R)-6-(2,6-difluoro-3-((5-fluoro-2-methoxypyridine)-3-sulfonamido)phenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
(S)-6-(2,6-difluoro-3-((5-fluoro-2-methoxypyridine)-3-sulfonamido)phenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
(R)-6-(3-((5-cyano-2-methoxypyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
(S)-6-(3-((5-cyano-2-methoxypyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
5-cyano-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a] pyrazin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro -2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-7-methyl-5H,6H,8H- imidazo[1,5-a]pyrazin-6-yl]phenyl] -2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro- 3-[(6S)-1-(1H-imidazol-2-yl)-7-methyl-5H,6H,8H-imidazo[1,5-a]pyrazin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1,2,3,4-tetrazol -1-yl)imidazo[1,5-a]pyridin-6-yl]phenyl] -5-fluoro-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(1,2,3,4-tetrazol-1-yl)imidazo [1,5-a]pyridin-6-yl]phenyl] -2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1,2,3,4-tetrazol-1-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]- 5-fluoro-2 -methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1,2,3,4-tetrazol-1-yl)imidazo [1,5-a]pyridin-6-yl] phenyl]- 2-methylpyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl] phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;

5-chloro-N-[2,4-difluoro-3-[(6S)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6S)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6S)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[(6S)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl] -2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6R)-1-(1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo [1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6S)-1- (1H-imidazol-2-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[5-(1H- imidazol-2-yl)imidazo[1,5-b]pyridazin-2-yl]phenyl] -2-methoxypyridine-3-sulfonamide;
(R)-6-(2,6-difluoro-3-((5-fluoro-2-methylpyridine)-3-sulfonamido)phenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
(S)-6-(2,6-difluoro-3-((5-fluoro-2-methylpyridine)-3-sulfonamido)phenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
5-chloro-N-[3-[1-(5-cyclopropyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyridin-6-yl]- 2,4-difluorophenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(5-isopropyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a] pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
(R)-6-(3-((5-chloro-2-methylpyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
(S)-6-(3-((5-chloro-2-methylpyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;

6-[2,6-difluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methylimidazo [1,5-a]pyrazine-1-carboxamide;
6-[2,6-difluoro-3-(5-fluoro-2-methylpyridine-3-sulfonamido)phenyl]-N-methylimidazo [1,5-a]pyrazine-1-carboxamide;
6-[3-(5-cyano-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methylpyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
5-chloro-N-(2,4-difluoro-3-(1-(hydroxymethyl)imidazo[1,5-a]pyridin-6-yl)phenyl)-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[5-(1H-imidazol-2-yl)imidazo[1,5-b]pyridazin-2-yl]phenyl] -2-methylpyridine-3-sulfonamide;
(5S,6R)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,5-dimethyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
(5R,6S)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N,5-dimethyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
5-cyano-N-[2,4-difluoro-3-[5-(1H-imidazol- 2-yl)imidazo[1,5-b]pyridazin-2-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[5-(1H-imidazol-2-yl)imidazo[1,5-b]pyridazin- 2-yl]phenyl]-5-fluoro -2-methoxypyridine-3-sulfonamide;
5-chloro-N-(2,4-difluoro-3-(1-(isoxazol-5-yl)imidazo[1,5-a]pyridin-6-yl)phenyl)-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(1-hydroxyethyl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
6-(2-chloro-3-((5-chloro-2-methoxypyridine)-3-sulfonamido)-6-fluorophenyl)-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
5-chloro-N-(2,4-difluoro-3-[1-[5-(trifluoromethyl)-4H-1,2,4-triazol-3-yl]imidazo[1,5-a]pyridin-6-yl]phenyl)-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2-chloro-4-fluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[5-fluoro-1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl] phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[5-fluoro-1-(2H-pyrazol-3-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;

6-[2-chloro-3-(5-chloro-2-methoxypyridine-3-sulfonamido)-6-fluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
N-[2,4-difluoro-3-[5-fluoro-1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl] -5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[5-fluoro-1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]phenyl] -5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[5-fluoro-1-(1H-imidazol-2-yl)imidazo[1,5-a]pyridine -6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl] -5-chloro-2-methoxypyridine-3-sulfonamide;
N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl] -5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl] -5-cyano-2-methoxypyridine-3-sulfonamide;
N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl]-5-chloro-2-methylpyridine-3-sulfonamide;
N-[3-[1-(1H-1,3-benzodiazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
N-[3-[1-(4-chloro-1H-imidazol-2-yl)-5-fluoroimidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[3-[1-(4-chloro-1H-imidazol-2-yl)-5-fluoroimidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl]-2-methoxypyridine-3-sulfonamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2-cyano-6-fluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
N-[2,4-difluoro-3-[1-(1,2-oxazol-5-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(1,2-oxazol-5-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
2-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[4,3-b][1,3]thiazole-7-carboxamide;
5-chloro-N-[2,4-difluoro-3-[1-(1,2-oxazol-5-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-6-fluoro-2-methylphenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;

5-cyano-N-[2,4-difluoro-3-[1-(4,5,6,7-tetrahydro-1H-1,3-benzodiazol-2-yl)imidazo [1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(1,2-oxazol-5-yl)imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-cyano-N-[3-[1-(4,5-dimethyl-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl]-2,4-difluorophenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6S)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6R)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6S)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6R)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
6-(3-((5-chloro-2-oxo-1,2-dihydropyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
5-chloro-N-[2,4-difluoro-3-[1-(5-methyl-4H-1,2,4-triazol-3-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6S)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
N-[2,4-difluoro-3-[(6R)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-5-fluoro-2-methylpyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[(6S)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;
5-cyano-N-[2,4-difluoro-3-[(6R)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methoxypyridine-3-sulfonamide;

5-chloro-N-[2,4-difluoro-3-[(6S)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
5-chloro-N-[2,4-difluoro-3-[(6R)-1-(5-methyl-4H-1,2,4-triazol-3-yl)-5H,6H,7H,8H-imidazo[1,5-a]pyridin-6-yl]phenyl]-2-methylpyridine-3-sulfonamide;
6-[6-chloro-3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2-fluorophenyl]-N-methylimidazo[1,5-a]pyridine-1-carboxamide;
2-[6-chloro-3-(5-chloro-2-methylpyridine-3-sulfonamido)-2-fluorophenyl]-N-methylimidazo[1,5-b]pyridazine-5-carboxamide;
2-[2-chloro-3-(5-chloro-2-methylpyridine-3-sulfonamido)-6-fluorophenyl]-N-methylimidazo[1,5-b]pyridazine-5-carboxamide;
6-(2-fluoro-5-((5-fluoro-2-methoxypyridine)-3-sulfonamido)phenyl)-N-methyl-5,6,7,8-tetrahydroimidazo[1,5-a]pyridine-1-carboxamide;
6-(6-chloro-3-((5-chloro-2-methoxypyridine)-3-sulfonamido)-2-fluorophenyl)-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
N-[4-chloro-2-fluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
5-chloro-N-(3-(1-(4,5-dimethyl-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl)-2,4-difluorophenyl)-2-methoxypyridine-3-sulfonamide;
N-(3-(1-(4,5-dimethyl-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl)- 2,4-difluorophenyl)-5-fluoro-2-methoxypyridine-3-sulfonamide;
N-(3-(1-(4,5-dimethyl-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl)-2,4-difluorophenyl)-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-(3-(1-(4,5-dimethyl-1H-imidazol-2-yl)imidazo[1,5-a]pyridin-6-yl) -2,4-difluorophenyl)-2-methylpyridine-3-sulfonamide;
5-chloro-N-(2,4-difluoro-3-(1-(4,5,6,7-tetrahydro-1H-benzo[d]imidazol-2-yl) imidazo[1,5-a]pyridin-6-yl)phenyl)-2-methoxypyridine-3-sulfonamide;
N-(2,4-difluoro-3-(1-(4,5,6,7-tetrahydro-1H-benzo[d]imidazol-2-yl)imidazo [1,5-a]pyridin-6-yl)phenyl)-5-fluoro-2-methoxypyridine-3-sulfonamide;
N-(2,4-difluoro-3-(1-(4,5,6,7-tetrahydro-1H-benzo[d]imidazol-2-yl) imidazo[1,5-a]pyridin-6-yl)phenyl)-5-fluoro-2-methylpyridine-3-sulfonamide;
5-chloro-N-(2,4-difluoro-3-(1-(4,5,6,7-tetrahydro-1H-benzo[d]imidazol-2 -yl)imidazo[1,5-a]pyridin-6-yl)phenyl)-2-methylpyridine-3-sulfonamide;
N-[2-chloro-4-fluoro-3-[1-(1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;

(6R)-6-[2-chloro-6-fluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
(6S)-6-[2-chloro-6-fluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
methyl 2-[6-[2,6-difluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]imidazo[1,5-a]pyrazin-1-yl]-3H-1,3-benzodiazole-5-carboxylate;
(6S)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methyl-5H,6H,8H-imidazo[4,3-c][1,4]oxazine-1-carboxamide;
(6R)-6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methyl-5H,6H,8H-imidazo[4,3-c][1,4]oxazine-1-carboxamide;
(6R)-6-[6-chloro-2-fluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
(6S)-6-[6-chloro-2-fluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-N-methyl-5H,6H,7H,8H-imidazo[1,5-a]pyridine-1-carboxamide;
N-[2,4-difluoro-3-[1-(4-phenyl-1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]phenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-isopropylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(2-methylpropyl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(2,2,2-trifluoroethyl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-5-fluoro-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(2-hydroxyethyl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(1-methylpyrazol-4-yl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(oxan-4-ylmethyl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(2-methanesulfonylethyl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-ethylimidazo[1,5-a]pyrazine-1-carboxamide;

6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(cyclopropylmethyl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-ethoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-isopropoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-cyclopropoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[2,6-difluoro-3-(5-fluoro-2-methoxypyridine-3-sulfonamido)phenyl]-5-fluoro-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-[3-(dimethylamino)propyl]imidazo[1,5-a]pyrazine-1-carboxamide;
(R)-6-(3-((5-chloro-2-methoxypyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-(1-methylpyrrolidin-3-yl)imidazo[1,5-a]pyrazine-1-carboxamide;
(S)-6-(3-((5-chloro-2-methoxypyridine)-3-sulfonamido)-2,6-difluorophenyl)-N-(1-methylpyrrolidin-3-yl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-(1,2-oxazol-4-yl)imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-[2-(morpholin-4-yl)ethyl]imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-[5-chloro-2-(2-methylpropoxy)pyridine-3-sulfonamido]-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
N-[3-[1-(5-cyclopropyl-3H-imidazol-4-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
N-[3-[1-(4-benzyl-1H-imidazol-2-yl)imidazo[1,5-a]pyrazin-6-yl]-2,4-difluorophenyl]-5-fluoro-2-methoxypyridine-3-sulfonamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-[2-(dimethylamino)ethyl]imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-[2-(2-oxopyrrolidin-1-yl)ethyl]imidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-(5-chloro-2-methoxypyridine-3-sulfonamido)-2,6-difluorophenyl]-N-[4-[(dimethylamino)methyl]phenyl]imidazo[1,5-a]pyrazine-1-carboxamide;

6-[3-[5-chloro-2-(2,2,2-trifluoroethoxy)pyridine-3-sulfonamido]-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[3-[2-(benzyloxy)-5-chloropyridine-3-sulfonamido]-2,6-difluorophenyl]-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
6-[2,6-difluoro-3-(5-fluoro-2-methylpyridine-3-sulfonamido)phenyl]-5-fluoro-N-methylimidazo[1,5-a]pyrazine-1-carboxamide;
N-(2,4-difluoro-3-[1-[5-(4-methylpiperazin-1-yl)-3H-1,3-benzodiazol-2-yl]imidazo[1,5-a]pyridin-6-yl]phenyl)-5-fluoro-2-methoxypyridine-3-sulfonamide; and
6-[3-(5-chloro-2-methylpyridine-3-sulfonamido)-2,6-difluorophenyl]-5-fluoro-N-methylimidazo [1,5-a]pyrazine-1-carboxamide
, or a pharmaceutically acceptable salt thereof.

37. A pharmaceutical composition comprising a compound of any one of claims 1-36 and a pharmaceutically acceptable carrier.

38. Use of a compound of any one of claims 1-36 or a pharmaceutical composition of claim 37 in the manufacture of a medicament for treating cancer in a subject in need thereof.

39. The use of claim 38, wherein the cancer is colon cancer, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, lung cancer, bladder cancer, stomach cancer, cervical cancer, testicular cancer, skin cancer, rectal cancer, sweat gland carcinoma, sebaceous gland carcinoma, thyroid cancer, kidney cancer, uterus cancer, esophagus cancer, liver cancer, head cancer, neck cancer, throat cancer, mouth cancer, bone cancer, chest cancer, lymph node cancer, eye cancer, mesothelioma, an acoustic neuroma, oligodendroglioma, meningioma, neuroblastoma, retinoblastoma, leukemia, lymphoma, or any combination thereof.

40. The use of claim 38, wherein the cancer is colon cancer, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, lung cancer, bladder cancer, stomach cancer, cervical cancer, testicular cancer, skin cancer, rectal cancer, leukemia, or lymphoma.

41. Use of a compound of any one of claims 1-36 or a pharmaceutical composition of claim 37 in the manufacture of a medicament for treating a neurodegenerative disease in a subject in need thereof.

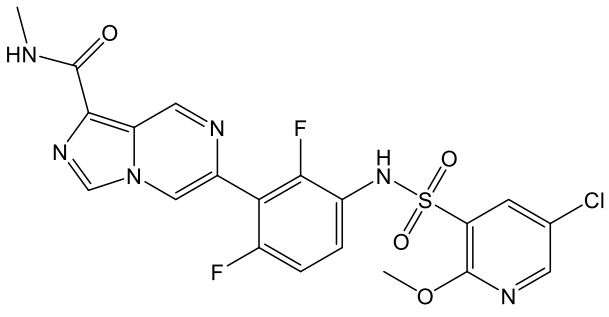
42. The use of claim 41, wherein the neurodegenerative disease is Alzheimer's disease, Parkinson's Disease, Huntington's Disease, amyotrophic lateral sclerosis, or spinocerebellar ataxia.

43. Use of a compound of any one of claims 1-36 or a pharmaceutical composition of claim 37 in the manufacture of a medicament for treating doxorubicin-induced cardiotoxicity in a subject in need thereof.

44. The use of any one of claims 38-43, wherein the subject is a human.

45. Use of a compound of any one of claims 1-36 or a pharmaceutical composition of claim 37 in the manufacture of a medicament for modulating the activity of GCN2, wherein GCN2 is exposed to said compound or composition to modulate the activity of said GCN2.

46. The compound of claim 1-3, wherein the compound is



, or a pharmaceutically acceptable salt thereof.

47. A compound of any one of claims 1-36 or a pharmaceutical composition of claim 37 for use in therapy.