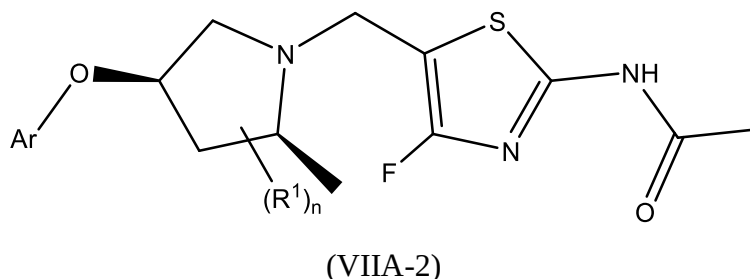


[0009a] In a first aspect of the present disclosure, there is provided a compound represented by the following structural formula:



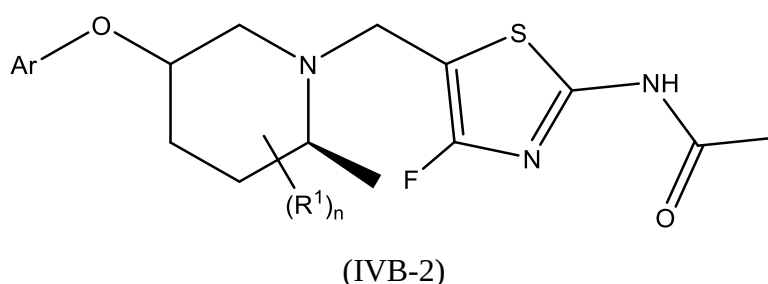
or a pharmaceutically acceptable salt thereof, wherein:

Ar is optionally substituted pyridinyl, optionally substituted pyrimidinyl, optionally substituted pyrazinyl, or optionally substituted pyridazinyl;

n is 0, 1, or 2; and

when n is other than 0, R¹, for each occurrence, is independently halo or C₁-C₄ alkyl.

[0009b] In another aspect of the present disclosure, there is provided a compound represented by the following structural formula:



or a pharmaceutically acceptable salt thereof, wherein:

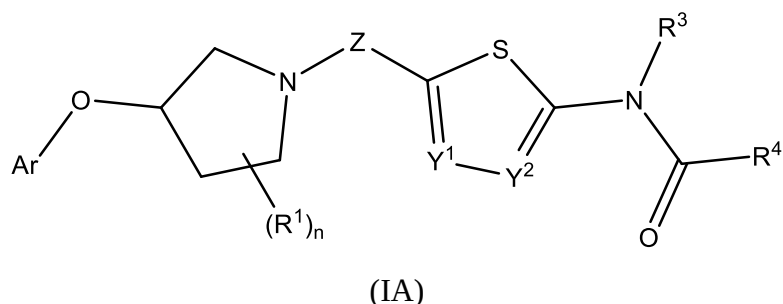
Ar is optionally substituted pyridinyl, optionally substituted pyrimidinyl, optionally substituted pyrazinyl, or optionally substituted pyridazinyl;

n is 0, 1, or 2; and

when n is other than 0, R¹, for each occurrence, is independently halo or C₁-C₄ alkyl.

[0009c] In yet another aspect of the present disclosure, there is provided a pharmaceutical composition comprising the compound as disclosed herein or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier or diluent.

[0010] A first example of a compound of the present disclosure is represented by the following structural formula:



or a pharmaceutically acceptable salt thereof, wherein:

Ar is an optionally substituted monocyclic aryl or optionally substituted monocyclic heteroaryl;

Y^1 and Y^2 are each CR^c or N, wherein at least one of Y^1 or Y^2 is N;

Z is CR^2R^2 , $C(=O)$, $(CR^2R^2)_2$, or $CH_2C(=O)$;

R^c is $-H$, halo, C_1 - C_4 alkyl, or C_1 - C_4 haloalkyl;

n is 0 or an integer from 1 to 8;

when n is other than 0, R^1 , for each occurrence, is independently halo, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, or C_1 - C_4 alkoxy;

R^2 , for each occurrence, is independently $-H$, halo, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_3 - C_{10} cycloalkyl, or C_3 - C_{10} halocycloalkyl;

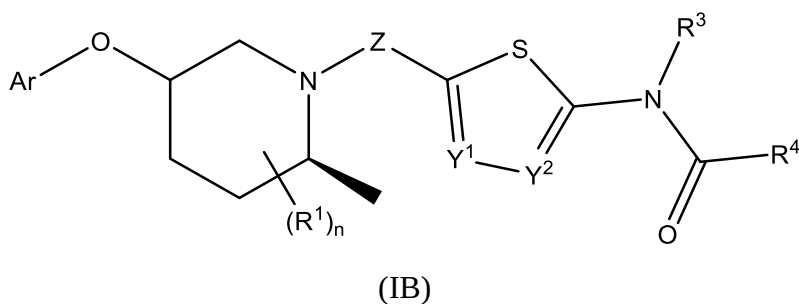
or alternatively two R^2 together with the carbon atom to which they are attached form a C_3 - C_{10} cycloalkyl;

R^3 is $-H$ or C_1 - C_4 alkyl; and

R^4 is $-H$, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, or C_3 - C_6 cycloalkyl;

or alternatively R^3 and R^4 taken together with their intervening atoms form an optionally substituted 5- to 7-membered heterocyclyl.

[0011] Another example of a compound of the present disclosure is represented by the following structural formula:

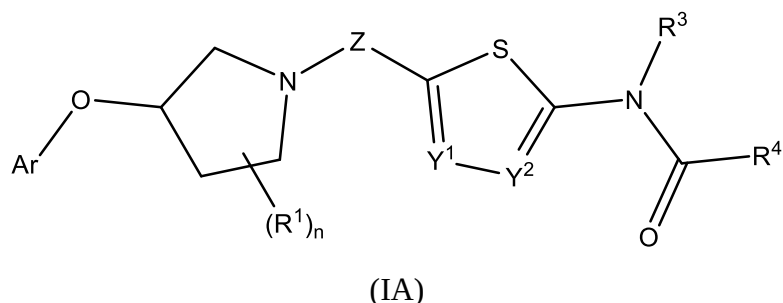


[0015] Also provided is a method of treating a disease or condition characterized by hyperphosphorylation of tau in the brain, comprising administering to the subject an effective amount of the compound described herein, or a pharmaceutically acceptable salt thereof, or an effective amount of a pharmaceutical composition comprising at least one compound described herein, or a pharmaceutically acceptable salt thereof, and at least one pharmaceutically acceptable excipient. In one example, the disease or condition characterized by hyperphosphorylation of tau in the brain is Alzheimer's disease.

DETAILED DESCRIPTION

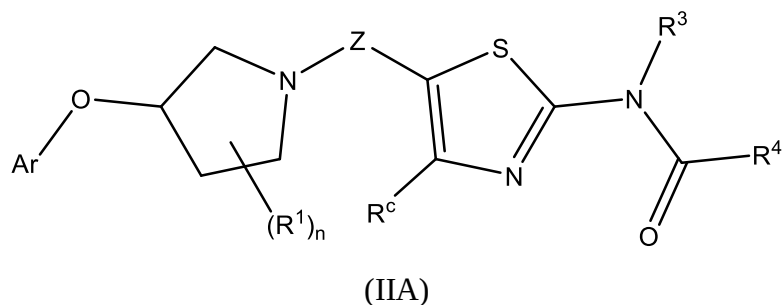
[0016] Described herein are compounds that are useful treating various diseases, disorders and medical conditions, including but not limited to those associated with proteins that are modified by O-GlcNAcase.

[0017] In a first embodiment, a compound of the present invention is represented by the following structural formula:



or a pharmaceutically acceptable salt thereof, wherein the variables are as defined above in the summary for a compound represented by formula (IA).

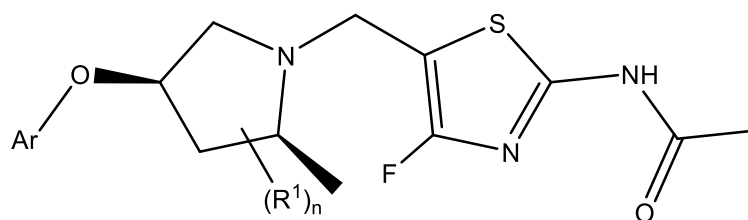
[0018] In a second embodiment, a compound of the present invention is represented by the following structural formula:



or a pharmaceutically acceptable salt thereof; wherein R¹ is halo, C₁-C₄ alkyl, C₁-C₄ haloalkyl, or C₁-C₄ alkoxy; R^c is halo, C₁-C₄ alkyl, or C₁-C₄ haloalkyl; and n is an integer from 1 to 7; wherein the remaining variables are as defined in the first embodiment.

CLAIMS

1. A compound represented by the following structural formula:



(VIIA-2)

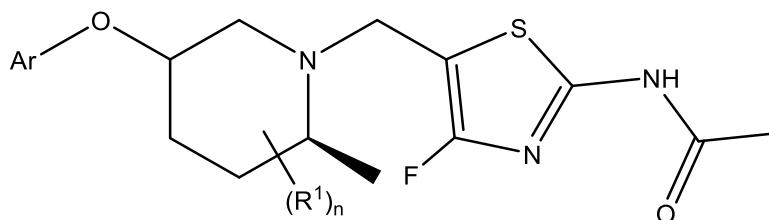
or a pharmaceutically acceptable salt thereof, wherein:

Ar is optionally substituted pyridinyl, optionally substituted pyrimidinyl, optionally substituted pyrazinyl, or optionally substituted pyridazinyl;

n is 0, 1, or 2; and

when n is other than 0, R¹, for each occurrence, is independently halo or C₁-C₄ alkyl.

2. A compound represented by the following structural formula:



(IVB-2)

or a pharmaceutically acceptable salt thereof, wherein:

Ar is optionally substituted pyridinyl, optionally substituted pyrimidinyl, optionally substituted pyrazinyl, or optionally substituted pyridazinyl;

n is 0, 1, or 2; and

when n is other than 0, R¹, for each occurrence, is independently halo or C₁-C₄ alkyl.

3. The compound according to claim 1 or a pharmaceutically acceptable salt thereof, wherein:

Ar is optionally substituted pyridinyl, optionally substituted pyrimidinyl, or optionally substituted pyrazinyl.

4. The compound according to claim 1 or a pharmaceutically acceptable salt thereof, wherein:

Ar is optionally substituted with one or more groups selected from C₁-C₄ alkyl, C₁-C₄ haloalkyl, C₃-C₆ cycloalkyl, C₃-C₆ heterocyclyl, halo, -CN, -NO₂, -OR^z, -NR^xR^y, -S(O)_iR^x, -NR^xS(O)_iR^y, -S(O)_iNR^xR^y, -C(=O)OR^x, -OC(=O)OR^x, -C(=S)OR^y, -O(C=S)R^x, -C(=O)NR^xR^y, -NR^xC(=O)R^y, -C(=S)NR^xR^y, -NR^xC(=S)R^y, -NR^x(C=O)OR^y, -O(C=O)NR^xR^y, -NR^x(C=S)OR^y, -O(C=S)NR^xR^y, -NR^x(C=O)NR^xR^y, -NR^x(C=S)NR^xR^y, -C(=S)R^x, -C(=O)R^x, phenyl and monocyclic heteroaryl;

wherein

the C₁-C₄ alkyl group substituent on Ar is optionally substituted with -CN, -NO₂, -OR^z, -NR^xR^y, -S(O)_iR^x, -NR^xS(O)_iR^y, -S(O)_iNR^xR^y, -C(=O)OR^x, -OC(=O)OR^x, -C(=S)OR^x, -O(C=S)R^x, -C(=O)NR^xR^y, -NR^xC(=O)R^y, -C(=S)NR^xR^y, -NR^xC(=S)R^y, -NR^x(C=O)OR^y, -O(C=O)NR^xR^y, -NR^x(C=S)OR^y, -O(C=S)NR^xR^y, -NR^x(C=O)NR^xR^y, -NR^x(C=S)NR^xR^y, -C(=S)R^x, -C(=O)R^y, C₃-C₆ cycloalkyl (optionally substituted with one or more groups selected from -CH₃, halomethyl, halo, methoxy and halomethoxy), monocyclic heteroaryl (optionally substituted with one or more groups selected from -CH₃, halomethyl, halo, methoxy and halomethoxy) or phenyl (optionally substituted with one or more groups selected from -CH₃, halomethyl, halo, methoxy and halomethoxy);

the C₃-C₆ cycloalkyl, C₃-C₆ heterocyclyl, phenyl and monocyclic heteroaryl group substituent on Ar are optionally and independently substituted with C₁-C₄ alkyl, C₁-C₄ haloalkyl, halo, -CN, -NO₂, -OR^z, -NR^xR^y, -S(O)_iR^x, -NR^xS(O)_iR^y, -S(O)_iNR^xR^y, -C(=O)OR^x, -OC(=O)OR^x, -C(=S)OR^x, -O(C=S)R^y, -C(=O)NR^xR^y, -NR^xC(=O)R^y, -C(=S)NR^xR^y, -NR^xC(=S)R^y, -NR^x(C=O)OR^y, -O(C=O)NR^xR^y, -NR^x(C=S)OR^y, -O(C=S)NR^xR^y, -NR^x(C=O)NR^xR^y, -NR^x(C=S)NR^xR^y, -C(=S)R^x, or -C(=O)R^x;

each R^x and each R^y is independently -H, C₁-C₄ alkyl, or C₃-C₈ cycloalkyl; wherein the C₁-C₄ alkyl or C₃-C₈ cycloalkyl represented by R^x or R^y is optionally substituted with one or more substituents selected from halo, hydroxyl, C₁-C₄ alkyl, C₁-C₄ alkoxy, C₃-C₆

cycloalkyl and phenyl (optionally substituted with one or more groups selected from -CH₃, halomethyl, halo, methoxy and halomethoxy);

R^z is -H, C₁-C₄ alkyl, C₃-C₈ cycloalkyl, or C₃-C₈ heterocyclyl; wherein the C₁-C₄ alkyl, C₃-C₈ cycloalkyl, or C₃-C₈ heterocyclyl group represented by R^z is optionally substituted with one or more substituents selected from -CN, halo, hydroxyl, C₁-C₄ alkyl, C₁-C₄ alkoxy, C₃-C₆ cycloalkyl and phenyl (optionally substituted with one or more groups selected from -CH₃, halomethyl, halo, methoxy and halomethoxy); and

i is 0, 1, or 2.

5. The compound according to claim 1 or a pharmaceutically acceptable salt thereof, wherein:

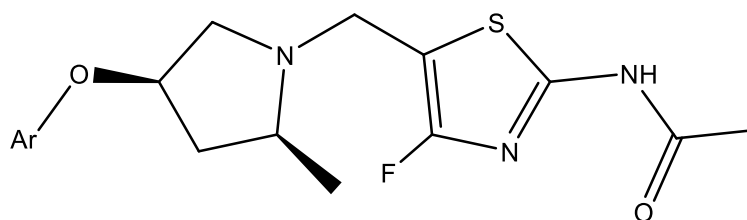
Ar is optionally substituted with one or more groups selected from optionally substituted C₁-C₄ alkyl, C₁-C₄ haloalkyl, optionally substituted C₃-C₆ cycloalkyl, optionally substituted C₃-C₆ heterocyclyl, halo, -CN, -OR^z, -NR^xR^y, -C(=O)NR^xR^y, -C(=S)NR^xR^y, -O(C=O)NR^xR^y, -O(C=S)NR^xR^y, -C(=O)R^x, -C(=O)OR^x, -NR^xC(=O)R^y, phenyl and optionally substituted monocyclic heteroaryl.

6. The compound according to claim 1 or a pharmaceutically acceptable salt thereof, wherein:

Ar is optionally substituted with one or more groups selected from C₁-C₄ alkyl, C₁-C₄ haloalkyl, halo, -CN, and -OR^z; wherein R^z is C₁-C₄ alkyl optionally substituted with one or more halo groups.

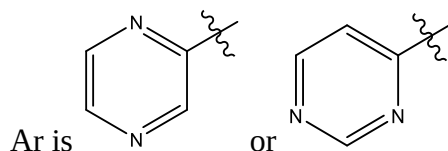
7. The compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein n is 0.

8. The compound according to claim 1, wherein the compound is represented by the following structural formula:



(VIII A-2)

or a pharmaceutically acceptable salt thereof, wherein:



, each of which is optionally substituted with one substituent R^{Ar} selected from selected from C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, halo, $-CN$, and $-OR^Z$; R^Z is H, C_1 - C_4 alkyl, C_3 - C_8 cycloalkyl or C_3 - C_6 heterocyclyl, wherein the C_1 - C_4 alkyl, C_3 - C_8 cycloalkyl and C_3 - C_6 heterocyclyl represented by R^Z are each optionally and independently substituted with one or more substituents independently selected from halo, $-CN$, C_1 - C_4 alkyl and C_1 - C_4 alkoxy.

9. The compound according to claim 1, wherein the compound is selected from
 - N*-(4-fluoro-5-(((2*S*,4*R*)-4-((6-(2-methoxyethoxy)pyrimidin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;
 - N*-(5-(((2*S*,4*R*)-4-((6-(azetidin-1-yl)pyrimidin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;
 - N*-(4-fluoro-5-(((2*S*,4*R*)-4-((6-(3-fluoroazetidin-1-yl)pyrimidin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;
 - N*-(5-(((2*S*,4*R*)-4-((6-(3,3-difluoroazetidin-1-yl)pyrimidin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;
 - N*-(4-fluoro-5-(((2*S*,4*R*)-4-((5-fluoropyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;
 - N*-(5-(((2*S*,4*R*)-4-((2,6-dimethylpyridin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;
 - N*-(4-fluoro-5-(((2*S*,4*R*)-4-((5-methoxypyrimidin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;
 - N*-(5-(((2*S*,4*R*)-4-((6-acetylpyrimidin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-((6-(2,2,2-trifluoroethoxy)pyrimidin-4-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((6-methoxypyridazin-3-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((6-fluoropyridin-3-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((6-methoxypyrazin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((5-methoxypyrimidin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(5-(((2*S*,4*R*)-4-((5-chloropyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((4-methoxypyrimidin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-(pyrimidin-2-yloxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((3-fluoropyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(5-(((2*S*,4*R*)-4-((5-chloropyrimidin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((4-fluoropyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((2-fluoropyridin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((5-methoxypyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((6-methoxypyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((2-methoxypyridin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(5-(((2*S*,4*R*)-4-((4-chloropyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;

N-(5-(((2*S*,4*R*)-4-((4,5-difluoropyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-((6-morpholinopyrimidin-4-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((5-methoxypyrazin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(5-(((2*S*,4*R*)-4-((3,5-dimethylpyrazin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;

N-(5-(((2*S*,4*R*)-4-((2,5-dimethylpyridin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-((5-methylpyrazin-2-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((6-hydroxypyrimidin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-((2-methylpyridin-4-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((6-fluoropyridazin-3-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((5-fluoropyrimidin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(5-(((2*S*,4*R*)-4-((5-(difluoromethyl)pyrazin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((6-methoxypyridin-3-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((5-fluoro-4-methylpyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((5-fluoro-4-methoxypyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-(pyrimidin-5-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(5-(((2*S*,4*R*)-4-((6-chloropyrimidin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-((6-(oxetan-3-yl)oxy)pyrimidin-4-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-((6-((1-methylazetidin-3-yl)oxy)pyrimidin-4-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-((5-morpholinopyrazin-2-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-((4-morpholinopyridin-2-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((5-(2-methoxyethoxy)pyrazin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((4-((2-methoxyethyl)(methyl)amino)pyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-((5-morpholinopyridin-2-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((4-(2-methoxyethoxy)pyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-(4-fluorophenoxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-((5-(4-methylpiperazin-1-yl)pyridin-2-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((5-(2-methoxyethoxy)pyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-4-((5-((2-methoxyethyl)(methyl)amino)pyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide;

N-(4-fluoro-5-(((2*S*,4*R*)-2-methyl-4-((4-(4-methylpiperazin-1-yl)pyridin-2-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide; and

N-(4-Fluoro-5-(((2*S*,4*R*)-4-((6-methoxypyrimidin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide,

or a pharmaceutically acceptable salt thereof.

10. The compound according to claim 2 or a pharmaceutically acceptable salt thereof, wherein the compound is *N*-(4-fluoro-5-(((2*S*,5*S*)-5-((6-methoxypyrimidin-4-yl)oxy)-2-methylpiperidin-1-yl)methyl)thiazol-2-yl)acetamide.

11. The compound according to claim 9 or a pharmaceutically acceptable salt thereof, wherein the compound is *N*-(4-fluoro-5-(((2*S*,4*R*)-4-((6-(2-methoxyethoxy)pyrimidin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide.

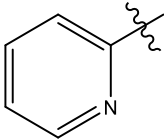
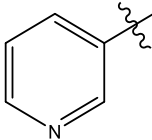
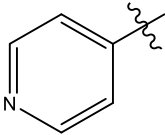
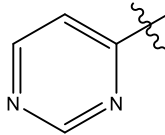
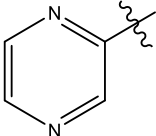
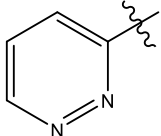
12. The compound according to claim 9 or a pharmaceutically acceptable salt thereof, wherein the compound is N-(4-fluoro-5-(((2S,4R)-2-methyl-4-((5-methylpyrazin-2-yl)oxy)pyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide.

13. The compound according to claim 9 or a pharmaceutically acceptable salt thereof, wherein the compound is N-(4-Fluoro-5-(((2S,4R)-4-((6-methoxypyrimidin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide.

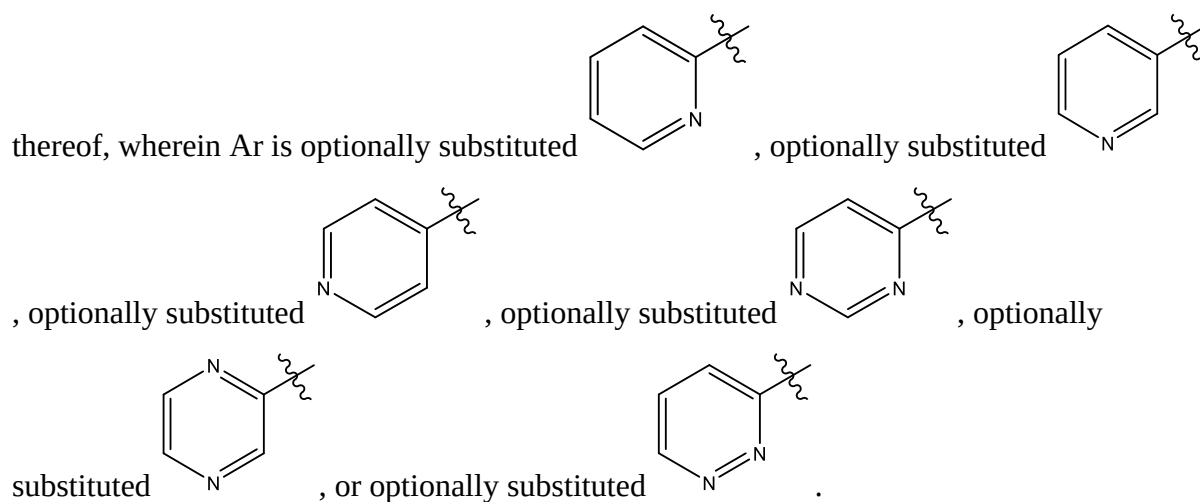
14. The compound according to claim 9 or a pharmaceutically acceptable salt thereof, wherein the compound is N-(5-(((2S,4R)-4-((2,6-dimethylpyridin-4-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)-4-fluorothiazol-2-yl)acetamide.

15. The compound according to claim 9 or a pharmaceutically acceptable salt thereof, wherein the compound is N-(4-fluoro-5-(((2S,4R)-4-((5-fluoropyridin-2-yl)oxy)-2-methylpyrrolidin-1-yl)methyl)thiazol-2-yl)acetamide.

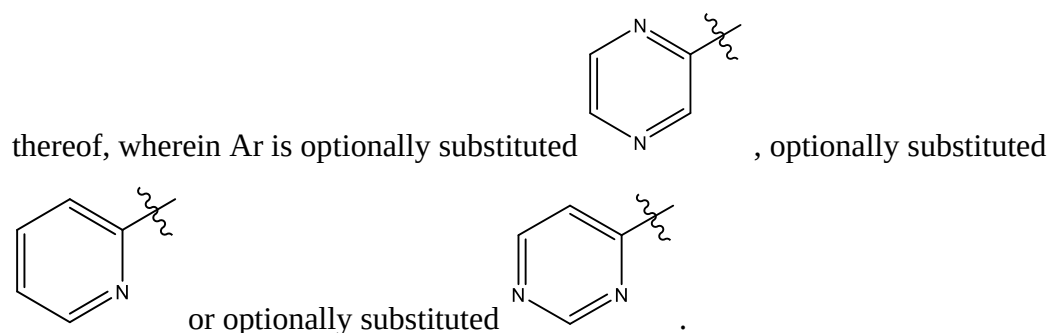
16. A pharmaceutical composition comprising the compound according to claim 1 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier or diluent.

17. The compound according to claim 1 or a pharmaceutically acceptable salt thereof, wherein Ar is optionally substituted , optionally substituted , optionally substituted , optionally substituted , optionally substituted , or optionally substituted .

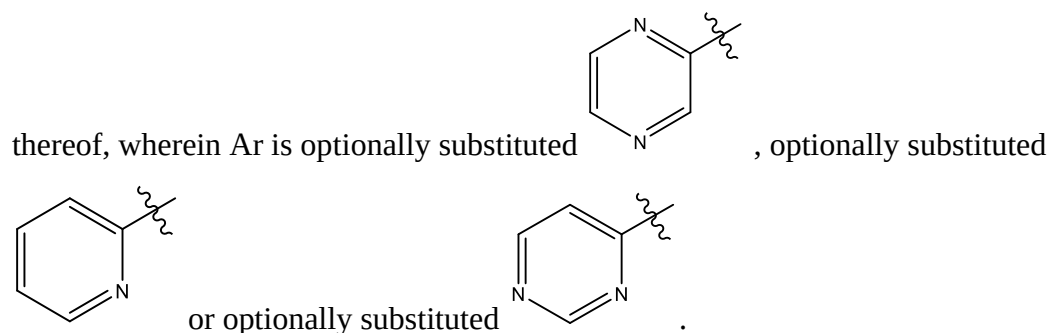
18. The compound according to claim 2 or a pharmaceutically acceptable salt



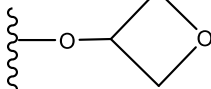
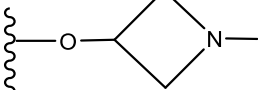
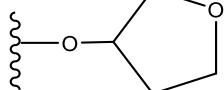
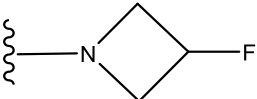
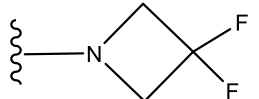
19. The compound according to claim 1 or a pharmaceutically acceptable salt

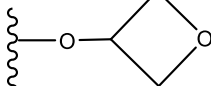
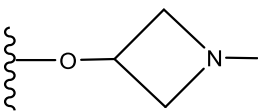
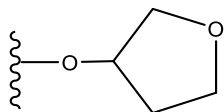
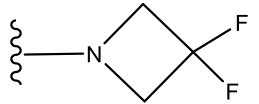


20. The compound according to claim 2 or a pharmaceutically acceptable salt



21. The compound according to claim 2 or a pharmaceutically acceptable salt thereof, wherein Ar is optionally substituted with one or more groups selected from optionally substituted C₁-C₄ alkyl, C₁-C₄ haloalkyl, optionally substituted C₃-C₆ cycloalkyl, optionally substituted C₃-C₆ heterocyclyl, halo, -CN, -OR^z, -NR^xR^y, -C(=O)NR^xR^y, -C(=S)NR^xR^y, -O(C=O)NR^xR^y, -O(C=S)NR^xR^y, -C(=O)R^x, -C(=O)OR^x, -NR^xC(=O)R^y, phenyl and optionally substituted monocyclic heteroaryl.

$\text{OCH(CH}_3)_2$, $-\text{O}-(3\text{-methoxycyclobutyl})$, $-\text{O-cyclobutyl}$, $-\text{O-cyclopentyl}$, ,
,  $-\text{COCH}_3$, $-\text{N(H)CH}_3$,
 $-\text{N(CH}_3)_2$, $-\text{N(H)cyclobutyl}$, $-\text{NHCH}_2\text{CH}_3$, $-\text{NHCH(CH}_3)_2$, $-\text{N(CH}_3)_2$,
 $-\text{N(CH}_3)(\text{CH}_2\text{CH}_2(\text{O})\text{CH}_3)$, $-\text{OH}$, azetidiny, , ,
oxetanyl, pyrrolidinyl, morpholinyl, 4-methylpiperazinyl, and piperazinyl.

$\text{OCH(CH}_3)_2$, $-\text{O}-(3\text{-methoxycyclobutyl})$, $-\text{O-cyclobutyl}$, $-\text{O-cyclopentyl}$, ,
,  $-\text{COCH}_3$, $-\text{N(H)CH}_3$,
 $-\text{N(CH}_3)_2$, $-\text{N(CH}_3)_2\text{C}_2\text{H}_5$, $-\text{N(H)cyclobutyl}$, $-\text{NHCH}_2\text{CH}_3$, $-\text{NHCH(CH}_3)_2$, $-\text{N(CH}_3)_2$,
 $-\text{N(CH}_3)(\text{CH}_2\text{CH}_2(\text{O})\text{CH}_3)$, $-\text{OH}$, azetidiny, , ,
oxetanyl, pyrrolidinyl, morpholinyl, 4-methylpiperazinyl, and piperazinyl.

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25. The compound according to claim 2 or a pharmaceutically acceptable salt thereof, wherein Ar is optionally substituted with one or more groups selected from $-\text{CH}_3$, $-\text{CF}_3$, $-\text{CHF}_2$, $-\text{F}$, $-\text{Cl}$, $-\text{CN}$, $-\text{OCH}_3$, $-\text{O}(\text{CH}_2)_2(\text{O})\text{CH}_3$, and $-\text{OCHF}_2$.

26. The compound according to claim 8 or a pharmaceutically acceptable salt thereof, wherein Ar is represented by the following formula:

