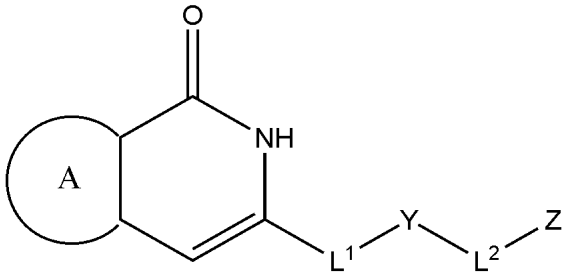
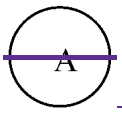
[CLAIMS]

1. A compound represented by Chemical Formula 1 below, a stereoisomer, or a pharmaceutically acceptable salt thereof:

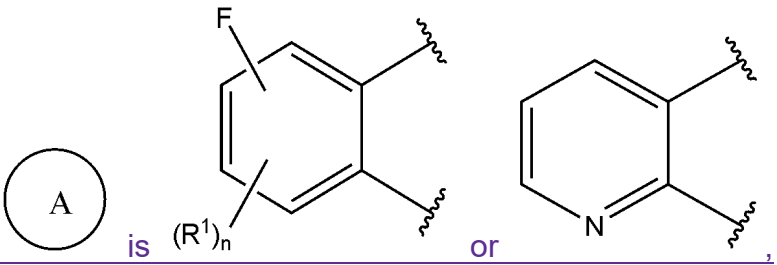
[Chemical Formula 1]



In Chemical Formula 1 above,



~~is phenyl, or 5- to 6-membered heteroaryl containing one or more heteroatom selected from the group consisting of N, O, and S, wherein the phenyl or heteroaryl may be unsubstituted or substituted with halogen or straight or branched C_{1-6} alkyl;~~



,

R^1 is methyl, and n is 0 or 1;

~~L^1 is C_{1-3} alkylene unsubstituted or substituted with oxo;~~

L^1 is $-(CH_2)_3-$ or $-(CH_2)_2C(=O)-$;

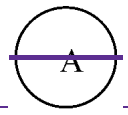
Y is a 4- to 8-membered monocyclic or polycyclic heterocycloalkylene or heterocycloalkenylene containing one or more heteroatom selected from the group consisting of N, O, and S;

L^2 is a single bond, ~~–NHCO–,~~ $–NR^2–$, –O–, or straight or branched $C_{1–10}$ alkylene substituted with one or more substituents selected from the group consisting of oxo and amino, R^2 is hydrogen or $C_{1–6}$ alkyl; and

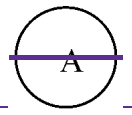
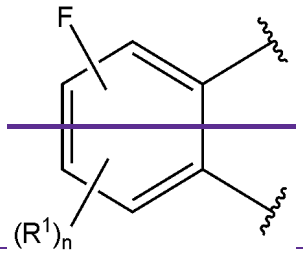
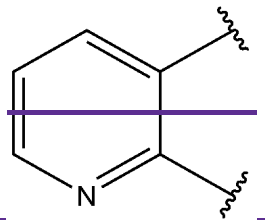
Z is ~~–H,~~ $C_{3–8}$ cycloalkyl, 5- to 8-membered heterocycloalkyl containing one or more heteroatom selected from the group consisting of N, O, and S, phenyl, or 5- to 8-membered heteroaryl containing one or more heteroatom selected from the group consisting of N, O, and S, wherein the cycloalkyl, heterocycloalkyl, phenyl, and heteroaryl may be each independently unsubstituted or substituted with one or more substituents selected from the group consisting of halogen, cyano, nitro, straight or branched $C_{1–6}$ alkyl unsubstituted or substituted with one or more halogen, straight or branched $C_{1–6}$ alkoxy unsubstituted or substituted with one or more halogen, $–CO_2H$,

C_{1-6} alkoxycarbonyl, and C_{1-6} alkylcarbonylamino.

~~2. The compound, a stereoisomer, or a pharmaceutically acceptable salt thereof of claim 1, wherein~~

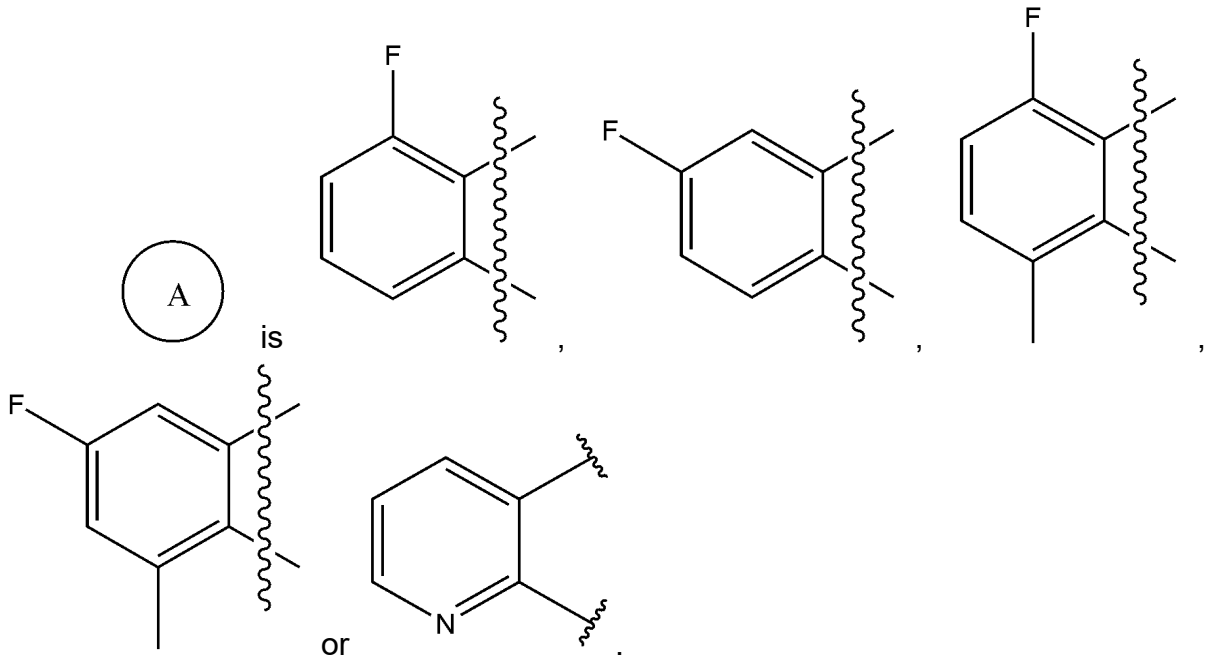
~~ is phenyl or pyridine, wherein the phenyl or pyridine is unsubstituted or substituted with one or more halogen, and straight or branched C_{1-6} alkyl.~~

~~3. The compound, a stereoisomer, or a pharmaceutically acceptable salt thereof of claim 1, wherein~~

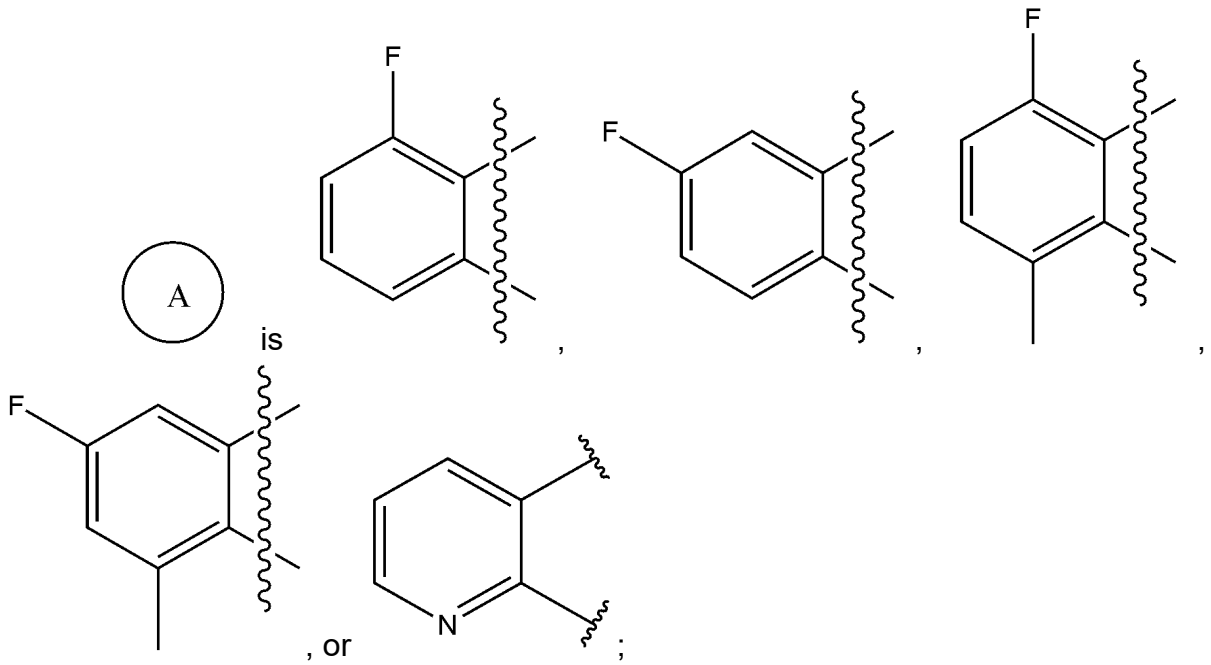
~~ is  or ;~~

~~R^1 is methyl, and n is 0 or 1.~~

42. The compound, a stereoisomer, or a pharmaceutically acceptable salt thereof of claim 1, wherein



53. The compound, a stereoisomer, or a pharmaceutically acceptable salt thereof of claim 1, wherein

A is 

, or ;

~~L^1 is C_3 alkylene unsubstituted or substituted with one or more oxo;~~

L^1 is $-(CH_2)_3-$ or $-(CH_2)_2C(=O)-$;

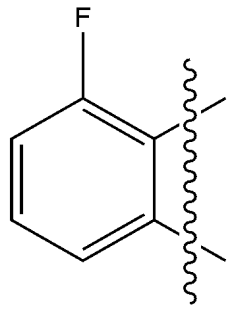
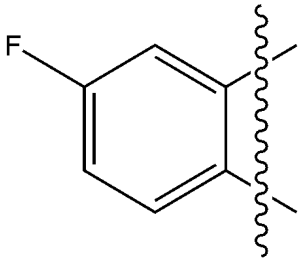
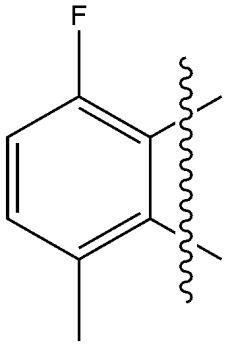
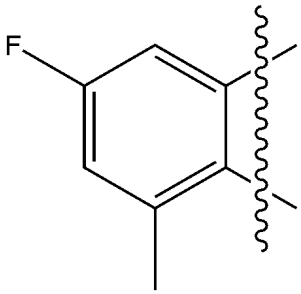
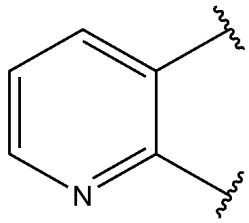
Y is a ~~4~~6- to 8-membered monocyclic or bicyclic heterocycloalkylene containing one or two nitrogen atoms, or 6-membered monocyclic heterocycloalkenylene containing one nitrogen;

L^2 is a single bond, ~~–NHCO–,~~ $–NR^2–$, –O–, or straight or branched $C_{1–6}$ alkylene substituted with one or more substituents selected from the group consisting of oxo and amino, R^2 is hydrogen or methyl; and

Z is ~~–H,~~ $C_{3–6}$ cycloalkyl, 5- to 8-membered heterocycloalkyl containing one or more heteroatom selected from the group consisting of N and O, phenyl, or 5- to 8-membered heteroaryl containing one or more heteroatom selected from the group consisting of N and S,

wherein the cycloalkyl, heterocycloalkyl, phenyl, and heteroaryl are each independently unsubstituted or substituted with one or more substituents selected from the group consisting of -F, -Cl, cyano, nitro, straight or branched $C_{1–3}$ alkyl unsubstituted or substituted with one or more fluorine, straight or branched $C_{1–3}$ alkoxy unsubstituted or substituted with one or more fluorine, $–CO_2H$, $C_{1–3}$ alkoxycarbonyl, and $C_{1–3}$ alkylcarbonylamino.

~~64~~. The compound, a stereoisomer, or a pharmaceutically acceptable salt thereof of claim 1, wherein

A is , , , , or ;

~~L^1 is C_3 alkylene unsubstituted or substituted with one or more oxo;~~

L^1 is $-(CH_2)_3-$ or $-(CH_2)_2C(=O)-$;

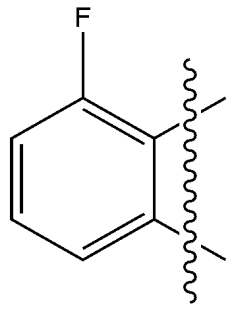
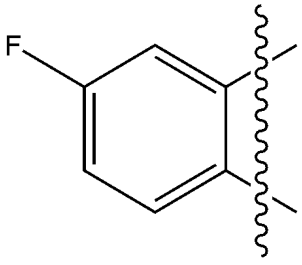
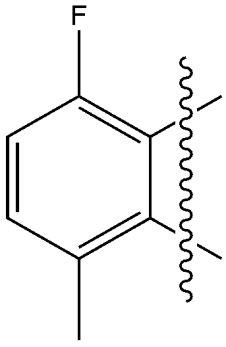
Y is a ~~4- to~~ 6-membered monocyclic or 8-membered bicyclic heterocycloalkylene containing one or two nitrogen atoms, or 6-membered monocyclic heterocycloalkenylene containing one nitrogen;

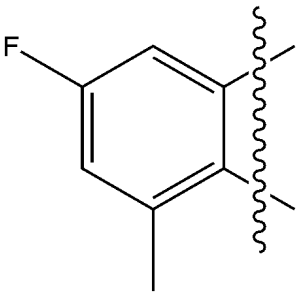
L^2 is a single bond, ~~–NHCO–,~~ $–NR^2–$, –O–, or straight or branched $C_{1–4}$ alkylene substituted with one or more substituents selected from the group consisting of oxo and amino, R^2 is hydrogen or methyl; and

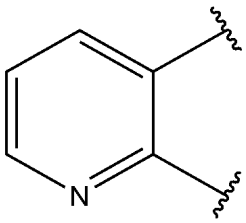
Z is ~~–H,~~ $C_{3–6}$ cycloalkyl, heterocycloalkyl, which is tetrahydrofuranyl or pyrrolidinyl, phenyl, or heteroaryl selected from pyridyl, pyrimidyl, and thiazole;

wherein the cycloalkyl, heterocycloalkyl, phenyl, and heteroaryl are each independently unsubstituted or substituted with one or more substituents selected from the group consisting of -F, -Cl, cyano, nitro, methyl unsubstituted or substituted with one or more fluorine, methoxy substituted with one or more fluorine, carboxy ($–CO_2H$), methoxycarbonyl, and methylcarbonylamino.

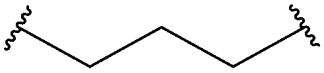
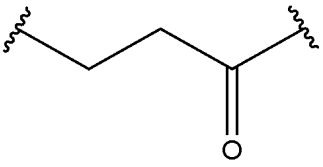
~~7~~5. The compound, a stereoisomer, or a pharmaceutically acceptable salt thereof of claim 1, wherein

A is , , ,

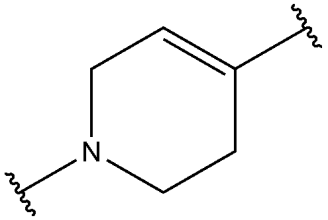


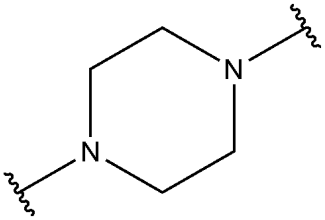
, or 

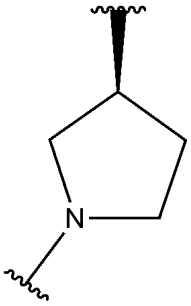
;

L^1 is  or 

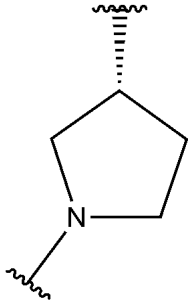
;

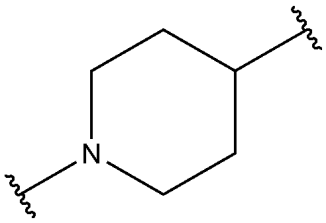
Y is 

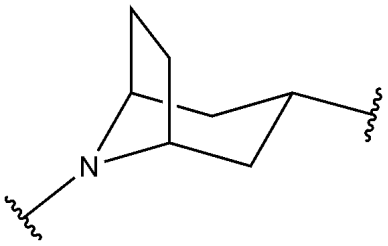
, 

, 

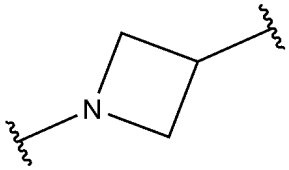
,

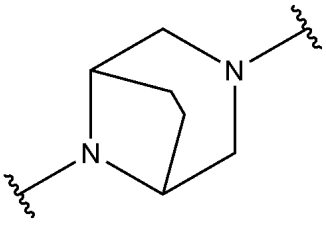


, 

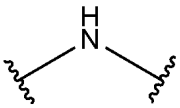
, 

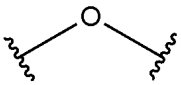
,

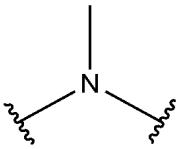


, or 

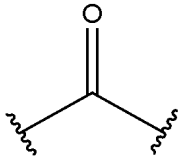
;

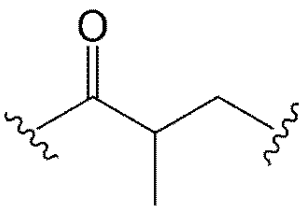
L^2 is a single bond, 

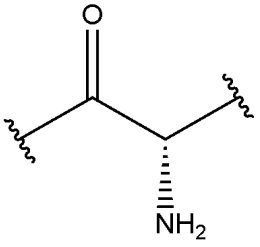
, 

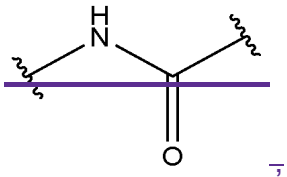
, 

,

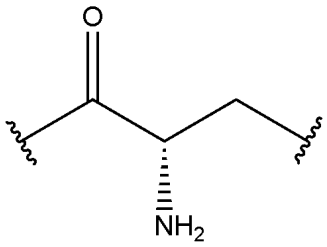


, 

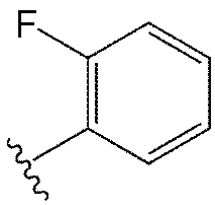
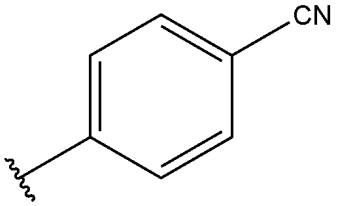
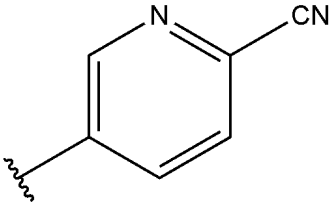
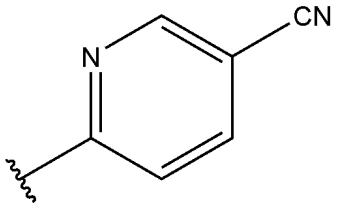
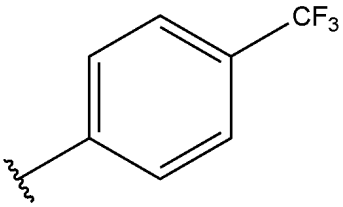
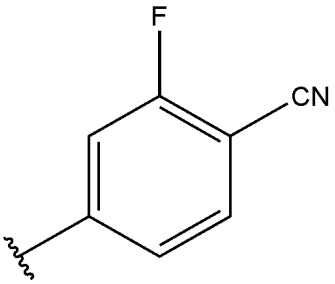
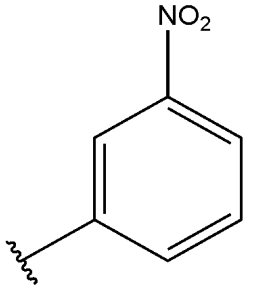
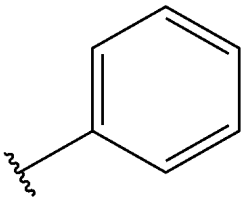
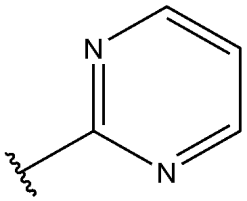
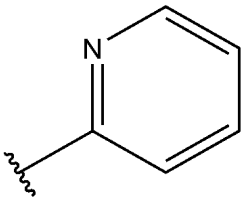
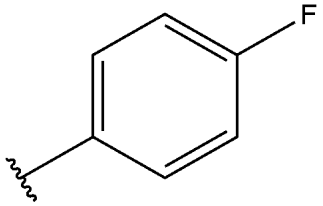
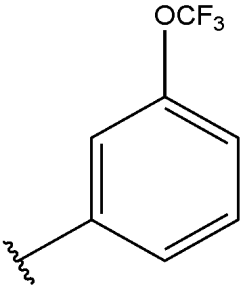
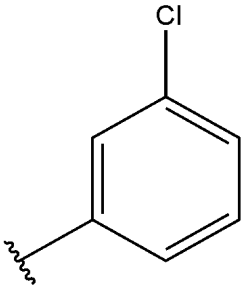
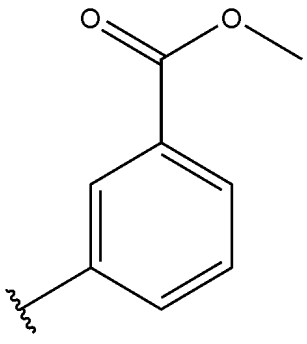
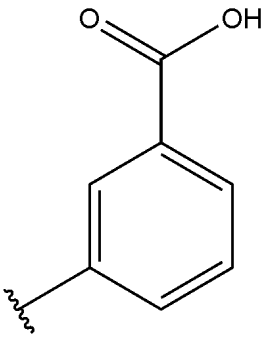
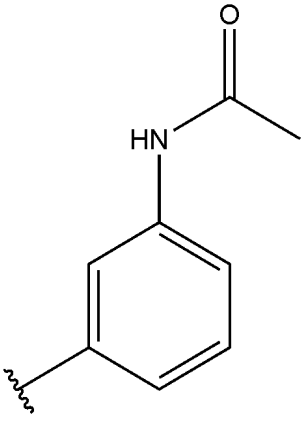
, 

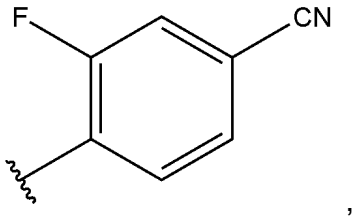
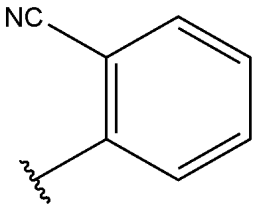
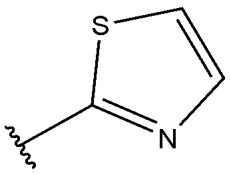
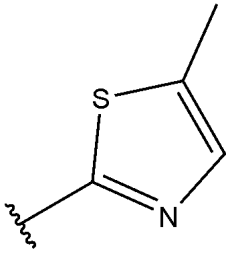
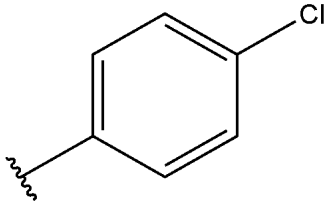
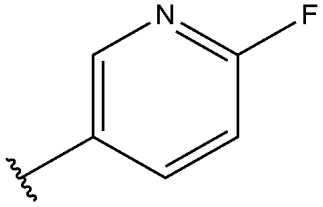
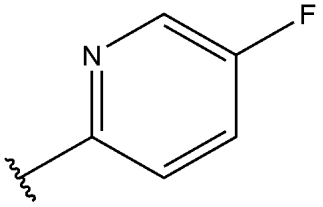
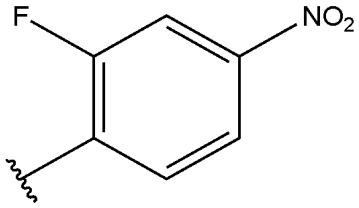
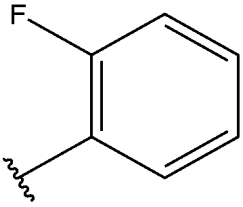
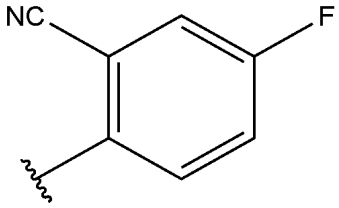
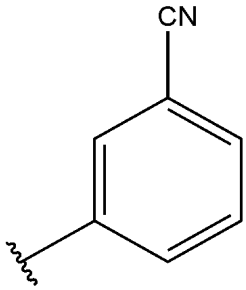
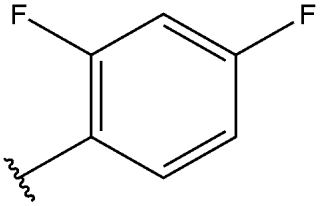
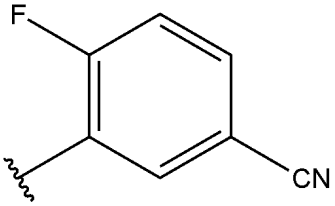
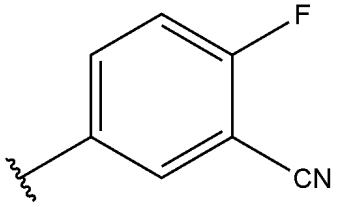
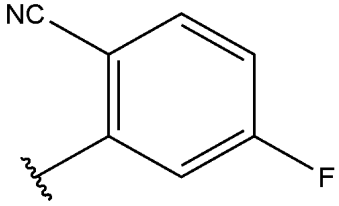
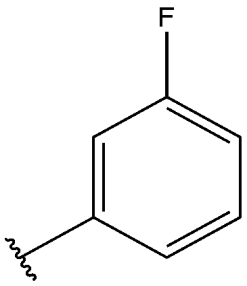
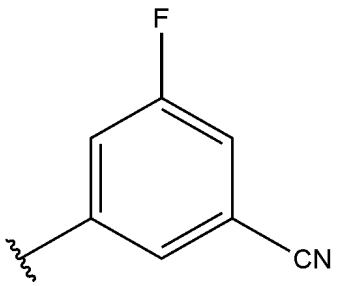
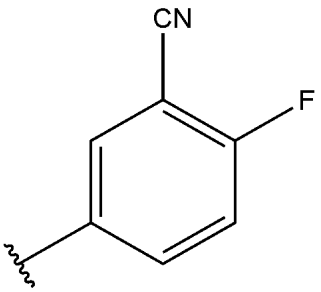
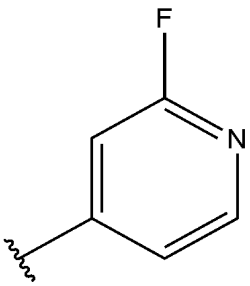
, 

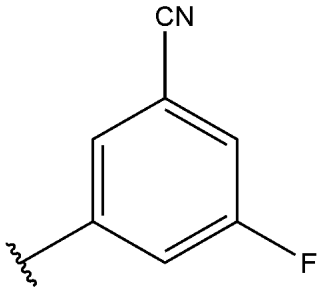
, or

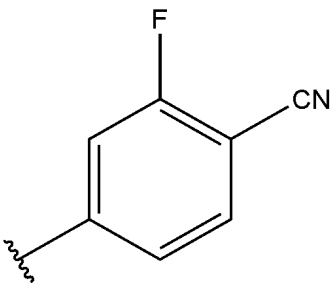


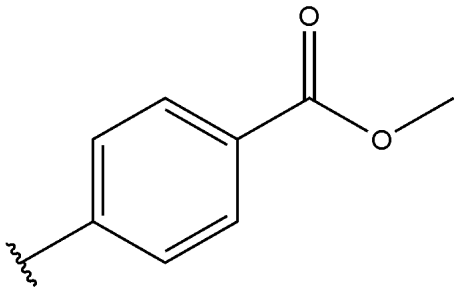
; and

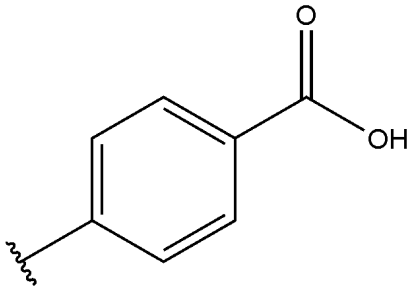
Z is ~~H,~~ , , , , , , , , , , , , , , , .

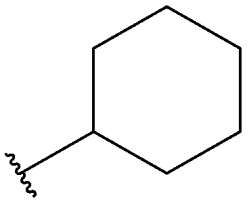
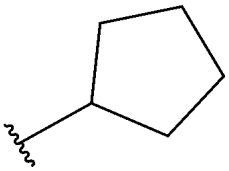
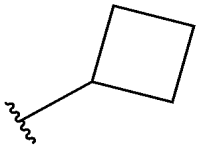
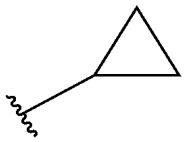
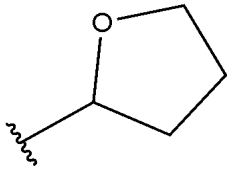

F
CN
,

NC
,

S
N
,

S
N
,

Cl
,

N
F
,

N
F
,

F
NO2
,

F
,

NC
F
,

CN
,

F
F
,

F
CN
,

F
CN
,

NC
F
,

F
,

F
CN
,

CN
F
,

F
N
,

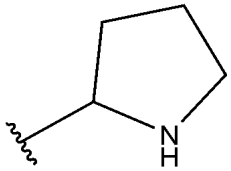


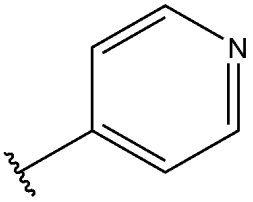
,


,


,


,

,

,

,

,


,


, or


.

~~8~~6. The compound, a stereoisomer, or a pharmaceutically acceptable salt thereof of claim 1, wherein the compound represented by Chemical Formula 1 above is any one selected from the following compound groups:

<1> 4-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzonitrile;

<2> 5-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)picolinonitrile;

<3> 6-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)nicotinonitrile;

<4> 8-fluoro-3-(3-(4-(4-(trifluoromethyl)phenyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;

<5> 2-fluoro-4-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzonitrile;

<6> 4-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzonitrile hydrochloride;

<7> 4-(8-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)benzonitrile;

<8> 4-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzonitrile;

<9> 7-fluoro-3-(3-(4-(4-(trifluoromethyl)phenyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;

<10> 5-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)picolinonitrile;

<11> 7-fluoro-3-(3-(4-(3-nitrophenyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<12> 7-fluoro-3-(3-(4-phenylpiperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<13> 7-fluoro-3-(3-(4-(pyrimidin-2-yl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<14> 7-fluoro-3-(3-(4-(pyridin-2-yl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<15> 7-fluoro-3-(3-(4-(4-fluorophenyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<16> 7-fluoro-3-(3-(4-(3-(trifluoromethoxy)phenyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<17> 3-(3-(4-(3-chlorophenyl)piperazin-1-yl)propyl)-7-fluoroisoquinolin-1(2*H*)-one;
<18> methyl 3-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzoate;
<19> 3-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzoic acid;
<20> *N*-(3-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)phenyl)acetamide;
<21> 5-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)picolinonitrile;
<22> 6-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)nicotinonitrile;
<23> 4-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzonitrile;
<24> 8-fluoro-5-methyl-3-(3-(4-(pyridin-2-yl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<25> 8-fluoro-5-methyl-3-(3-(4-(pyrimidin-2-yl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<26> 3-fluoro-4-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzonitrile;
<27> 8-fluoro-5-methyl-3-(3-(4-(4-(trifluoromethyl)phenyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<28> 2-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzonitrile;
<29> 8-fluoro-5-methyl-3-(3-(4-(thiazole-2-yl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<30> 8-fluoro-5-methyl-3-(3-(4-(5-methylthiazole-2-yl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<31> (*R*)-8-fluoro-3-(3-(3-(4-fluorophenyl)pyrrolidin-1-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<32> (*S*)-8-fluoro-3-(3-(3-(4-fluorophenyl)pyrrolidin-1-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<33> 3-(3-(4-(4-chlorophenyl)piperazin-1-yl)propyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one;
<34> 4-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzonitrile;
<35> 5-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)picolinonitrile;
<36> 6-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-

yl)nicotinonitrile;
<37> 3-fluoro-4-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzonitrile;
<38> 2-fluoro-4-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperazin-1-yl)benzonitrile;
<39> 7-fluoro-5-methyl-3-(3-(4-(4-(trifluoromethyl)phenyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<40> 7-fluoro-3-(3-(4-(4-fluorophenyl)piperazin-1-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<41> 4-(1-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<42> 8-fluoro-3-(3-(4-(4-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)propyl)isoquinolin-1(2*H*)-one;
<43> 8-fluoro-3-(3-(6-fluoro-3′,6′-dihydro-[3,4′-bipyridine]-1′(2′*H*)-yl)propyl)isoquinolin-1(2*H*)-one;
<44> 8-fluoro-3-(3-(5-fluoro-3′,6′-dihydro-[2,4′-bipyridine]-1′(2′*H*)-yl)propyl)isoquinolin-1(2*H*)-one;
<45> 8-fluoro-3-(3-(4-(4-(trifluoromethyl)phenyl)-3,6-dihydropyridin-1(2*H*)-yl)propyl)isoquinolin-1(2*H*)-one;
<46> 1′-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-1′,2′,3′,6′-tetrahydro-[2,4′-bipyridine]-5-carbonitrile;
<47> 4-(1-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<48> 7-fluoro-3-(3-(4-(4-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)propyl)isoquinolin-1(2*H*)-one;
<49> 3-(3-(4-(4-chlorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)propyl)-7-fluoroisoquinolin-1(2*H*)-one;
<50> 1′-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-1′,2′,3′,6′-tetrahydro-[2,4′-bipyridine]-5-carbonitrile;
<51> 7-fluoro-3-(3-(4-(2-fluoro-4-nitrophenyl)-3,6-dihydropyridin-1(2*H*)-yl)propyl)isoquinolin-1(2*H*)-one;
<52> 2-fluoro-4-(1-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<53> 8-fluoro-3-(3-(4-(4-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<54> 4-(1-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<55> 2-fluoro-4-(1-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<56> 8-fluoro-3-(3-(4-(2-fluoro-4-nitrophenyl)-3,6-dihydropyridin-1(2*H*)-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<57> 1′-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-1′,2′,3′,6′-tetrahydro-[2,4′-bipyridine]-5-carbonitrile;
<58> 4-(1-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;

<59> 7-fluoro-3-(3-(4-(4-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<60> 1′-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-1′,2′,3′,6′-tetrahydro-[2,4′-bipyridine]-5-carbonitrile;
<61> 1′-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-1′,2′,3′,6′-tetrahydro-[3,4′-bipyridine]-6-carbonitrile;
<62> 7-fluoro-3-(3-(5-fluoro-3′,6′-dihydro-[2,4′-bipyridine]-1′(2′*H*)-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<63> 7-fluoro-3-(3-(6-fluoro-3′,6′-dihydro-[3,4′-bipyridine]-1′(2′*H*)-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<64> 7-fluoro-5-methyl-3-(3-(4-(4-(trifluoromethyl)phenyl)-3,6-dihydropyridin-1(2*H*)-yl)propyl)isoquinolin-1(2*H*)-one;
<65> 8-fluoro-3-(3-(4-(3-fluorobenzoyl)piperazin-1-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<66> 3-(3-(4-benzoylpiperazin-1-yl)propyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one;
<67> 8-fluoro-3-(3-(4-(4-fluorobenzoyl)piperazin-1-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<68> 4-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<69> 4-(1-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<70> 5-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)picolinonitrile;
<71> 6-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)nicotinonitrile;
<72> 2-fluoro-4-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<73> 3-fluoro-4-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<74> 2-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<75> 8-fluoro-3-(3-(4-(2-fluorophenyl)piperazin-1-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<76> 5-fluoro-2-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<77> 3-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<78> 3-(3-(4-(2,4-difluorophenyl)piperazin-1-yl)-3-oxopropyl)-8-fluoroisoquinolin-1(2*H*)-one;
<79> 4-fluoro-3-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<80> 2-fluoro-5-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<81> 4-fluoro-2-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;

<82> 8-fluoro-3-(3-(4-(2-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<83> 8-fluoro-3-(3-(4-(3-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<84> 3-fluoro-5-(1-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<85> 8-fluoro-3-(3-(6-fluoro-3′,6′-dihydro-[3,4′-bipyridine]-1′(2′*H*)-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<86> 8-fluoro-3-(3-(5-fluoro-3′,6′-dihydro-[2,4′-bipyridine]-1′(2′*H*)-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<87> 2-fluoro-5-(1-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<88> 1′-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1′,2′,3′,6′-tetrahydro-[2,4′-bipyridine]-5-carbonitrile;
<89> 8-fluoro-3-(3-(4-(3-fluorophenyl)piperazin-1-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<90> 2-fluoro-5-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<91> 4-(4-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile hydrochloride;
<92> 8-fluoro-3-(3-(2′-fluoro-3,6-dihydro-[4,4′-bipyridine]-1(2*H*)-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<93> 1′-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1′,2′,3′,6′-tetrahydro-[3,4′-bipyridine]-6-carbonitrile;
<94> 4-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<95> 4-(1-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<96> 1′-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1′,2′,3′,6′-tetrahydro-[2,4′-bipyridine]-5-carbonitrile;
<97> 5-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)picolinonitrile;
<98> 2-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<99> 6-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)nicotinonitrile;
<100> 3-fluoro-4-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<101> 2-fluoro-4-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<102> 7-fluoro-3-(3-(6-fluoro-3′,6′-dihydro-[3,4′-bipyridine]-1′(2′*H*)-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<103> 7-fluoro-3-(3-(5-fluoro-3′,6′-dihydro-[2,4′-bipyridine]-1′(2′*H*)-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<104> 7-fluoro-3-(3-(4-(4-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)-3-

oxopropyl)isoquinolin-1(2*H*)-one;
<105> 3-(3-(4-(4-chlorophenyl)piperazin-1-yl)-3-oxopropyl)-7-fluoroisoquinolin-1(2*H*)-one;
<106> 3-(3-(4-(2,4-difluorophenyl)piperazin-1-yl)-3-oxopropyl)-7-fluoroisoquinolin-1(2*H*)-one;
<107> 4-fluoro-3-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<108> 4-fluoro-2-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<109> 2-fluoro-5-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<110> 5-fluoro-2-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<111> 4-fluoro-3-(1-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<112> 5-fluoro-2-(1-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<113> 3-(3-(4-(2,4-difluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)-3-oxopropyl)-7-fluoroisoquinolin-1(2*H*)-one;
<114> 3-fluoro-5-(1-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<115> 7-fluoro-3-(3-(4-(3-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<116> (*R*)-7-fluoro-3-(3-(3-(4-fluorophenyl)pyrrolidin-1-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<117> (*S*)-7-fluoro-3-(3-(3-(4-fluorophenyl)pyrrolidin-1-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<118> 7-fluoro-3-(3-oxo-3-(4-(4-(trifluoromethyl)phenyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<119> 3-fluoro-5-(4-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<120> 7-fluoro-3-(3-(4-(3-fluorophenyl)piperazin-1-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<121> 7-fluoro-3-(3-(2′-fluoro-3,6-dihydro-[4,4′-bipyridine]-1(2*H*)-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;
<122> 4-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<123> 6-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)nicotinonitrile;
<124> 5-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)picolinonitrile;
<125> 8-fluoro-3-(3-(4-(4-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<126> 2-fluoro-4-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;

<127> 2-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<128> 3-fluoro-4-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<129> 8-fluoro-3-(3-(6-fluoro-3′,6′-dihydro-[3,4′-bipyridine]-1′(2′*H*)-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<130> 8-fluoro-3-(3-(5-fluoro-3′,6′-dihydro-[2,4′-bipyridine]-1′(2′*H*)-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<131> 3-(3-(4-(4-chlorophenyl)piperazin-1-yl)-3-oxopropyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one;
<132> 3-(3-(4-(2,4-difluorophenyl)piperazin-1-yl)-3-oxopropyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one;
<133> 4-fluoro-3-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<134> 4-fluoro-2-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<135> 2-fluoro-5-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<136> 5-fluoro-2-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<137> 4-fluoro-3-(1-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<138> 8-fluoro-3-(3-(4-(2-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<139> 2-fluoro-5-(1-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<140> 1′-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1′,2′,3′,6′-tetrahydro-[2,4′-bipyridine]-5-carbonitrile;
<141> 2-fluoro-4-(1-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<142> 8-fluoro-3-(3-(4-(3-fluorophenyl)piperazin-1-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<143> 2-fluoro-5-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<144> 8-fluoro-3-(3-(2′-fluoro-3,6-dihydro-[4,4′-bipyridine]-1(2*H*)-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<145> 1′-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1′,2′,3′,6′-tetrahydro-[3,4′-bipyridine]-6-carbonitrile;
<146> methyl 4-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzoate;
<147> 4-(4-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzoic acid;
<148> 4-(8-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)benzonitrile;
<149> 4-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-

yl)propanoyl)piperazin-1-yl)benzonitrile;
<150> 7-fluoro-3-(3-(4-(4-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<151> 5-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)picolinonitrile;
<152> 6-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)nicotinonitrile;
<153> 2-fluoro-4-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<154> 3-fluoro-4-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<155> 3-(3-(4-(4-chlorophenyl)piperazin-1-yl)-3-oxopropyl)-7-fluoro-5-methylisoquinolin-1(2*H*)-one;
<156> 4-fluoro-3-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<157> 4-fluoro-2-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<158> 2-fluoro-5-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<159> 5-fluoro-2-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<160> 4-fluoro-3-(1-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<161> 5-fluoro-2-(1-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<162> 3-(3-(4-(2,4-difluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)-3-oxopropyl)-7-fluoro-5-methylisoquinolin-1(2*H*)-one;
<163> 3-fluoro-5-(1-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<164> 7-fluoro-3-(3-(4-(3-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<165> 1′-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-1′,2′,3′,6′-tetrahydro-[2,4′-bipyridine]-5-carbonitrile;
<166> 3-fluoro-5-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)benzonitrile;
<167> 7-fluoro-3-(3-(4-(3-fluorophenyl)piperazin-1-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<168> 7-fluoro-3-(3-(2′-fluoro-3,6-dihydro-[4,4′-bipyridine]-1(2*H*)-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<169> 5-(4-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperazin-1-yl)picolinonitrile dihydrochloride;
<170> 3-(3-(4-(cyclohexanecarbonyl)piperazin-1-yl)-3-oxopropyl)-8-fluoroisoquinolin-1(2*H*)-one;
<171> 3-(3-(4-(cyclohexanecarbonyl)piperazin-1-yl)-3-oxopropyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one;

<172> 3-(3-(4-(cyclohexanecarbonyl)piperazin-1-yl)-3-oxopropyl)-7-fluoroisoquinolin-1(2*H*)-one;
<173> 3-(3-(4-(cyclohexanecarbonyl)piperazin-1-yl)-3-oxopropyl)-7-fluoro-5-methylisoquinolin-1(2*H*)-one;
<174> 3-(3-(4-(cyclopentanecarbonyl)piperazin-1-yl)-3-oxopropyl)-8-fluoroisoquinolin-1(2*H*)-one;
<175> 3-(3-(4-(cyclopentanecarbonyl)piperazin-1-yl)-3-oxopropyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one;
<176> 3-(3-(4-(cyclopentanecarbonyl)piperazin-1-yl)-3-oxopropyl)-7-fluoroisoquinolin-1(2*H*)-one;
<177> 3-(3-(4-(cyclopentanecarbonyl)piperazin-1-yl)-3-oxopropyl)-7-fluoro-5-methylisoquinolin-1(2*H*)-one;
<178> 3-(3-(4-(cyclobutanecarbonyl)piperazin-1-yl)-3-oxopropyl)-8-fluoroisoquinolin-1(2*H*)-one;
<179> 3-(3-(4-(cyclobutanecarbonyl)piperazin-1-yl)-3-oxopropyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one;
<180> 3-(3-(4-(cyclobutanecarbonyl)piperazin-1-yl)-3-oxopropyl)-7-fluoroisoquinolin-1(2*H*)-one;
<181> 3-(3-(4-(cyclobutanecarbonyl)piperazin-1-yl)-3-oxopropyl)-7-fluoro-5-methylisoquinolin-1(2*H*)-one;
<182> 3-(3-(4-(cyclopropanecarbonyl)piperazin-1-yl)-3-oxopropyl)-8-fluoroisoquinolin-1(2*H*)-one;
<183> 3-(3-(4-(cyclopropanecarbonyl)piperazin-1-yl)-3-oxopropyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one;
<184> 3-(3-(4-(cyclopropanecarbonyl)piperazin-1-yl)-3-oxopropyl)-7-fluoroisoquinolin-1(2*H*)-one;
<185> 3-(3-(4-(cyclopropanecarbonyl)piperazin-1-yl)-3-oxopropyl)-7-fluoro-5-methylisoquinolin-1(2*H*)-one;
~~<186> 8-fluoro-3-(3-(4-isobutyrylpiperazin-1-yl)-3-oxopropyl)isoquinolin-1(2H)-one;~~
~~<187> 8-fluoro-3-(3-(4-isobutyrylpiperazin-1-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;~~
~~<188> 7-fluoro-3-(3-(4-isobutyrylpiperazin-1-yl)-3-oxopropyl)isoquinolin-1(2*H*)-one;~~
~~<189> 7-fluoro-3-(3-(4-isobutyrylpiperazin-1-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;~~
<190> 8-fluoro-3-(3-oxo-3-(4-(tetrahydrofuran-2-carbonyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<191> 8-fluoro-5-methyl-3-(3-oxo-3-(4-(tetrahydrofuran-2-carbonyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<192> 7-fluoro-3-(3-oxo-3-(4-(tetrahydrofuran-2-carbonyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<193> 7-fluoro-5-methyl-3-(3-oxo-3-(4-(tetrahydrofuran-2-carbonyl)piperazin-1-yl)propyl)isoquinolin-1(2*H*)-one;
~~<194> 3-(3-(4-(L-alanyl)piperazin-1-yl)-3-oxopropyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one hydrochloride;~~
<195> 3-(3-(4-(L-phenylalanyl)piperazin-1-yl)-3-oxopropyl)-8-fluoro-5-

methylisoquinolin-1(2*H*)-one hydrochloride;
<196> 8-fluoro-5-methyl-3-(3-oxo-3-(4-propylpiperazin-1-yl)propyl)isoquinolin-1(2*H*)-one hydrochloride;
<197> 4-(8-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl-3,8-diazabicyclo[3.2.1]octan-3-yl)benzonitrile;
<198> 8-fluoro-3-(3-(3-(4-fluorophenyl)-3,8-diazabicyclo[3.2.1]octan-8-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<199> 6-(8-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl-3,8-diazabicyclo[3.2.1]octan-3-yl)nicotinonitrile;
<200> 5-(8-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)picolinonitrile;
<201> 3-(3-(3-(4-chlorophenyl)-3,8-diazabicyclo[3.2.1]octan-8-yl)propyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one;
<202> 8-fluoro-3-(3-(3-(6-fluoropyridin-3-yl)-3,8-diazabicyclo[3.2.1]octan-8-yl)propyl)-5-methylisoquinolin-1(2*H*)-one;
<203> 6-(8-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)3,8-diazabicyclo[3.2.1]octan-3-yl)nicotinonitrile;
<204> 6-(8-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)nicotinonitrile;
<205> 6-(8-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)nicotinonitrile;
<206> 6-(8-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)nicotinonitrile;
<207> 6-(8-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)nicotinonitrile;
<208> 8-fluoro-3-(3-(3-(4-fluorophenyl)-3,8-diazabicyclo[3.2.1]octan-8-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<209> 4-(8-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)benzonitrile;
<210> 3-(3-(3-(4-chlorophenyl)-3,8-diazabicyclo[3.2.1]octan-8-yl)-3-oxopropyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one;
<211> 8-fluoro-3-(3-(3-(6-fluoropyridin-3-yl)-3,8-diazabicyclo[3.2.1]octan-8-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<212> 8-fluoro-3-(3-(3-(5-fluoropyridin-2-yl)-3,8-diazabicyclo[3.2.1]octan-8-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<213> 4-(8-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)benzonitrile;
<214> 6-(8-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)nicotinonitrile;
<215> 7-fluoro-3-(3-(3-(4-fluorophenyl)-3,8-diazabicyclo[3.2.1]octan-8-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<216> 3-(3-(3-(4-chlorophenyl)-3,8-diazabicyclo[3.2.1]octan-8-yl)-3-oxopropyl)-7-fluoro-5-methylisoquinolin-1(2*H*)-one;
<217> 7-fluoro-3-(3-(3-(6-fluoropyridin-3-yl)-3,8-diazabicyclo[3.2.1]octan-8-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;

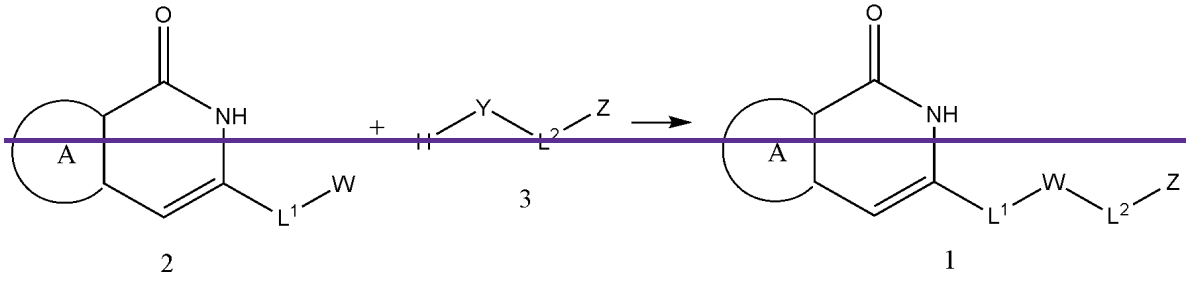
<218> 6-(8-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)nicotinonitrile;
<219> 7-fluoro-3-(3-(3-(5-fluoropyridin-2-yl)-3,8-diazabicyclo[3.2.1]octan-8-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;
<220> 6-(8-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)3,8-diazabicyclo[3.2.1]octan-3-yl)nicotinonitrile;
<221> 4-(4-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)piperazin-1-yl)benzonitrile;
<222> 6-(4-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)piperazin-1-yl)nicotinonitrile;
<223> 7-(3-(4-(4-fluorophenyl)piperazin-1-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;
<224> 7-(3-(4-(3-fluorophenyl)piperazin-1-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;
<225> 4-(8-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)benzonitrile;
<226> 5-(4-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)piperazin-1-yl)picolinonitrile;
<227> 7-(3-(4-(2-fluoropyridin-4-yl)piperazin-1-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;
<228> 7-(3-(3-(4-chlorophenyl)-3,8-diazabicyclo[3.2.1]octan-8-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;
<229> 5-(8-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)picolinonitrile;
<230> 7-(3-(3-(4-fluorophenyl)-3,8-diazabicyclo[3.2.1]octan-8-yl)propyl-1,6-naphthyridin-5(6*H*)-one;
<231> 7-(3-(3-(5-fluoropyridin-2-yl)-3,8-diazabicyclo[3.2.1]octan-8-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;
<232> 6-(8-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)nicotinonitrile;
<233> 7-(3-(3-(6-fluoropyridin-3-yl)-3,8-diazabicyclo[3.2.1]octan-8-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;
<234> 1′-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)-1′,2′,3′,6′-tetrahydro-[3,4′-bipyridine]-6-carbonitrile;
<235> 1′-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)-1′,2′,3′,6′-tetrahydro-[2,4′-bipyridine]-5-carbonitrile;
<236> 7-(3-(4-(4-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;
<237> 7-(3-(2′-fluoro-3,6-dihydro-[4,4′-bipyridine]-1(2*H*)-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;
<238> 7-(3-(4-(3-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;
<239> 4-(1-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<240> 7-(3-(3,6-dihydro-[4,4′-bipyridine]-1(2*H*)-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;
<241> 4-(4-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propanoyl)piperazin-1-yl)benzonitrile;
<242> 6-(4-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propanoyl)piperazin-1-

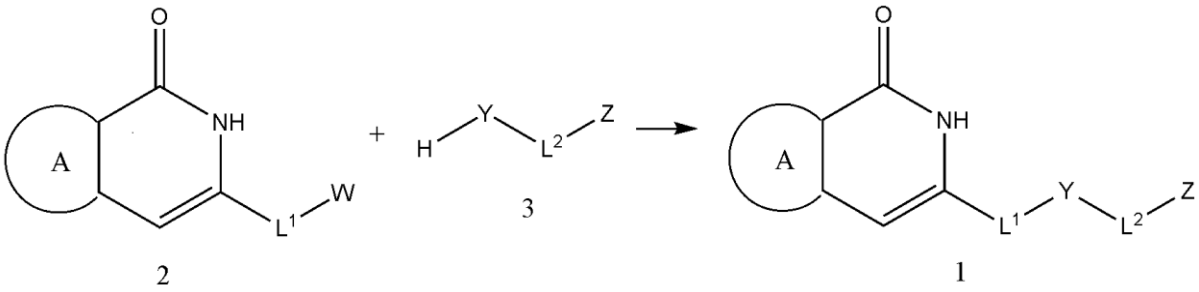
yl)nicotinonitrile;
<243> 5-(4-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propanoyl)piperazin-1-yl)picolinonitrile;
<244> 7-(3-(4-(4-fluorophenyl)-3,6-dihydropyridin-1(2*H*)-yl)-3-oxopropyl)-1,6-naphthyridin-5(6*H*)-one;
<245> 4-(1-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propanoyl)-1,2,3,6-tetrahydropyridin-4-yl)benzonitrile;
<246> 4-(8-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propanoyl)-3,8-diazabicyclo[3.2.1]octan-3-yl)benzonitrile;
<247> 4-((1-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperidin-4-yl)amino)benzonitrile;
<248> 5-((1-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperidin-4-yl)amino)picolinonitrile;
<249> 4-((1-(3-(7-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperidin-4-yl)amino)benzonitrile;
<250> 4-((1-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)piperidin-4-yl)amino)benzonitrile;
<251> 5-((1-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)piperidin-4-yl)amino)picolinonitrile;
<252> methyl 4-((1-(3-(5-oxo-5,6-dihydro-1,6-naphthyridin-7-yl)propyl)piperidin-4-yl)amino)benzoate;
<253> 7-(3-(4-((4-(trifluoromethyl)phenyl)amino)piperidin-1-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;
<254> 4-((1-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)piperidin-4-yl)oxy)benzonitrile;
<255> 4-((1-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperidin-4-yl)oxy)benzonitrile;
<256> 4-((1-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperidin-4-yl)amino)benzonitrile;
<257> 4-((1-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperidin-4-yl)(methyl)amino)benzonitrile;
<258> 5-((1-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperidin-4-yl)amino)picolinonitrile;
<259> 4-((1-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperidin-4-yl)amino)benzonitrile;
<260> 4-((1-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperidin-4-yl)amino)benzonitrile;
<261> 4-((1-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperidin-4-yl)oxy)benzonitrile;
<262> 4-((1-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperidin-4-yl)oxy)benzonitrile;
<263> 3-(3-(4-((4-chlorophenyl)amino)piperidin-1-yl)-3-oxopropyl)-7-fluoro-5-methylisoquinolin-1(2*H*)-one;
<264> 3-(3-(4-((4-chlorophenyl)amino)piperidin-1-yl)-3-oxopropyl)-8-fluoro-5-methylisoquinolin-1(2*H*)-one;

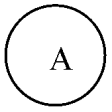
<265> 7-fluoro-5-methyl-3-(3-oxo-3-(4-((4-(trifluoromethyl)phenyl)amino)piperidin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<266> 8-fluoro-5-methyl-3-(3-oxo-3-(4-((4-(trifluoromethyl)phenyl)amino)piperidin-1-yl)propyl)isoquinolin-1(2*H*)-one;
<267> methyl 4-((1-(3-(7-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperidin-4-yl)amino)benzoate;
<268> methyl 4-((1-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperidin-4-yl)amino)benzoate;
~~<269> 8-fluoro-3-(3-(3-hydroxy-8-azabicyclo[3.2.1]octan-8-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;~~
~~<270> 8-fluoro-3-(3-(4-hydroxypiperidin-1-yl)-3-oxopropyl)-5-methylisoquinolin-1(2*H*)-one;~~
~~<271> 7-(3-(3-hydroxy-8-azabicyclo[3.2.1]octan-8-yl)propyl)-1,6-naphthyridin-5(6*H*)-one;~~
~~<272> 8-fluoro-3-(3-(3-hydroxy-8-azabicyclo[3.2.1]octan-8-yl)propyl)isoquinolin-1(2*H*)-one;~~
<273> 4-((8-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propyl)-8-azabicyclo[3.2.1]octan-3-yl)oxy)benzonitrile; and
<274> 4-((8-(3-(8-fluoro-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)-8-azabicyclo[3.2.1]octan-3-yl)oxy)benzonitrile
;
~~<275> *N*-(1-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)azetidin-3-yl)cyclopropanecarboxamide; and~~
~~<276> *N*-(1-(3-(8-fluoro-5-methyl-1-oxo-1,2-dihydroisoquinolin-3-yl)propanoyl)piperidin-4-yl)cyclopropanecarboxamide~~.

~~97~~. A method for preparing a compound represented by Chemical Formula 1 of claim 1, comprising: reacting a compound represented by Chemical Formula 2 with a compound represented by Chemical Formula 3 to prepare a compound represented by Chemical Formula 1, as shown in Reaction Scheme 1 below:

[Reaction Scheme 1]





in the Reaction Scheme 1 above, 

, L^1, Y, L^2, and Z are as defined in claim 1, and W is a leaving group.

~~108~~. ~~A pharmaceutical composition for preventing or treating a poly(ADP-ribose) polymerase-1 (PARP-1)-related disease, comprising a compound represented by Chemical Formula 1 of claim 1, an isomer, or a pharmaceutically acceptable salt thereof as an active ingredient.~~A compound represented by Chemical Formula 1 of claim 1, a stereoisomer, or a pharmaceutically acceptable salt thereof for use in preventing or treating a poly(ADP-ribose) polymerase-1 (PARP-1)-related disease.

~~119~~. The ~~pharmaceutical composition~~compound, stereoisomer, or pharmaceutically acceptable salt thereof for use of claim ~~108~~, wherein the compound represented by Chemical Formula 1 above, a stereoisomer~~an isomer~~, or a pharmaceutically acceptable salt thereof is characterized in preventing or treating a poly(ADP-ribose) polymerase-1 (PARP-1)-related disease from cytoprotective effects.

~~12~~10. The ~~pharmaceutical composition~~compound, stereoisomer, or pharmaceutically acceptable salt thereof for use of claim ~~108~~, wherein the poly(ADP-ribose) polymerase-1 (PARP-1)-related disease is a disease caused by cell damage or apoptosis induced by hyperactivity of poly(ADP-ribose) polymerase-1 (PARP-1).

~~13~~11. The ~~pharmaceutical composition~~compound, stereoisomer, or pharmaceutically acceptable salt thereof for use of claim ~~108~~, wherein the poly(ADP-ribose) polymerase-1 (PARP-1)-related disease is one or more selected from the group consisting of neurogenic disorder, neurodegenerative disease, vascular stroke, cardiovascular disorder, macular degeneration, AIDS, arthritis, atherosclerosis, cancer, diabetes mellitus, brain tumor, inflammatory bowel disorder, muscular dystrophy, osteoarthritis, osteoporosis, chronic pain, acute pain, neuropathic pain, nerve attack, peripheral nerve damage, kidney disease, retinal ischemia, and septic shock~~, and skin aging~~.

~~14~~12. ~~A pharmaceutical composition for preventing or treating an ophthalmic disease or disorder, comprising a compound represented by Chemical Formula 1 of claim 1, an isomer, or a pharmaceutically acceptable salt thereof as an active ingredient.~~A compound represented by Chemical Formula 1 of claim 1, a stereoisomer, or a

pharmaceutically acceptable salt thereof for use in preventing or treating an ophthalmic disease or disorder.

~~15~~13. The ~~pharmaceutical composition~~compound, stereoisomer, or pharmaceutically acceptable salt thereof for use of claim ~~14~~12, wherein the ophthalmic disease or disorder is one or more selected from the group consisting of age-related macular degeneration, Stargardt's macular dystrophy, retinal detachment, hemorrhagic retinopathy, retinitis pigmentosa, cone-rod dystrophy, Sorsby's fundus dystrophy, optic neuropathy, inflammatory retinal disease, diabetic retinopathy, diabetic maculopathy, retinal vascular occlusion, retinopathy of prematurity, or retinal damage associated with ischemia reperfusion, proliferative vitreoretinopathy, retinal dystrophy, congenital optic neuropathy, uveitis, retinal damage, retinal disorder associated with Alzheimer's disease, retinal disorder associated with multiple sclerosis, retinal disorder associated with Parkinson's disease, retinal disorder associated with viral infections, retinal disorder associated with light overexposure, myopia, or AIDS-related retinal disorder.

~~16~~14. A health functional food for preventing or improving an ophthalmic disease or disorder, comprising a compound represented by Chemical Formula 1 of claim 1, a stereoisomer~~an isomer~~, or a pharmaceutically acceptable salt thereof as an active ingredient.

~~17~~15. The health functional food of claim ~~16~~14, wherein the ophthalmic disease or disorder is one or more selected from the group consisting of age-related macular degeneration, Stargardt's macular dystrophy, retinal detachment, hemorrhagic retinopathy, retinitis pigmentosa, cone-rod dystrophy, Sorsby's fundus dystrophy, optic neuropathy, inflammatory retinal disease, diabetic retinopathy, diabetic maculopathy, retinal vascular occlusion, retinopathy of prematurity, or retinal damage associated with ischemia reperfusion, proliferative vitreoretinopathy, retinal dystrophy, congenital optic neuropathy, uveitis, retinal damage, retinal disorder associated with Alzheimer's disease, retinal disorder associated with multiple sclerosis, retinal disorder associated with Parkinson's disease, retinal disorder associated with viral infections, retinal disorder associated with light overexposure, myopia, or AIDS-related retinal disorder.