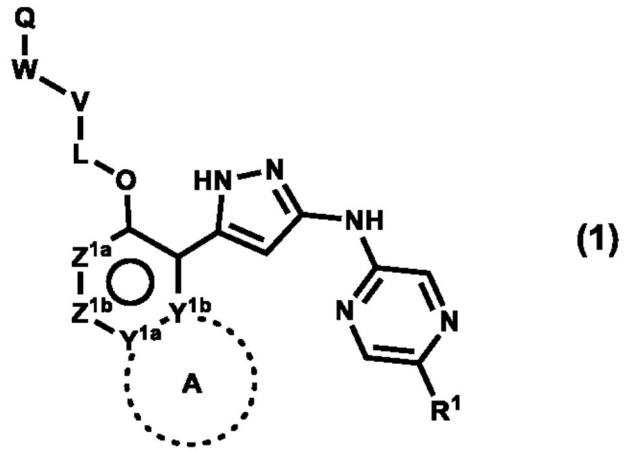
[CLAIMS]

[Claim 1]

A compound represented by

[Chemical Formula 1]



(1)

or a pharmaceutically acceptable salt thereof,

wherein

R^1 represents a hydrogen atom, a halogen atom, cyano, nitro, carboxyl, a sulfonic acid, a phosphoric acid, $-OR^2$, $-SR^2$, $-COR^3$, $-CO_2R^3$, $-CONR^4R^5$, $-SO_2R^3$, $-SO_2NR^4R^5$, $-OCOR^3$, $-OCO_2R^3$, $-OCONR^4R^5$, $-NR^4R^5$, $-NR^6COR^3$, $-NR^6CO_2R^3$, $-NR^6CONR^4R^5$, $-NR^6SO_2R^3$, $-NR^6SO_2NR^4R^5$, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{3-10} cycloalkyl, an optionally substituted 3- to 10-membered saturated heterocyclic group, optionally substituted C_{6-10} aryl, or optionally substituted 5- to 12-membered heteroaryl,

R^2 represents a hydrogen atom or C_{1-6} alkyl,

R^3 represents C_{1-6} alkyl,

R^4, R^5 and R^6 represent each independently a hydrogen atom, or C_{1-6} alkyl, wherein when R^4 and R^5 attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached,

Y^{1a} and Y^{1b} represent each independently a carbon

atom, or a nitrogen atom,

Z^{1a} represents a nitrogen atom, or CR^{7a},

Z^{1b} represents a nitrogen atom, or CR^{7b},

R^{7a} and R^{7b} represent each independently a hydrogen atom, a halogen atom, cyano, nitro, carboxyl, a sulfonic acid, a phosphoric acid, $-OR^8$, $-SR^8$, $-COR^9$, $-CO_2R^9$, $-CONR^{10}R^{11}$, $-SO_2R^9$, $-SO_2NR^{10}R^{11}$, $-OCOR^9$, $-OCO_2R^9$, $-OCONR^{10}R^{11}$, $-NR^{10}R^{11}$, $-NR^{12}COR^9$, $-NR^{12}CO_2R^9$, $-NR^{12}CONR^{10}R^{11}$, $-NR^{12}SO_2R^9$, $-NR^{12}SO_2NR^{10}R^{11}$, optionally substituted C_{1-6} alkyl, optionally substituted C_{2-6} alkenyl, optionally substituted C_{2-6} alkynyl, optionally substituted C_{3-10} cycloalkyl, an optionally substituted 3- to 10-membered saturated heterocyclic group, optionally substituted C_{6-10} aryl, or optionally substituted 5- to 12-membered heteroaryl,

R^8 represents a hydrogen atom or C_{1-6} alkyl,

R^9 represents C_{1-6} alkyl,

R^{10}, R^{11} and R^{12} represent each independently a hydrogen atom or C_{1-6} alkyl, wherein when R^{11} and R^{12} attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached,

Ring A represents optionally substituted 3- to 10-membered cycloalkane, optionally substituted 6- to 10-membered arene, an optionally substituted 4- to 10-membered aromatic heterocycle, or an optionally substituted 4- to 10-membered non-aromatic heterocycle,

L represents a single bond or optionally substituted C_{1-6} alkylene,

V represents a single bond, carbonyl, thiocarbonyl, optionally substituted C_{2-6} alkenylene, optionally substituted C_{3-10} cycloalkylene, optionally substituted C_{3-10} cycloalkenylene, an optionally substituted 3- to 10-membered divalent saturated heterocyclic group, or $-C(=NR^{13})-$,

R^{13} represents a hydrogen atom, or C_{1-6} alkyl,

W represents a single bond, or optionally substituted C_{1-6} alkylene,

Q represents a hydrogen atom, or NHR^{14}, and

R^{14} represents a hydrogen atom, optionally substituted C_{1-6} alkyl, optionally substituted C_{3-10} cycloalkyl, or an optionally substituted 3- to 10-membered saturated heterocyclic group.

[Claim 2]

The compound or the pharmaceutically acceptable salt thereof of claim 1, wherein the optionally substituted C_{1-6} alkyl, the optionally substituted C_{2-6} alkenyl, the optionally substituted C_{2-6} alkynyl, the optionally substituted C_{2-6} alkenylene, the optionally substituted C_{3-10} cycloalkyl, the optionally substituted 3- to 10-membered saturated heterocyclic group, the optionally substituted 6- to 10-membered arene, the optionally substituted 4- to 10-membered aromatic heterocycle, the optionally substituted 3- to 10-membered cycloalkane, the optionally substituted 4- to 10-membered non-aromatic heterocycle, the optionally substituted C_{6-10} aryl, the optionally substituted 5- to 12-membered heteroaryl, the optionally substituted C_{1-6} alkylene, the optionally substituted C_{3-10} cycloalkylene, the optionally substituted C_{3-10} cycloalkenylene, or the optionally substituted 3- to 10-membered divalent saturated heterocyclic group in R^1, R^{7a}, R^{7b}, R^{14}, Ring A, L, V, and W are each independently optionally substituted with 1 to 5 of the same or different substituents selected from the group consisting of

(1) a halogen atom,

(2) a hydroxyl group,

(3) C_{6-10} aryl,

(4) 5- to 12-membered heteroaryl,

(5) C_{1-6} alkyl,

(6) C_{2-6} alkenyl,

(7) C_{2-6} alkynyl,

(8) C_{1-6} alkoxy,

(9) C_{1-6} alkylthio

(10) C_{3-10} cycloalkyl,

(11) a 3- to 10-membered saturated heterocyclic group,

(12) carboxyl,

(13) $-COR^{15}$,

(14) $-CO_2R^{15}$,

(15) $-CONR^{16}R^{17}$,

(16) $-NR^{16}R^{17}$,

(17) $-NR^{18}COR^{15}$,

(18) $-NR^{18}CO_2R^{15}$,

(19) $-NR^{18}SO_2R^{15}$,

(20) $-NR^{18}CONR^{16}R^{17}$,

(21) $-NR^{18}SO_2NR^{16}R^{17}$,

(22) $-SO_2R^{15}$,

(23) $-SO_2NR^{16}R^{17}$,

(24) $-OCOR^{15}$,

(25) $-OCO_2R^{15}$,

(26) $-OCONR^{16}R^{17}$,

(27) a sulfonic acid,

(28) a phosphoric acid,

(29) cyano, and

(30) nitro,

wherein the groups represented by the (3) C_{6-10} aryl, (4) 5- to 12-membered heteroaryl, (5) C_{1-6} alkyl, (6) C_{2-6} alkenyl, (7) C_{2-6} alkynyl, (8) C_{1-6} alkoxy, (9) C_{1-6} alkylthio, (10) C_{3-10} cycloalkyl and (11) a 3- to 10-membered saturated heterocyclic group are optionally substituted with 1 to 5 of the same or different substituents selected from the group consisting of

(a) a halogen atom,

(b) a hydroxyl group,

(c) C_{6-10} aryl,

(d) 5- to 12-membered heteroaryl,

(e) C_{1-6} alkyl,

(f) C_{2-6} alkenyl,

(g) C_{2-6} alkynyl,

(h) C_{1-6} alkoxy,

(i) C_{3-10} cycloalkyl,

(j) a 3- to 10-membered saturated heterocyclic group,

(k) carboxyl,

(l) $-COR^{15}$,

(m) $-CO_2R^{15}$,

(n) $-CONR^{16}R^{17}$,

(o) $-NR^{16}R^{17}$,

(p) $-NR^{18}COR^{15}$,

(q) $-NR^{18}SO_2R^{15}$,

(r) $-SO_2R^{15}$,

(s) $-SO_2NR^{16}R^{17}$,

(t) a sulfonic acid,

(u) a phosphoric acid,

(v) cyano, and

(w) nitro,

R^{15} is C_{1-6} alkyl, and when plural, then each is independent,

R^{16} and R^{17} represent each independently a hydrogen atom or C_{1-6} alkyl, and when R^{16} or R^{17} is plural, then each of R^{16} or R^{17} may be the same or different, wherein when R^{16} and R^{17} attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached, and

R^{18} is a hydrogen atom or C_{1-6} alkyl.

[Claim 3]

The compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 2, wherein:

(i) R^1 is a hydrogen atom, a halogen atom, cyano, $-OR^2$, $-CO_2R^3$, C_{1-6} alkyl, C_{3-10} cycloalkyl, or a 3- to 10-membered saturated heterocyclic group, or

(ii) R^1 is a hydrogen atom, a halogen atom, cyano, or $-CO_2R^3$, or

(iii) R^1 is cyano.

[Claim 4]

The compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 3, wherein

(i) R^{7a} and R^{7b} are each independently a hydrogen atom, a halogen atom, cyano, $-OR^8$, $-CO_2R^9$, $-CONR^{10}R^{11}$, $-NR^{10}R^{11}$, $-NR^{12}COR^9$, C_{1-6} alkyl (the alkyl is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a chlorine atom, a bromine atom, a hydroxyl group, phenyl, 5- to 6-membered heteroaryl, C_{1-6} alkoxy, C_{3-7} cycloalkyl, a 3- to 7-membered saturated heterocyclic group, $-CONR^{16}R^{17}$, $-NR^{16}R^{17}$, and cyano), C_{3-10} cycloalkyl (the cycloalkyl is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a chlorine atom, a bromine atom, a hydroxyl group, phenyl, 5- to 6-membered heteroaryl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-7} cycloalkyl, a 3- to 7-membered saturated heterocyclic group, $-CONR^{16}R^{17}$, $-NR^{16}R^{17}$, and cyano), a 3- to 10-membered saturated heterocyclic group (the saturated heterocyclic group is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a chlorine atom, a bromine atom, a hydroxyl group, phenyl, 5- to 6-membered heteroaryl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-7} cycloalkyl, a 3- to 7-membered saturated heterocyclic group, $-CONR^{16}R^{17}$, $-NR^{16}R^{17}$, and cyano), phenyl (the phenyl is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a chlorine atom, a bromine atom, a hydroxyl group, phenyl, 5- to 6-membered heteroaryl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-7} cycloalkyl, a 3- to 7-membered saturated heterocyclic group, $-CONR^{16}R^{17}$, $-NR^{16}R^{17}$, and cyano), or 5- to 6-membered heteroaryl (the heteroaryl is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a chlorine atom, a bromine atom, a hydroxyl group, phenyl, 5- to 6-membered heteroaryl, C_{1-6}

alkyl, C_{1-6} alkoxy, C_{3-7} cycloalkyl, a 3- to 7-membered saturated heterocyclic group, $-CONR^{16}R^{17}$, $-NR^{16}R^{17}$, and cyano), and

R^{16} and R^{17} represent each independently a hydrogen atom or C_{1-6} alkyl, and when R^{16} or R^{17} is plural, then each of R^{16} or R^{17} may be the same or different, wherein when R^{16} and R^{17} attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached; or

(ii) R^{7a} and R^{7b} are each independently a hydrogen atom, a fluorine atom, a chlorine atom, a bromine atom, C_{1-6} alkyl (the alkyl is optionally substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), or 5- to 6-membered heteroaryl (the heteroaryl is optionally substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), and

R^{16} and R^{17} represent each independently a hydrogen atom or C_{1-6} alkyl, and when R^{16} or R^{17} is plural, then each of R^{16} or R^{17} may be the same or different, wherein when R^{16} and R^{17} attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached.

[Claim 5]

The compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 4, wherein

(i) Ring A is 3- to 10-membered cycloalkane (the cycloalkane is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a chlorine atom, a bromine atom, a hydroxyl group, phenyl, 5- to 6-membered heteroaryl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-7} cycloalkyl, a 3- to 7-membered saturated heterocyclic group, $-CONR^{16}R^{17}$, -

$NR^{16}R^{17}$, and cyano), a 6- to 10-membered arene (the arene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a chlorine atom, a bromine atom, a hydroxyl group, phenyl, 5- to 6-membered heteroaryl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-7} cycloalkyl, a 3- to 7-membered saturated heterocyclic group, $-CONR^{16}R^{17}$, $-NR^{16}R^{17}$, and cyano), a 4- to 10-membered aromatic heterocycle (the aromatic heterocycle is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a chlorine atom, a bromine atom, a hydroxyl group, phenyl, 5- to 6-membered heteroaryl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-7} cycloalkyl, a 3- to 7-membered saturated heterocyclic group, $-CONR^{16}R^{17}$, $-NR^{16}R^{17}$, and cyano), or a 4- to 10-membered non-aromatic heterocycle (the non-aromatic heterocycle is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a chlorine atom, a bromine atom, a hydroxyl group, phenyl, 5- to 6-membered heteroaryl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-7} cycloalkyl, a 3- to 7-membered saturated heterocyclic group, $-CONR^{16}R^{17}$, $-NR^{16}R^{17}$, and cyano), and

R^{16} and R^{17} represent each independently a hydrogen atom or C_{1-6} alkyl, and when R^{16} or R^{17} is plural, then each of R^{16} or R^{17} may be the same or different, wherein when R^{16} and R^{17} attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached;or

(ii) Ring A is a 4- to 10-membered aromatic heterocycle (the aromatic heterocycle is optionally substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), or a 4- to 10-membered non-aromatic heterocycle (the non-aromatic heterocycle is optionally

substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, -$NR^{16}R^{17}$, and cyano), and

R^{16} and R^{17} represent each independently a hydrogen atom or C_{1-6} alkyl, and when R^{16} or R^{17} is plural, then each of R^{16} or R^{17} may be the same or different, wherein when R^{16} and R^{17} attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached.

[Claim 6]

The compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 5, wherein

L is

a single bond, or

C_{1-6} alkylene (the alkylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, -$NR^{16}R^{17}$, and cyano), and

R^{16} and R^{17} represent each independently a hydrogen atom or C_{1-6} alkyl, and when R^{16} or R^{17} is plural, then each of R^{16} or R^{17} may be the same or different, wherein when R^{16} and R^{17} attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached.

[Claim 7]

The compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 6, wherein

V is

a single bond,

carbonyl,

thiocarbonyl,

C_{2-6} alkenylene (the alkenylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a

hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano),
C_{3-10} cycloalkylene (the cycloalkylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano),
C_{3-10} cycloalkenylene (the cycloalkenylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano),
a 3- to 10-membered divalent saturated heterocyclic group (the saturated heterocyclic group is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl optionally substituted with 1 to 2 hydroxyl groups or fluorine atoms, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), or
$-C(=NR^{13})-$, and

R^{16} and R^{17} represent each independently a hydrogen atom or C_{1-6} alkyl, and when R^{16} or R^{17} is plural, then each of R^{16} or R^{17} may be the same or different, wherein when R^{16} and R^{17} attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached.

[Claim 8]

The compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 7, wherein

W is
a single bond, or
C_{1-6} alkylene (the alkylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), and

R^{16} and R^{17} represent each independently a hydrogen

atom or C_{1-6} alkyl, and when R^{16} or R^{17} is plural, then each of R^{16} or R^{17} may be the same or different, wherein when R^{16} and R^{17} attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached.

[Claim 9]

The compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 8, wherein

R^{14} is

a hydrogen atom,

C_{1-6} alkyl (the alkyl is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano),

C_{3-10} cycloalkyl (the cycloalkyl is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), or

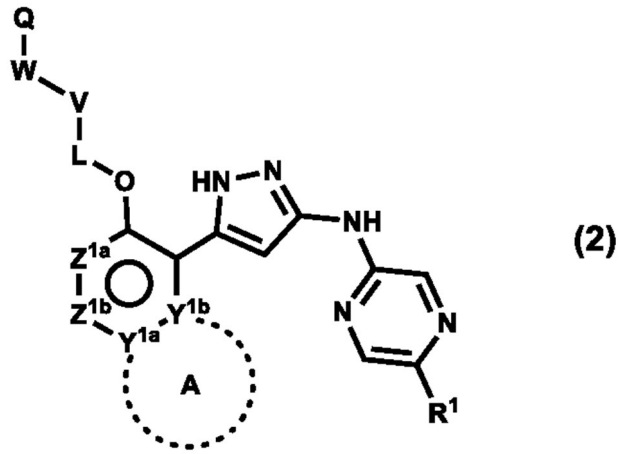
a 3- to 10-membered saturated heterocyclic group (the saturated heterocyclic group is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), and

R^{16} and R^{17} represent each independently a hydrogen atom or C_{1-6} alkyl, and when R^{16} or R^{17} is plural, then each of R^{16} or R^{17} may be the same or different, wherein when R^{16} and R^{17} attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached.

[Claim 10]

The compound or the pharmaceutically acceptable salt thereof of claim 1, wherein formula (1) is represented by the following formula (2):

[Chemical Formula 2]



(2)

wherein

R^1 represents a hydrogen atom, a halogen atom, cyano, or $-CO_2R^3$,

R^3 represents C_{1-6} alkyl,

Y^{1a} and Y^{1b} represent each independently a carbon atom, or a nitrogen atom,

Z^{1a} represents a nitrogen atom, or CR^{7a},

Z^{1b} represents a nitrogen atom, or CR^{7b},

R^{7a} and R^{7b} represent each independently

a hydrogen atom,

a fluorine atom,

a chlorine atom,

a bromine atom,

C_{1-6} alkyl (the alkyl is optionally substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), or

5- to 6-membered heteroaryl (the heteroaryl is optionally substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano),

Ring A represents

a 5- to 6-membered aromatic heterocycle (the aromatic heterocycle is optionally substituted with 1 to 2 of the

same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), or
a 5- to 8-membered non-aromatic heterocycle (the non-aromatic heterocycle is optionally substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano),

L represents
a single bond, or
C_{1-6} alkylene (the alkylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano),

V represents
a single bond,
C_{2-6} alkenylene (the alkenylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano),
C_{3-10} cycloalkylene (the cycloalkylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano),
C_{3-10} cycloalkenylene (the cycloalkenylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), or
a 3- to 10-membered divalent saturated heterocyclic group (the saturated heterocyclic group is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl optionally substituted with 1 to 2 fluorine atoms, C_{1-3} alkoxy, -

$NR^{16}R^{17}$, and cyano),

W represents

a single bond, or

C_{1-6} alkylene (the alkylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano),

Q represents

a hydrogen atom, or

NHR^{14},

R^{14} represents

a hydrogen atom,

C_{1-6} alkyl (the alkyl is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano),

C_{3-10} cycloalkyl (the cycloalkyl is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), or

a 3- to 10-membered saturated heterocyclic group (the saturated heterocyclic group is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, $-NR^{16}R^{17}$, and cyano), and

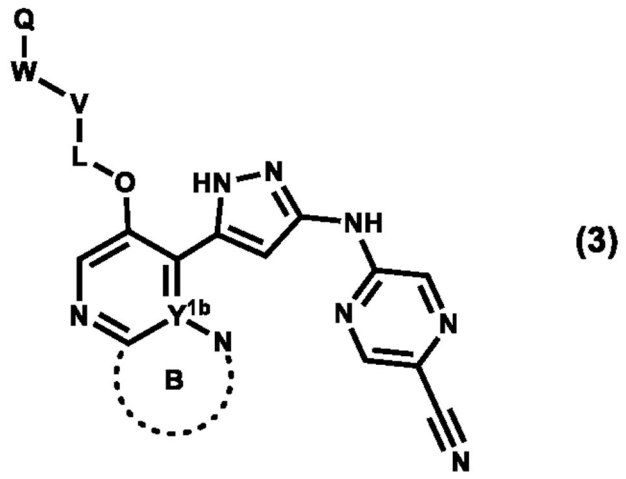
R^{16} and R^{17} represent each independently a hydrogen atom, or C_{1-6} alkyl, and when R^{16} or R^{17} is plural, then each of R^{16} or R^{17} may be the same or different, wherein when R^{16} and R^{17} attached to the same nitrogen atom are both C_{1-6} alkyl, then they may form a 3- to 8-membered nitrogen-containing saturated heterocycle together with the nitrogen atom to which each is attached.

[Claim 11]

The compound or the pharmaceutically acceptable salt thereof of claim 1, wherein formula (1) is

represented by the following formula (3):

[Chemical Formula 3]



(3)

wherein

Y^{1b} represents

a carbon atom, or

a nitrogen atom,

Ring B represents a 5- to 6-membered aromatic heterocycle (the aromatic heterocycle is optionally substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, and cyano),

L represents

a single bond, or

C_{1-6} alkylene (the alkylene is optionally substituted with 1 to 2 substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano),

V represents

a single bond,

C_{2-6} alkenylene (the alkenylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano),

C_{3-10} cycloalkylene (the cycloalkylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a

fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano), C_{3-10} cycloalkenylene (the cycloalkenylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano), or
a 3- to 10-membered divalent saturated heterocyclic group (the saturated heterocyclic group is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl optionally substituted with 1 to 2 hydroxyl groups or fluorine atoms, and cyano),

W represents
a single bond, or
C_{1-3} alkylene (the alkylene is optionally substituted with 1 to 2 substituents selected from the group consisting of a fluorine atom, a hydroxyl group, and cyano),

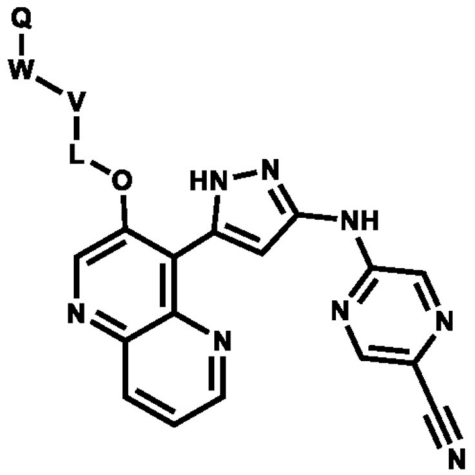
Q represents
a hydrogen atom, or
NHR^{14}, and

R^{14} is
a hydrogen atom, or
C_{1-3} alkyl (the alkyl is optionally substituted with one substituent selected from the group consisting of a fluorine atom, a hydroxyl group, and cyano).

[Claim 12]

The compound or the pharmaceutically acceptable salt thereof of claim 1, wherein formula (1) is represented by the following formula (4):

[Chemical Formula 4]



(4)

wherein

L represents

a single bond, or

C_{1-6} alkylene (the alkylene is optionally substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom or C_{1-3} alkyl),

V represents

a single bond,

C_{2-6} alkenylene (the alkenylene is optionally substituted with one substituent selected from the group consisting of a hydroxyl group, and C_{1-3} alkyl),

C_{3-10} cycloalkylene (the cycloalkylene is optionally substituted with 1 to 3 substituents selected from the group consisting of a fluorine atom, a hydroxyl group, and C_{1-3} alkyl),

C_{3-10} cycloalkenylene (the cycloalkenylene is optionally substituted with one substituent selected from the group consisting of a hydroxyl group, and C_{1-3} alkyl), or

a 3- to 10-membered divalent saturated heterocyclic group (the saturated heterocyclic group is optionally substituted with one substituent selected from the group consisting of a fluorine atom, a hydroxyl group, and C_{1-3} alkyl optionally substituted with 1 to 2 fluorine atoms),

W represents

a single bond, or

C_{1-3} alkylene optionally substituted with 1 to 2 fluorine atoms, and

Q represents

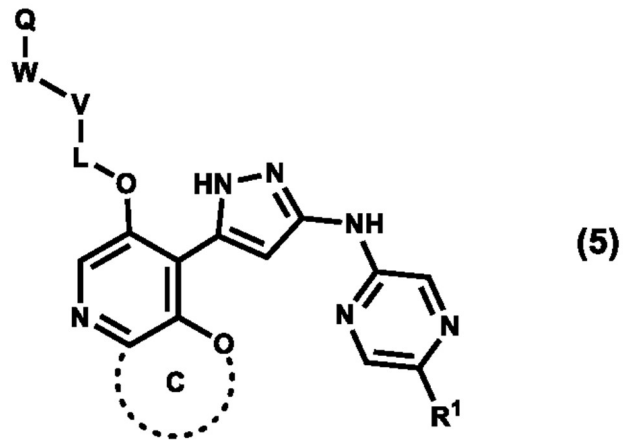
a hydrogen atom, or

NH_2.

[Claim 13]

The compound or the pharmaceutically acceptable salt thereof of claim 1, wherein formula (1) is represented by the following formula (5):

[Chemical Formula 5]



(5)

wherein

R^1 represents a hydrogen atom, a halogen atom, cyano, or $-CO_2R^3$,

R^3 represents C_{1-6} alkyl,

Ring C represents a 5- to 8-membered non-aromatic heterocycle (the non-aromatic heterocycle is optionally substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy, and cyano),

L represents

a single bond, or

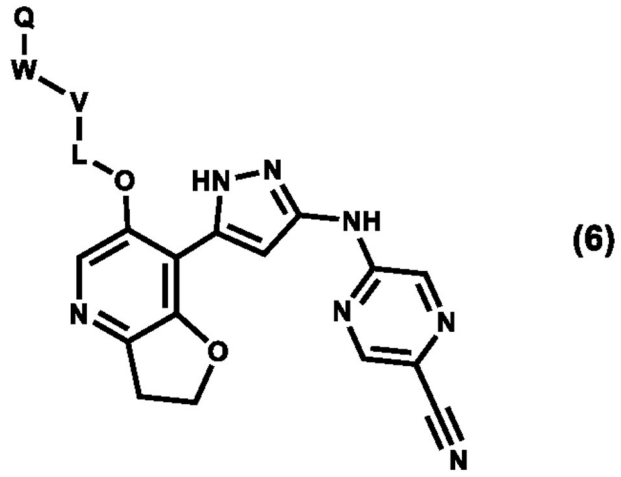
C_{1-6} alkylene (the alkylene is optionally substituted with 1 to 2 substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano),

V represents
a single bond,
C_{2-6} alkenylene (the alkenylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano),
C_{3-10} cycloalkylene (the cycloalkylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano),
C_{3-10} cycloalkenylene (the cycloalkenylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano), or
a 3- to 10-membered divalent saturated heterocyclic group (the saturated heterocyclic group is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl optionally substituted with 1 to 2 hydroxyl groups or fluorine atoms, and cyano),
W represents
a single bond, or
C_{1-3} alkylene (the alkylene is optionally substituted with 1 to 2 substituents selected from the group consisting of a fluorine atom, a hydroxyl group, and cyano),
Q represents
a hydrogen atom, or
NHR^{14}, and
R^{14} is
a hydrogen atom, or
C_{1-3} alkyl (the alkyl is optionally substituted with one substituent selected from the group consisting of a fluorine atom, a hydroxyl group, and cyano).

[Claim 14]

The compound or the pharmaceutically acceptable salt thereof of claim 1, wherein formula (1) is represented by the following formula (6):

[Chemical Formula 6]



(6)

wherein

L represents

a single bond, or

C_{1-6} alkylene (the alkylene is optionally substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom, or C_{1-3} alkyl),

V represents

a single bond,

C_{2-6} alkenylene (the alkenylene is optionally substituted with one substituent selected from the group consisting of a hydroxyl group, and C_{1-3} alkyl),

C_{3-10} cycloalkylene (the cycloalkylene is optionally substituted with one substituent selected from the group consisting of a hydroxyl group, and C_{1-3} alkyl),

C_{3-10} cycloalkenylene (the cycloalkenylene is optionally substituted with one substituent selected from the group consisting of a hydroxyl group, and C_{1-3} alkyl), or

a 3- to 10-membered divalent saturated heterocyclic group (the saturated heterocyclic group is optionally substituted with one substituent selected from the group consisting of a fluorine atom, a hydroxyl group, and C_{1-3}

alkyl optionally substituted with 1 to 2 fluorine atoms),

W represents

a single bond, or

C_{1-3} alkylene optionally substituted with 1 to 2 fluorine atoms, and

Q represents

a hydrogen atom

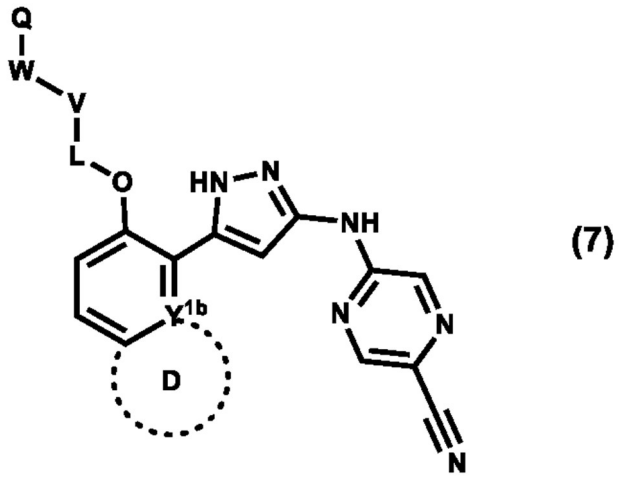
NH_2, or

NMeH.

[Claim 15]

The compound or the pharmaceutically acceptable salt thereof of claim 1, wherein formula (1) is represented by the following formula (7):

[Chemical Formula 7]



(7)

wherein

Y^{1b} represents

a carbon atom, or

a nitrogen atom,

Ring D represents

a 5- to 8-membered non-aromatic heterocycle, or

a 5- to 6-membered aromatic heterocycle (the non-aromatic heterocycle and aromatic heterocycle are optionally substituted with 1 to 2 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, C_{1-3} alkoxy,

and cyano),

L represents

a single bond, or

C_{1-6} alkylene (the alkylene is optionally substituted with 1 to 2 substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano),

V represents

a single bond,

C_{2-6} alkenylene (the alkenylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano),

C_{3-10} cycloalkylene (the cycloalkylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano),

C_{3-10} cycloalkenylene (the cycloalkenylene is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl, and cyano), or

a 3- to 10-membered divalent saturated heterocyclic group (the saturated heterocyclic group is optionally substituted with 1 to 3 of the same or different substituents selected from the group consisting of a fluorine atom, a hydroxyl group, C_{1-3} alkyl optionally substituted with 1 to 2 hydroxyl groups or fluorine atoms, and cyano),

W represents

a single bond, or

C_{1-3} alkylene (the alkylene is optionally substituted with one substituent selected from the group consisting of a fluorine atom, a hydroxyl group, and cyano),

Q represents

a hydrogen atom, or

NHR^{14}, and

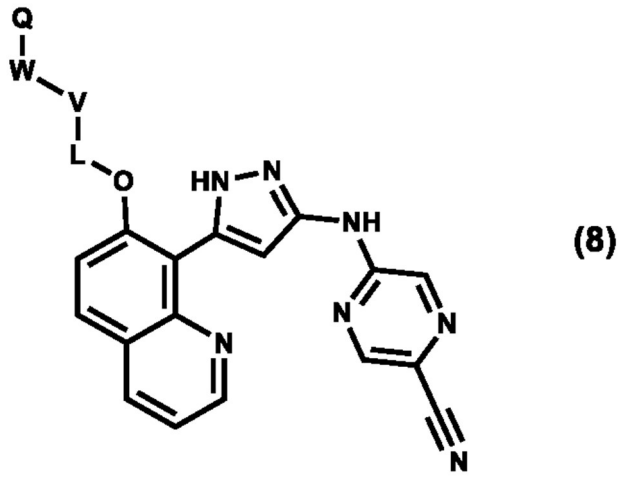
R^{14} is

a hydrogen atom, or
C_{1-3} alkyl (the alkyl is optionally substituted with one substituent selected from the group consisting of a fluorine atom, a hydroxyl group, and cyano).

[Claim 16]

The compound or the pharmaceutically acceptable salt thereof of claim 1, wherein formula (1) is represented by the following formula (8):

[Chemical Formula 8]



(8)

wherein

L represents
a single bond, or
C_{1-6} alkylene (the alkylene is optionally substituted with 1 to 2 substituents selected from the group consisting of a fluorine atom, and C_{1-3} alkyl),

V represents
a single bond,
C_{2-6} alkenylene (the alkenylene is optionally substituted with one substituent selected from the group consisting of a hydroxyl group, and C_{1-3} alkyl),
C_{3-10} cycloalkylene (the cycloalkylene is optionally substituted with one substituent selected from the group consisting of a hydroxyl group, and C_{1-3} alkyl),
C_{3-10} cycloalkenylene (the cycloalkenylene is optionally substituted with one substituent selected from the group

consisting of a hydroxyl group, and C_{1-3} alkyl), or
a 3- to 10-membered divalent saturated heterocyclic group (the saturated heterocyclic group is optionally substituted with one substituent selected from the group consisting of a fluorine atom, a hydroxyl group, and C_{1-3} alkyl optionally substituted with 1 to 2 fluorine atoms),

W represents
a single bond, or
C_{1-3} alkylene optionally substituted with 1 to 2 fluorine atoms, and

Q represents
a hydrogen atom
NH_2, or
NHMe.

[Claim 17]

The compound or the pharmaceutically acceptable salt thereof of claim 1, which is selected from the following compounds:

5-({5-[7-(3-aminopropoxy)quinolin-8-yl]-1H-pyrazol-3-yl}amino)pyrazine-2-carbonitrile,
5-({5-[6-(3-aminopropoxy)-1-benzofuran-7-yl]-1H-pyrazol-3-yl}amino)pyrazine-2-carbonitrile,
5-({5-[6-(3-aminopropoxy)-2,3-dihydro-1-benzofuran-7-yl]-1H-pyrazol-3-yl}amino)pyrazine-2-carbonitrile,
5-{[5-(6-{[1-(aminomethyl)cyclopropyl]methoxy}-2,3-dihydro-1-benzofuran-7-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-[(5-{6-[(3-methylazetidin-3-yl)methoxy]-2,3-dihydro-1-benzofuran-7-yl}-1H-pyrazol-3-yl)amino]pyrazine-2-carbonitrile,
5-({5-[6-(3-aminopropoxy)pyrazolo[1,5-a]pyridin-7-yl]-1H-pyrazol-3-yl}amino)pyrazine-2-carbonitrile,
5-({5-[6-(3-aminopropoxy)pyrazolo[1,5-a]pyrimidin-7-yl]-1H-pyrazol-3-yl}amino)pyrazine-2-carbonitrile,
5-({5-[3-(3-aminopropoxy)-1,5-naphthyridin-4-yl]-1H-pyrazol-3-yl}amino)pyrazine-2-carbonitrile,
5-({5-[3-(3-amino-2,2-difluoropropoxy)-1,5-naphthyridin-

4-yl]-1H-pyrazol-3-yl}amino)pyrazine-2-carbonitrile,
5-{[5-(3-{[1-(aminomethyl)cyclopropyl]methoxy}-1,5-naphthyridin-4-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-[(5-{3-[(3-methylazetidin-3-yl)methoxy]-1,5-naphthyridin-4-yl}-1H-pyrazol-3-yl)amino]pyrazine-2-carbonitrile,
5-{[5-(3-{[(2S)-morpholin-2-yl]methoxy}-1,5-naphthyridin-4-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-({5-[6-(3-aminopropoxy)-2,3-dihydrofuro[3,2-b]pyridin-7-yl]-1H-pyrazol-3-yl}amino)pyrazine-2-carbonitrile,
5-{[5-(6-{[1-(aminomethyl)cyclopropyl]methoxy}-2,3-dihydrofuro[3,2-b]pyridin-7-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-[(5-{6-[(3-methylazetidin-3-yl)methoxy]-2,3-dihydrofuro[3,2-b]pyridin-7-yl}-1H-pyrazol-3-yl)amino]pyrazine-2-carbonitrile,
5-({5-[6-(3-aminopropoxy)-2-methyl-1,3-benzoxazol-7-yl]-1H-pyrazol-3-yl}amino)pyrazine-2-carbonitrile,
5-{[5-(6-{[1-(aminomethyl)cyclopropyl]methoxy}pyrazolo[1,5-a]pyridin-7-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-[(5-{6-[(3-methylazetidin-3-yl)methoxy]pyrazolo[1,5-a]pyridin-7-yl}-1H-pyrazol-3-yl)amino]pyrazine-2-carbonitrile,
5-{[5-(6-{[1-(aminomethyl)cyclopropyl]methoxy}-1-benzofuran-7-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-{[5-(6-{[1-(aminomethyl)-2,2-difluorocyclopropyl]methoxy}-1-benzofuran-7-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-{[5-(6-{[(1R,3R)-3-aminocyclopentyl]oxy}-2,3-dihydrofuro[3,2-b]pyridin-7-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-{[5-(6-{[3-(difluoromethyl)azetidin-3-yl]methoxy}-2,3-dihydrofuro[3,2-b]pyridin-7-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,

5-[(5-{6-[(3-fluoroazetidin-3-yl)methoxy]-2,3-dihydrofuro[3,2-b]pyridin-7-yl}-1H-pyrazol-3-yl)amino]pyrazine-2-carbonitrile,
5-{[5-(6-{[(1R,3S)-3-aminocyclohexyl]oxy}-2,3-dihydrofuro[3,2-b]pyridin-7-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-[(5-{6-[(1R)-1-(azetidin-3-yl)ethoxy]-2,3-dihydrofuro[3,2-b]pyridin-7-yl}-1H-pyrazol-3-yl)amino]pyrazine-2-carbonitrile,
5-{[5-(6-{[(3S)-pyrrolidin-3-yl]methoxy}-2,3-dihydrofuro[3,2-b]pyridin-7-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-[(5-{6-[3-(methylamino)propoxy]-2,3-dihydrofuro[3,2-b]pyridin-7-yl}-1H-pyrazol-3-yl)amino]pyrazine-2-carbonitrile,
5-[(5-{6-[(2R)-3-amino-2-methylpropoxy]-2,3-dihydrofuro[3,2-b]pyridin-7-yl}-1H-pyrazol-3-yl)amino]pyrazine-2-carbonitrile,
5-{[5-(6-{[(1R,2S,4S,5S)-4-aminobicyclo[3.1.0]hexan-2-yl]oxy}-2,3-dihydrofuro[3,2-b]pyridin-7-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-[(5-{6-[(2S)-3-amino-2-methylpropoxy]-2,3-dihydrofuro[3,2-b]pyridin-7-yl}-1H-pyrazol-3-yl)amino]pyrazine-2-carbonitrile,
5-{[5-(6-{[2-(aminomethyl)prop-2-en-1-yl]oxy}-2,3-dihydrofuro[3,2-b]pyridin-7-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
N-{5-[6-(3-aminopropoxy)-2,3-dihydrofuro[3,2-b]pyridin-7-yl]-1H-pyrazol-3-yl}-5-chloropyrazin-2-amine,
methyl 5-({5-[6-(3-aminopropoxy)-2,3-dihydrofuro[3,2-b]pyridin-7-yl]-1H-pyrazol-3-yl}amino)pyrazine-2-carboxylate,
5-{[5-(3-{[(1R,2S)-2-(aminomethyl)cyclopentyl]oxy}-1,5-naphthyridin-4-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-[(5-{3-[(3-fluoroazetidin-3-yl)methoxy]-1,5-naphthyridin-4-yl}-1H-pyrazol-3-yl)amino]pyrazine-2-

carbonitrile,
5-{[5-(3-{[(1R,3S)-3-aminocyclohexyl]oxy}-1,5-naphthyridin-4-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile,
5-{[5-(3-{[(1R,3R)-3-aminocyclopentyl]oxy}-1,5-naphthyridin-4-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile, and
5-{[5-(3-{[1-(aminomethyl)-3,3-difluorocyclobutyl]methoxy}-1,5-naphthyridin-4-yl)-1H-pyrazol-3-yl]amino}pyrazine-2-carbonitrile.

[Claim 18]

A liposome comprising the compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 17.

[Claim 19]

A pharmaceutical composition comprising the compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 17 as an active ingredient, or comprising a liposome encapsulating the compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 17.

[Claim 20]

The pharmaceutical composition of claim 19, wherein the liposome further comprises:
(i) a phospholipid, and/or
(ii) a sterol, and/or
(iii) a polymer-modified lipid, and/or
(iv) an additive selected from the group consisting of an inorganic acid, an inorganic acid salt, an organic acid, an organic acid salt, a saccharide, a buffer, an antioxidant, and a polymer.

[Claim 21]

The pharmaceutical composition of claim 20, wherein:
(i) the phospholipid is one phospholipid selected from the group consisting of phosphatidylcholine, phosphatidylglycerol, phosphatidic acid,

phosphatidylethanolamine, phosphatidylserine, phosphatidylinositol, sphingomyelin, soybean lecithin, egg yolk lecithin, hydrogenated egg yolk lecithin, and hydrogenated soybean lecithin, or a combination of two or more thereof, and/or

(ii) the sterol is a cholesterol, and/or

(iii)a polymer moiety of the polymer-modified lipid is polyethylene glycol, polypropylene glycol, polyvinyl alcohol, polyvinylpyrrolidone, methoxypolyethylene glycol, methoxypolypropylene glycol, methoxypolyvinyl alcohol, methoxypolyvinylpyrrolidone, ethoxypolyethylene glycol, ethoxypolypropylene glycol, ethoxypolyvinyl alcohol, ethoxypolyvinylpyrrolidone, propoxypolyethylene glycol, propoxypolypropylene glycol, propoxypolyvinyl alcohol, or propoxypolyvinylpyrrolidone, and/or a lipid moiety of the polymer-modified lipid is phosphatidylethanolamine or diacylglycerol.

[Claim 22]

The pharmaceutical composition of any one of claims 20 to 21, wherein the polymer-modified lipid comprises polyethylene glycol, polypropylene glycol, polyvinyl alcohol, polyvinylpyrrolidone, methoxypolyethylene glycol, methoxypolypropylene glycol, methoxypolyvinyl alcohol, methoxypolyvinylpyrrolidone, ethoxypolyethylene glycol, ethoxypolypropylene glycol, ethoxypolyvinyl alcohol, ethoxypolyvinylpyrrolidone, propoxypolyethylene glycol, propoxypolypropylene glycol, propoxypolyvinyl alcohol, or propoxypolyvinylpyrrolidone as a polymer moiety, and comprises phosphatidylethanolamine or diacylglycerol as a lipid moiety.

[Claim 23]

The pharmaceutical composition of any one of claims 19 to 22, wherein the liposome comprises

(1) the compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 17,

(2) 40 to 70 mol% of a phospholipid,

(3) 30 to 50 mol% of a cholesterol, and

(4) 1 to 10 mol% of a polymer-modified lipid.

[Claim 24]

A therapeutic agent and/or prophylactic agent for cancer, comprising the compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 17 as an active ingredient.

[Claim 25]

The therapeutic agent and/or prophylactic agent of claim 24, wherein the cancer is at least one type of cancer selected from the group consisting of acute leukemia, chronic lymphocytic leukemia, chronic myelogenous leukemia, myelodysplastic syndrome, polycythemia vera, malignant lymphoma, plasma cell tumor, multiple myeloma, brain tumor, head and neck cancer, esophageal cancer, thyroid cancer, small cell lung cancer, non-small cell lung cancer, thymoma/thymic carcinoma, breast cancer, gastric cancer, gallbladder/bile duct cancer, liver cancer, hepatocellular carcinoma, pancreatic cancer, colon cancer, rectal cancer, anal cancer, gastrointestinal stromal tumor, choriocarcinoma, endometrial cancer, cervical cancer, ovarian cancer, bladder cancer, urothelial cancer, renal cancer, renal cell cancer, prostate cancer, testicular tumor, testicular germ cell tumor, ovarian germ cell tumor, Wilms tumor, malignant melanoma, neuroblastoma, osteosarcoma, Ewing sarcoma, chondrosarcoma, soft tissue sarcoma, or skin cancer.

[Claim 26]

The compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 17, or the liposome of claim 18, or the pharmaceutical composition of claims 19 to 23, or the therapeutic agent and/or prophylactic agent of claim 24 or 25, for use in the treatment and/or prophylaxis of cancer.

[Claim 27]

The compound or the pharmaceutically acceptable salt thereof, or the pharmaceutical composition, or the

liposome, or the therapeutic agent and/or prophylactic agent of claim 26, wherein the cancer is at least one type of cancer selected from the group consisting of acute leukemia, chronic lymphocytic leukemia, chronic myelogenous leukemia, myelodysplastic syndrome, polycythemia vera, malignant lymphoma, plasma cell tumor, multiple myeloma, brain tumor, head and neck cancer, esophageal cancer, thyroid cancer, small cell lung cancer, non-small cell lung cancer, thymoma/thymic carcinoma, breast cancer, gastric cancer, gallbladder/bile duct cancer, liver cancer, hepatocellular carcinoma, pancreatic cancer, colon cancer, rectal cancer, anal cancer, gastrointestinal stromal tumor, choriocarcinoma, endometrial cancer, cervical cancer, ovarian cancer, bladder cancer, urothelial cancer, renal cancer, renal cell cancer, prostate cancer, testicular tumor, testicular germ cell tumor, ovarian germ cell tumor, Wilms tumor, malignant melanoma, neuroblastoma, osteosarcoma, Ewing sarcoma, chondrosarcoma, soft tissue sarcoma, or skin cancer.

[Claim 28]

The compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 17, or the liposome of claim 18, for treating cancer, used in combination with a concomitant drug or a pharmaceutically acceptable salt thereof, wherein the concomitant drug is at least one selected from the group consisting of a hormonal therapy agent, a chemotherapeutic agent, an immunotherapeutic agent, and an agent that inhibits a cell growth factor and its receptor action.

[Claim 29]

The compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 17, or the liposome of claim 18, for treating cancer, used in combination with a concomitant drug or a pharmaceutically acceptable salt thereof, wherein the concomitant drug is at least one selected from the group consisting of a 5-FU

type drug, Cytarabine, Doxorubicin hydrochloride, Gemcitabine, Methotrexate, Pemetrexed, Etoposide, Irinotecan, Topotecan, Cisplatin, Carboplatin, Oxaliplatin, Paclitaxel, Docetaxel, ionizing radiation, Bevacizumab, liposomal Doxorubicin, Rucaparib, Olaparib, Niraparib, Trabectedin, Pazopanib, Pembrolizumab, Nivolumab, Ipilimumab, Durvalumab, Avelumab, Atezolizumab, Larotrectinib, Entrectinib, nab-Paclitaxel, Erlotinib, liposomal Irinotecan, Leucovorin, Cetuximab, Eribulin, Ifosfamide, and Dacarbazine.

[Claim 30]

A pharmaceutical composition comprising the compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 17, or the pharmaceutical composition of any one of claims 19 to 23, in combination with a concomitant drug, wherein the concomitant drug is at least one selected from the group consisting of a hormonal therapy agent, a chemotherapeutic agent, an immunotherapeutic agent, and an agent that inhibits a cell growth factor and its receptor action.

[Claim 31]

A pharmaceutical composition comprising the compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 17, or the pharmaceutical composition of any one of claims 19 to 23, in combination with a concomitant drug, wherein the concomitant drug is at least one selected from the group consisting of a 5-FU type drug, Cytarabine, Doxorubicin hydrochloride, Gemcitabine, Methotrexate, Pemetrexed, Etoposide, Irinotecan, Topotecan, Cisplatin, Carboplatin, Oxaliplatin, Paclitaxel, Docetaxel, ionizing radiation, Bevacizumab, liposomal Doxorubicin, Rucaparib, Olaparib, Niraparib, Trabectedin, Pazopanib, Pembrolizumab, Nivolumab, Ipilimumab, Durvalumab, Avelumab, Atezolizumab, Larotrectinib, Entrectinib, nab-Paclitaxel, Erlotinib, liposomal Irinotecan, Leucovorin, Cetuximab, Eribulin, Ifosfamide, and Dacarbazine.

[Claim 32]
Use of the compound or the pharmaceutically acceptable salt thereof of any one of claims 1 to 17, or the liposome of claim 18, or the pharmaceutical composition of any one of claims 19 to 23, or the therapeutic agent and/or prophylactic agent of claim 24 or 25 in the manufacture of a medicament for the treatment and/or prophylaxis of cancer.
[Claim 33]
The use of clain 32, wherein the cancer is at least one type of cancer selected from the group consisting of acute leukemia, chronic lymphocytic leukemia, chronic myelogenous leukemia, myelodysplastic syndrome, polycythemia vera, malignant lymphoma, plasma cell tumor, multiple myeloma, brain tumor, head and neck cancer, esophageal cancer, thyroid cancer, small cell lung cancer, non-small cell lung cancer, thymoma/thymic carcinoma, breast cancer, gastric cancer, gallbladder/bile duct cancer, liver cancer, hepatocellular carcinoma, pancreatic cancer, colon cancer, rectal cancer, anal cancer, gastrointestinal stromal tumor, choriocarcinoma, endometrial cancer, cervical cancer, ovarian cancer, bladder cancer, urothelial cancer, renal cancer, renal cell cancer, prostate cancer, testicular tumor, testicular germ cell tumor, ovarian germ cell tumor, Wilms tumor, malignant melanoma, neuroblastoma, osteosarcoma, Ewing sarcoma, chondrosarcoma, soft tissue sarcoma, or skin cancer.
[Claim 34]
The use of claim 32 or 33, wherein the medicament is used in combination with a concomitant drug or a pharmaceutically acceptable salt thereof, wherein the concomitant drug is at least one selected from the group consisting of a 5-FU type drug, Cytarabine, Doxorubicin hydrochloride, Gemcitabine, Methotrexate, Pemetrexed, Etoposide, Irinotecan, Topotecan, Cisplatin, Carboplatin, Oxaliplatin, Paclitaxel, Docetaxel, ionizing radiation,

Bevacizumab, liposomal Doxorubicin, Rucaparib, Olaparib, Niraparib, Trabectedin, Pazopanib, Pembrolizumab, Nivolumab, Ipilimumab, Durvalumab, Avelumab, Atezolizumab, Larotrectinib, Entrectinib, nab-Paclitaxel, Erlotinib, liposomal Irinotecan, Leucovorin, Cetuximab, Eribulin, Ifosfamide, and Dacarbazine.