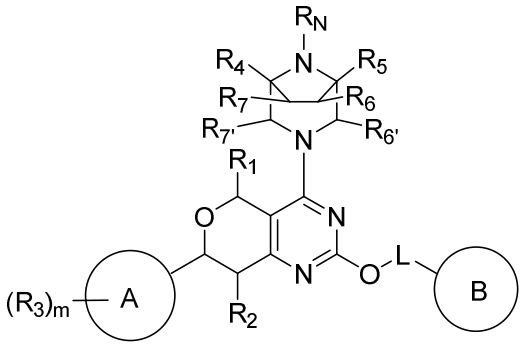
CLAIMS

1. A compound of Formula (I") or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof:



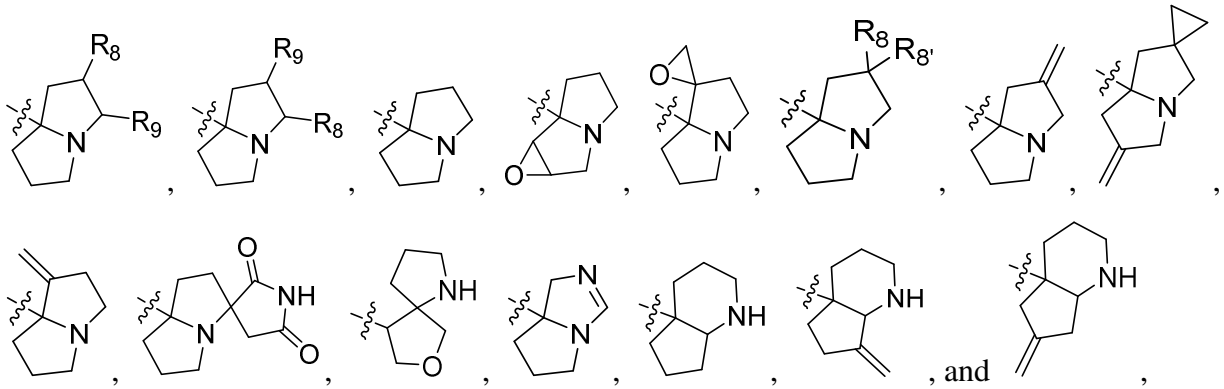
(I"),

wherein,

R_N is selected from H and C_{1-3} alkyl, wherein the C_{1-3} alkyl is optionally substituted with 1, 2, or 3 F or Cl;

Ring A is selected from C_6 aryl and 5-6 membered heteroaryl;

Ring B is selected from



wherein Ring B is optionally substituted with 1, 2, 3, or 4 R_{10};

L is selected from -C($R_{L1}R_{L2}$)-, wherein R_{L1} and R_{L2} are each independently selected from H, D, and C_{1-3} alkyl;

R_1 and R_2 are each independently selected from oxo, H, F, Cl, Br, I, and CN;

each R_3 is independently selected from F, Cl, Br, I, OH, NH_2, CN, C_{1-3} alkyl, C_{1-3} alkoxy, C_{1-3} alkylamino, di-C_{1-3} alkylamino, C_{2-4} alkenyl, C_{2-4} alkynyl, and C_{3-5} cycloalkyl, wherein the C_{1-3} alkyl, C_{1-3} alkoxy, C_{1-3} alkylamino, di-C_{1-3} alkylamino, C_{2-4} alkenyl, C_{2-4} alkynyl, and C_{3-5} cycloalkyl are each independently optionally substituted with 1, 2, 3, 4, or 5 R_a;

each R_a is independently selected from D, F, Cl, Br, and I;

R_4, R_5, R_6, R_7, $R_{6'}$, and $R_{7'}$ are each independently selected from oxo, H, F, Cl, Br, I, OH, NH_2, CN, C_{1-3} alkyl, C_{2-4} alkenyl, C_{1-3} alkoxy, -C(=O)-R_d, -C(=O)-$NR_{b1}R_{b2}$, and =NO(C_{1-3} alkyl), wherein the C_{1-3} alkyl, C_{2-4} alkenyl, and C_{1-3} alkoxy are each independently optionally substituted with 1, 2, 3, 4, or 5 R_b;

or, R_6 and R_7 together with the carbon atoms to which they are attached form a 3-5 membered heterocyclyl;

each R_b is independently selected from D, F, Cl, Br, I, OH, NH_2, CN, C_{1-3} alkoxy, and -C(=O)-$NR_{b1}R_{b2}$;

R_8 is selected from H, F, Cl, Br, I, OH, NH_2, CN, C_{1-3} alkyl, and C_{1-3} alkoxy, wherein the C_{1-3} alkyl and C_{1-3} alkoxy are each independently optionally substituted with 1, 2, 3, 4, or 5 R_a;

or, R_8 and $R_{8'}$ together with the carbon atom to which they are attached form a C_{3-5} cycloalkyl or 3-5 membered heterocyclyl, wherein the C_{3-5} cycloalkyl and 3-5 membered heterocyclyl are each independently optionally substituted with 1, 2, or 3 R_{10};

R_9 is selected from -C(=O)-$NR_{b3}R_{b4}$ and -CH_2R_c;

each R_{10} is independently selected from oxo, D, F, Cl, Br, I, OH, NH_2, CN, C_{1-3} alkyl, C_{1-3} alkoxy, C_{1-3} alkylamino, di-C_{1-3} alkylamino, -C(=O)-R_d, -S-R_d, -S(=O)-R_d, -$S(=O)_2$-R_d, -NH-C(=O)-R_d, C_{6-10} aryl, and 5-10 membered heteroaryl, wherein the C_{1-3} alkyl is optionally substituted with 1, 2, or 3 OH or F, and the C_{6-10} aryl and 5-10 membered heteroaryl are each independently optionally substituted with 1, 2, 3, 4, or 5 R_{s1};

R_{b1} and R_{b2} are each independently selected from H, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-10} cycloalkyl, 3-10 membered heterocyclyl, C_{6-10} aryl, and 5-10 membered heteroaryl, wherein the C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-10} cycloalkyl, 3-10 membered heterocyclyl, C_{6-10} aryl, and 5-10 membered heteroaryl are each independently optionally substituted with 1, 2, 3, or 4 R_{e1};

or, R_{b1} and R_{b2} together with the nitrogen atom to which they are attached form a 3-6 membered heterocyclyl, wherein the 3-6 membered heterocyclyl is optionally substituted with 1, 2, 3, or 4 R_{e1};

R_{b3} and R_{b4} are each independently selected from H, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-10} cycloalkyl, 3-10 membered heterocyclyl, C_{6-10} aryl, and 5-10 membered heteroaryl, wherein the C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-10} cycloalkyl, 3-10 membered heterocyclyl, C_{6-10} aryl, and 5-10 membered heteroaryl are each independently optionally substituted with 1, 2, 3, or 4 R_{e2};

or, R_{b3} and R_{b4} together with the nitrogen atom to which they are attached form a 3-6 membered heterocyclyl, wherein the 3-6 membered heterocyclyl is optionally substituted with 1, 2,

3, or 4 R_{e2};

R_c is selected from F, Cl, Br, I, OH, NH_2, -(C=O)$NR_{C1}R_{C2}$, -O(C=O)$NR_{C1}R_{C2}$, -NR_{C0}(C=O)R_{C1}, and -NR_{C0}(C=O)$NR_{C1}R_{C2}$;

R_{C0}, R_{C1}, and R_{C2} are each independently selected from H, C_{1-6} alkyl, C_{3-6} cycloalkyl, and 3-6 membered heterocyclyl;

R_d is selected from C_{1-3} alkyl;

R_{e1} is selected from F, Cl, Br, I, OH, NH_2, NO_2, C_{1-3} alkyl, C_{1-3} alkylamino, di-C_{1-3} alkylamino, CN, C_{1-3} alkoxy, -S(=O)$_2$-(C_{1-3} alkyl), -(C=O)(C_{1-3} alkyl), -(C=O)O(C_{1-3} alkyl), -(C=O)NH(C_{1-3} alkyl), -(C=O)N(C_{1-3} alkyl)$_2$, C_{3-10} cycloalkyl, 3-10 membered heterocyclyl, C_{6-10} aryl, and 5-10 membered heteroaryl;

R_{e2} is selected from F, Cl, Br, I, OH, NH_2, NO_2, C_{1-3} alkyl, C_{1-3} alkylamino, di-C_{1-3} alkylamino, CN, C_{1-3} alkoxy, -S(=O)$_2$-(C_{1-3} alkyl), -(C=O)(C_{1-3} alkyl), -(C=O)O(C_{1-3} alkyl), -(C=O)NH(C_{1-3} alkyl), -(C=O)N(C_{1-3} alkyl)$_2$, C_{3-10} cycloalkyl, 3-10 membered heterocyclyl, C_{6-10} aryl, and 5-10 membered heteroaryl, wherein the C_{3-10} cycloalkyl, 3-10 membered heterocyclyl, C_{6-10} aryl, and 5-10 membered heteroaryl are each independently optionally substituted with 1, 2, 3, 4, or 5 R_{s1}, and wherein the C_{1-3} alkyl and C_{1-3} alkoxy are each independently optionally substituted with 1, 2, 3, 4, or 5 R_{s2};

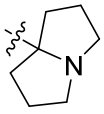
or, two R_{e2} together with the carbon atoms to which they are attached form a C_6 aryl or 5- or 6-membered heteroaryl;

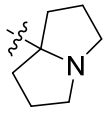
R_{s1} is selected from oxo, F, Cl, Br, I, OH, NH_2, NO_2, C_{1-6} alkyl, C_{1-6} alkylamino, di-C_{1-6} alkylamino, CN, C_{1-6} alkoxy, -S(=O)$_2$-(C_{1-3} alkyl), -(C=O)(C_{1-3} alkyl), -(C=O)O(C_{1-3} alkyl), -(C=O)NH(C_{1-3} alkyl), and -(C=O)N(C_{1-3} alkyl)$_2$;

R_{s2} is selected from F, Cl, Br, I, OH, NH_2, C_{1-6} alkylamino, di-C_{1-6} alkylamino, CN, C_{1-6} alkoxy, -S(=O)$_2$-(C_{1-3} alkyl), -(C=O)(C_{1-3} alkyl), -(C=O)O(C_{1-3} alkyl), -(C=O)NH(C_{1-3} alkyl), and -(C=O)N(C_{1-3} alkyl)$_2$; and

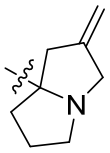
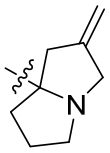
m is selected from 0, 1, 2, 3, 4, and 5;

provided that,

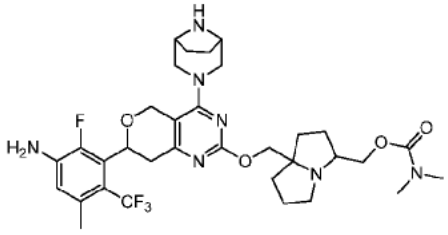
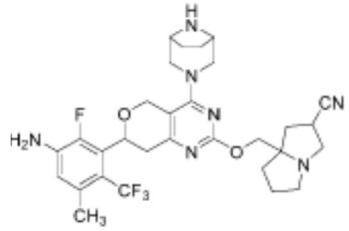
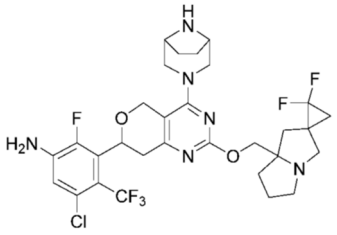
1) when Ring B is selected from 

, and the 

is substituted with 1 R_{10}, and R_{10} is F, at least one of R_1, R_2, R_4, R_5, R_6, R_7, $R_{6'}$, and $R_{7'}$ is not H;

2) when Ring B is selected from , and the  is optionally substituted with 1, 2, 3, or 4 R_{10}, at least one of R_1, R_2, R_4, R_5, R_6, R_7, $R_{6'}$, and $R_{7'}$ is not H; and

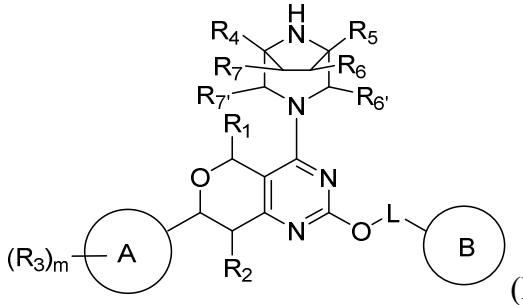
3) the compound is not

,  and .

2. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according claim 1, wherein R_N is H;

alternatively, wherein R_N is C_{1-3} alkyl optionally substituted with 1, 2, or 3 F or Cl.

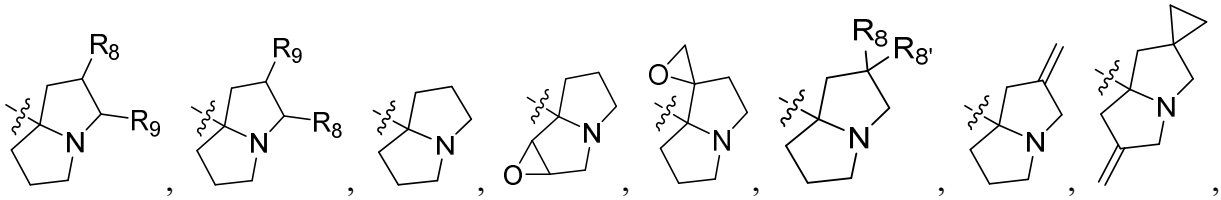
3. A compound of Formula (I') or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof:

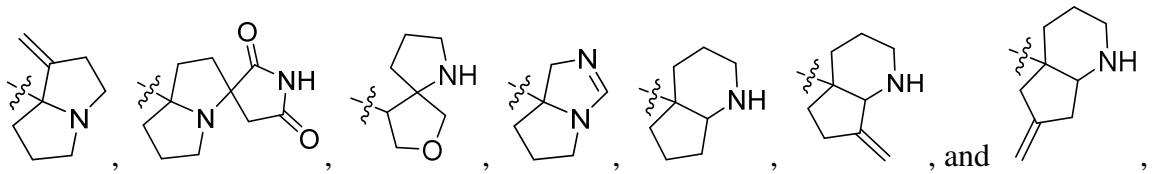

(I'),

wherein,

Ring A is selected from C_6 aryl and 5-6 membered heteroaryl;

Ring B is selected from





, and ,

wherein Ring B is optionally substituted with 1, 2, 3, or 4 R_{10};

L is selected from -CH_2-, wherein the -CH_2- is optionally substituted with 1 or 2 D;

R_1 and R_2 are each independently selected from oxo, H, F, Cl, Br, I, and CN;

each R_3 is independently selected from F, Cl, Br, I, OH, NH_2, CN, C_{1-3} alkyl, C_{1-3} alkoxy, C_{1-3} alkylamino, di-C_{1-3} alkylamino, C_{2-4} alkenyl, C_{2-4} alkynyl, and C_{3-5} cycloalkyl, wherein the C_{1-3} alkyl, C_{1-3} alkoxy, C_{1-3} alkylamino, di-C_{1-3} alkylamino, C_{2-4} alkenyl, C_{2-4} alkynyl, and C_{3-5} cycloalkyl are each independently optionally substituted with 1, 2, 3, 4, or 5 R_a;

each R_a is independently selected from D, F, Cl, Br, and I;

R_4, R_5, R_6, R_7, $R_{6'}$, and $R_{7'}$ are each independently selected from oxo, H, F, Cl, Br, I, OH, NH_2, CN, C_{1-3} alkyl, C_{2-4} alkenyl, C_{1-3} alkoxy, -C(=O)-R_d, -C(=O)-$NR_{b1}R_{b2}$, and =NO(C_{1-3} alkyl), wherein the C_{1-3} alkyl, C_{2-4} alkenyl, and C_{1-3} alkoxy are each independently optionally substituted with 1, 2, 3, 4, or 5 R_b;

or, R_6 and R_7 together with the carbon atoms to which they are attached form a 3-5 membered heterocyclyl;

each R_b is independently selected from D, F, Cl, Br, I, OH, NH_2, CN, C_{1-3} alkoxy, and -C(=O)-$NR_{b1}R_{b2}$;

R_8 is selected from H, F, Cl, Br, I, OH, NH_2, CN, C_{1-3} alkyl, and C_{1-3} alkoxy, wherein the C_{1-3} alkyl and C_{1-3} alkoxy are each independently optionally substituted with 1, 2, 3, 4, or 5 R_a;

or, R_8 and $R_{8'}$ together with the carbon atom to which they are attached form a C_{3-5} cycloalkyl or 3-5 membered heterocyclyl, wherein the C_{3-5} cycloalkyl and 3-5 membered heterocyclyl are each independently optionally substituted with 1, 2, or 3 R_{10};

R_9 is selected from -C(=O)-$NR_{b1}R_{b2}$ and -CH_2R_c;

each R_{10} is independently selected from oxo, D, F, Cl, Br, I, OH, NH_2, CN, C_{1-3} alkyl, C_{1-3} alkoxy, C_{1-3} alkylamino, di-C_{1-3} alkylamino, -S-R_d, -S(=O)-R_d, -$S(=O)_2$-R_d, and -NH-C(=O)-R_d, wherein the C_{1-3} alkyl is optionally substituted with 1, 2, or 3 OH;

R_{b1} and R_{b2} are each independently selected from H, C_{1-6} alkyl, C_{3-10} cycloalkyl, 3-10 membered heterocyclyl, C_{6-10} aryl, and 5-10 membered heteroaryl, wherein the C_{1-6} alkyl, C_{3-10} cycloalkyl, 3-10 membered heterocyclyl, C_{6-10} aryl, and 5-10 membered heteroaryl are each

independently optionally substituted with 1, 2, or 3 R_{e1};

or, R_{b1} and R_{b2} together with the nitrogen atom to which they are attached form a 3-6 membered heterocyclyl;

R_c is selected from F, Cl, Br, I, OH, NH_2, $-O(C=O)NR_{C1}R_{C2}$, $-NR_{C0}(C=O)R_{C1}$, and $-NR_{C0}(C=O)NR_{C1}R_{C2}$;

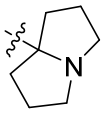
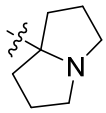
R_{C0}, R_{C1}, and R_{C2} are each independently selected from H, C_{1-6} alkyl, C_{3-6} cycloalkyl, and 3-6 membered heterocyclyl;

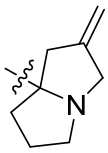
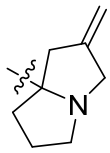
R_d is selected from C_{1-3} alkyl;

R_{e1} is selected from F, Cl, Br, I, OH, NH_2, C_{1-3} alkylamino, di-C_{1-3} alkylamino, CN, C_{1-3} alkoxy, C_{3-10} cycloalkyl, 3-10 membered heterocyclyl, C_{6-10} aryl, and 5-10 membered heteroaryl; and

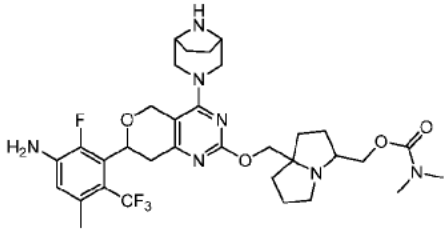
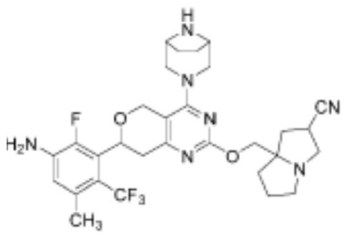
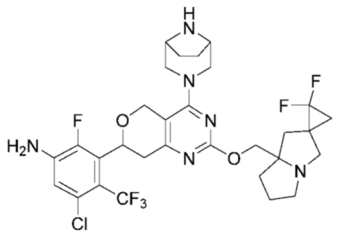
m is selected from 0, 1, 2, 3, 4, and 5;

provided that,

1) when Ring B is selected from , and the  is substituted with 1 R_{10}, and R_{10} is F, at least one of R_1, R_2, R_4, R_5, R_6, R_7, $R_{6'}$, and $R_{7'}$ is not H;

2) when Ring B is selected from , and the  is optionally substituted with 1, 2, 3, or 4 R_{10}, at least one of R_1, R_2, R_4, R_5, R_6, R_7, $R_{6'}$, and $R_{7'}$ is not H; and

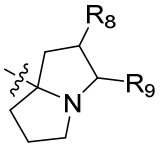
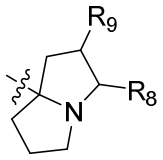
3) the compound is not

,  and .

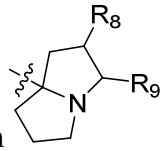
4. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to any one of claims 1-3, wherein Ring A is selected from C_6 aryl;

alternatively, wherein Ring A is selected from 5-membered heteroaryl.

5. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to any one of claims 1-4, wherein the compound has any one of the following definitions:

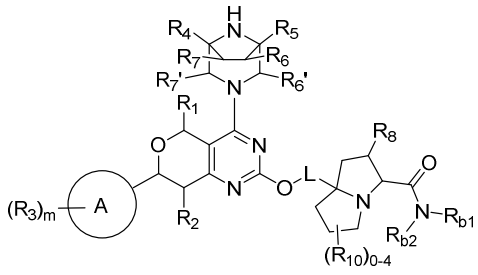
i) wherein Ring B is selected from  and , and is optionally substituted with 1, 2, 3, or 4 R_{10},

preferably, wherein R_4, R_5, R_6, R_7, $R_{6'}$ and $R_{7'}$ are selected from H;

ii) wherein Ring B is selected from , and is optionally substituted with 1, 2, 3, or 4 R_{10},

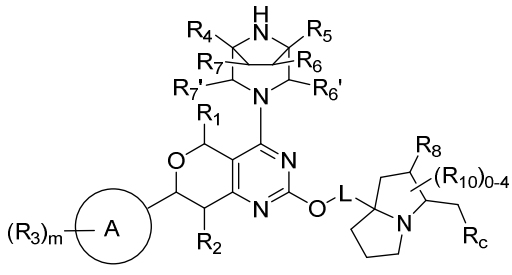
preferably, wherein R_4, R_5, R_6, R_7, $R_{6'}$ and $R_{7'}$ are selected from H;

iii) selected from a compound of Formula (I'-1-i) or a stereoisomers thereof, or a pharmaceutically acceptable salts thereof,

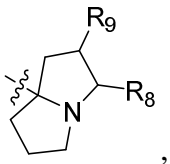

(I'-1-i),

preferably, wherein R_4, R_5, R_6, R_7, $R_{6'}$ and $R_{7'}$ are selected from H;

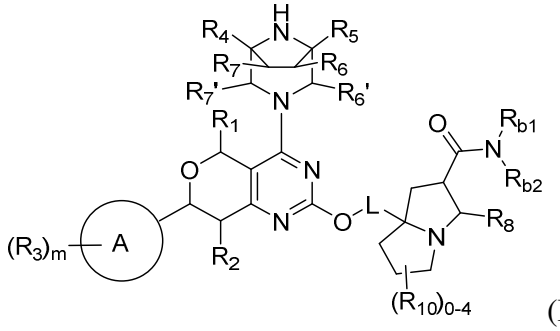
iv) selected from a compound of Formula (I'-2-i) or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof,


(I'-2-i),

preferably, wherein R_4, R_5, R_6, R_7, $R_{6'}$ and $R_{7'}$ are selected from H;

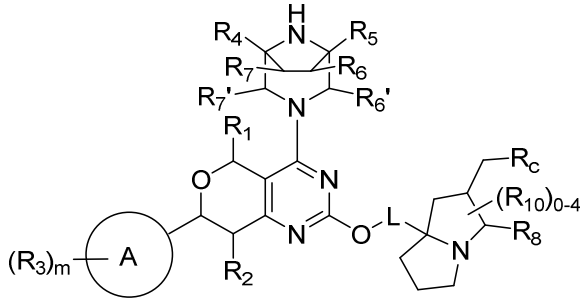
v) wherein Ring B is selected from , and is optionally substituted with 1, 2, 3, or 4 R_{10}, preferably, wherein R_4, R_5, R_6, R_7, $R_{6'}$ and $R_{7'}$ are selected from H;

vi) selected from a compound of Formula (I'-1-ii) or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof,

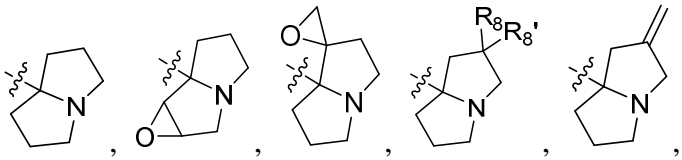

(I'-1-ii),

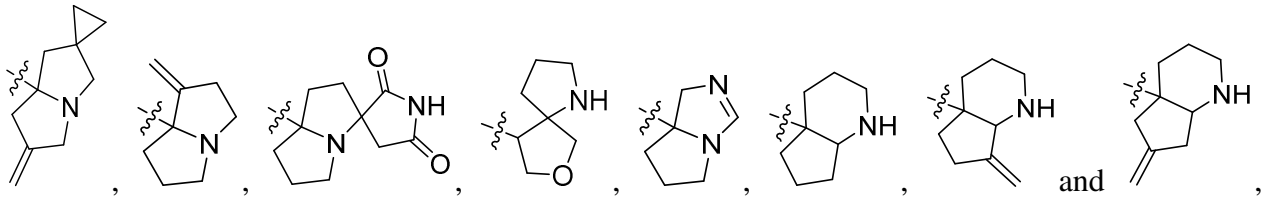
preferably, wherein R_4, R_5, R_6, R_7, $R_{6'}$ and $R_{7'}$ are selected from H;

vii) selected from a compound of Formula (I'-2-ii) or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof,


(I'-2-ii),

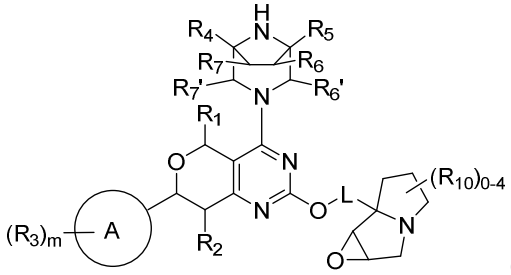
preferably, wherein R_4, R_5, R_6, R_7, $R_{6'}$ and $R_{7'}$ are selected from H;

viii) wherein Ring B is selected from ,

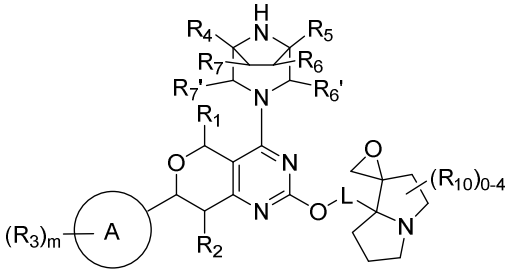


and is optionally substituted with 1, 2, 3, or 4 R_{10};

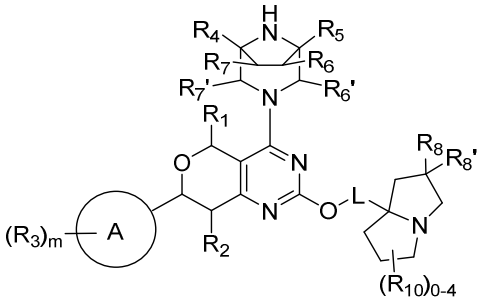
ix) selected from a compound of Formula (I'-3), (I'-4), (I'-5), (I'-6), (I'-7), (I'-8), (I'-9), (I'-10), (I'-11), (I'-12), and (I'-13), or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof,



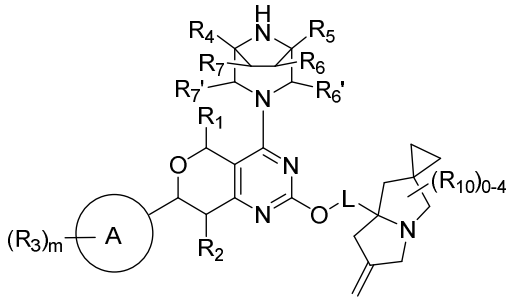
(I'-3),



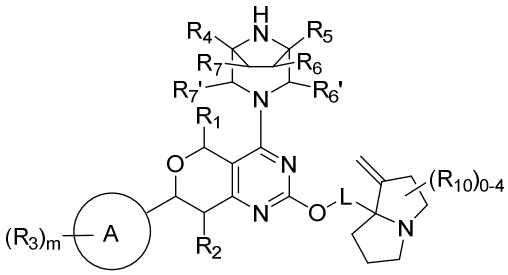
(I'-4),



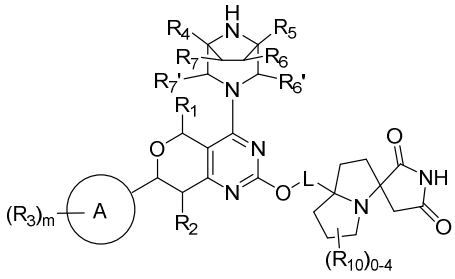
(I'-5),



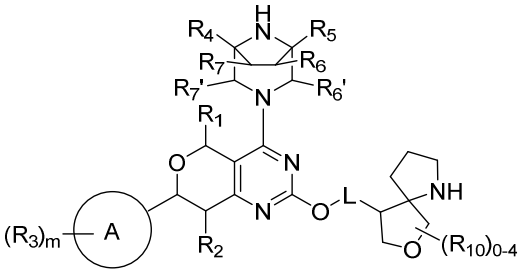
(I'-6),



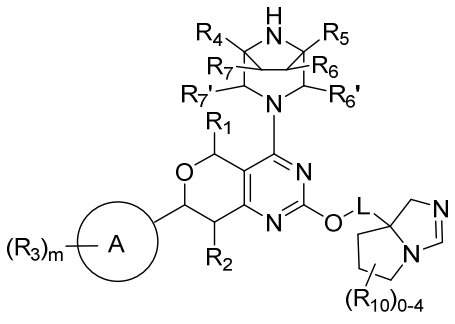
(I'-7),



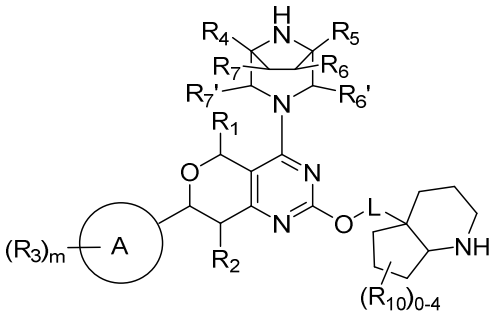
(I'-8),



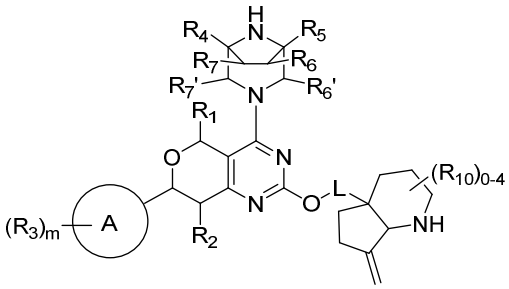
(I'-9),



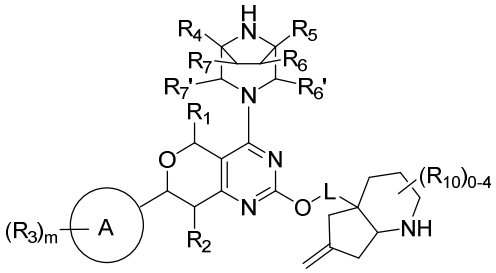
(I'-10),



(I'-11),



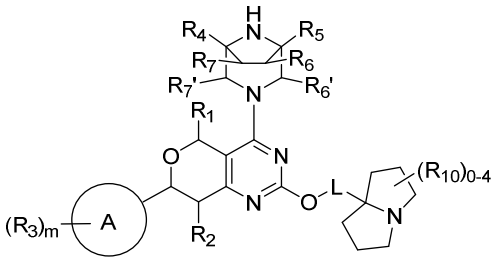
(I'-12)



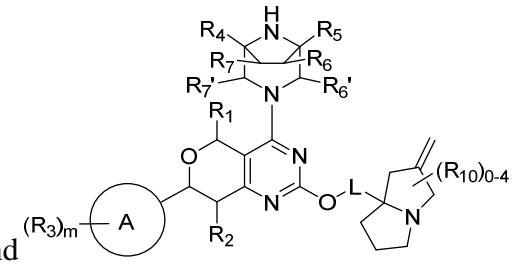
and (I'-13),

preferably, wherein R_4, R_5, R_6, R_7, $R_{6'}$ and $R_{7'}$ are selected from H.

6. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to claim 5, wherein the compound in the definition viii) of claim 5 is selected from a compound of Formula (I'-14) and (I'-15), or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof,



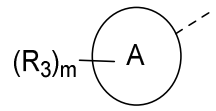
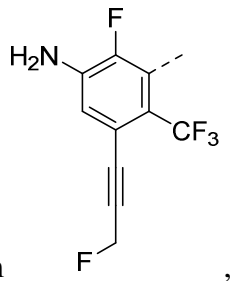
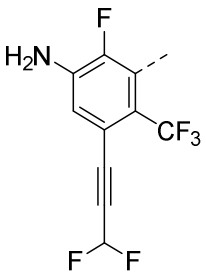
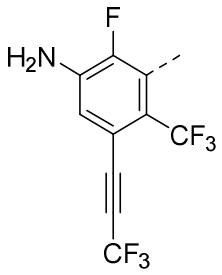
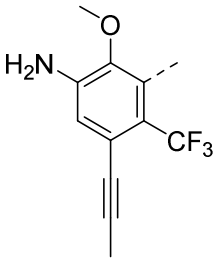
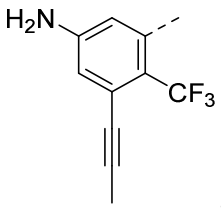
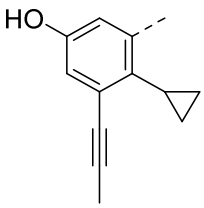
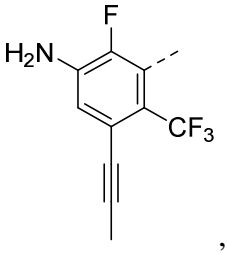
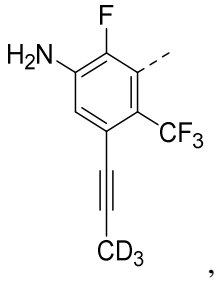
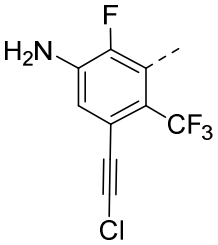
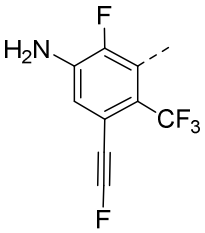
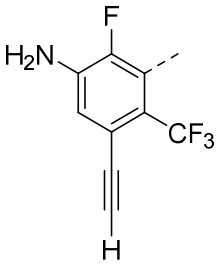
(I'-14) and

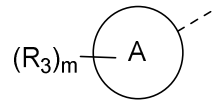
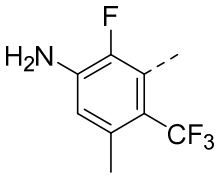
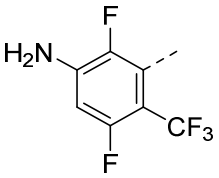
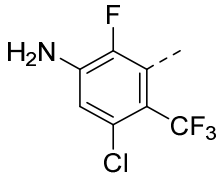
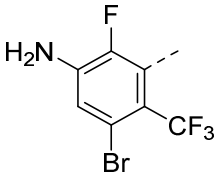
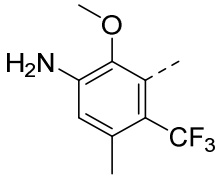
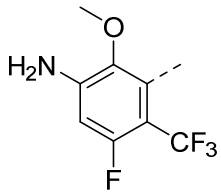
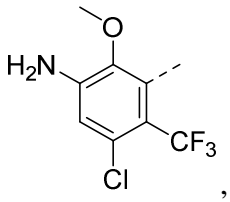
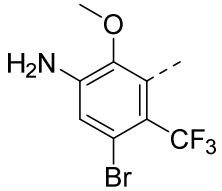
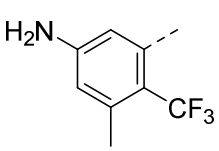
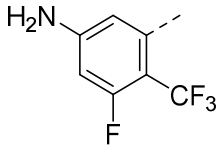
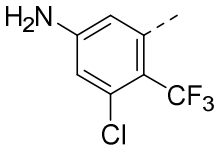
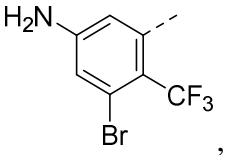
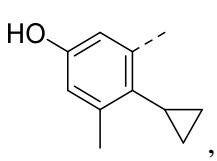
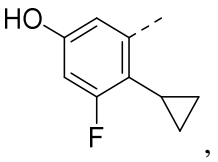
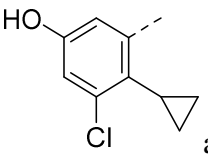
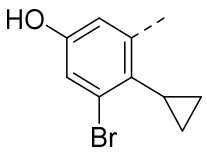


(I'-15).

7. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to any one of claims 1-6, wherein Ring A is selected from phenyl, and is substituted with at least one R_3, and each R_3 is independently selected from F, OH, NH_2, CF_3, OCH_3, $-C\equiv CCH_3$, $-C\equiv CCH_2F$, $-C\equiv CCHF_2$, $-C\equiv CCF_3$, $-C\equiv CCD_3$, $-C\equiv CH$, $-C\equiv CCl$, $-C\equiv CF$ and cyclopropyl.

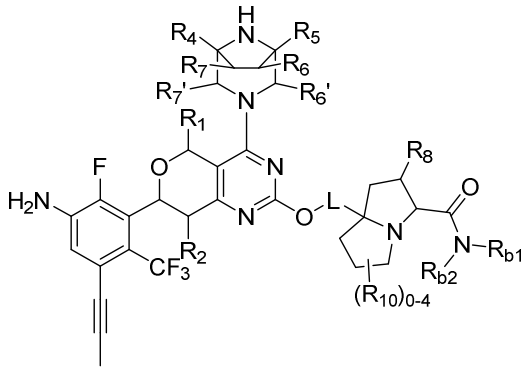
8. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to any

one of claims 1-6, wherein  is selected from , , , , , , , , , , and .

9. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to any one of claims 1-6, wherein  is selected from , , , , , , , , , , , , , , , and .

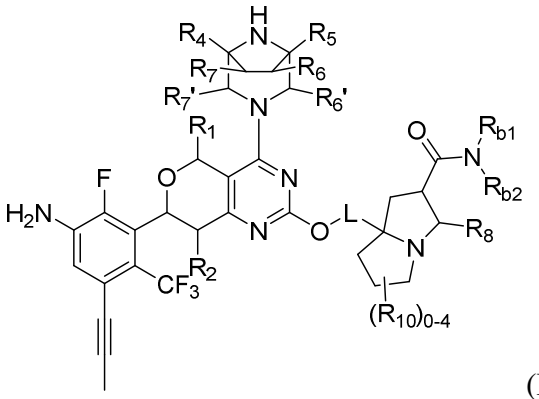
10. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to claim 8, wherein the compound has any one of the following definitions:

i) the compound is selected from a compound of Formula (I'-1'-i) or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof,



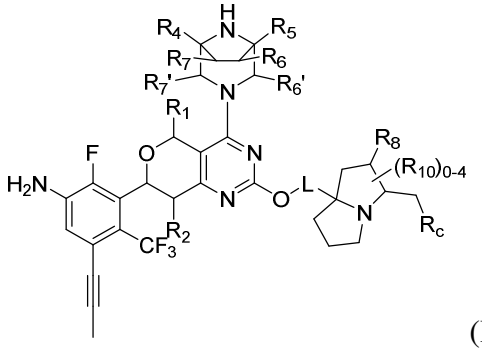
(I'-1'-i);

ii) the compound is selected from a compound of Formula (I'-1'-ii) or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof,



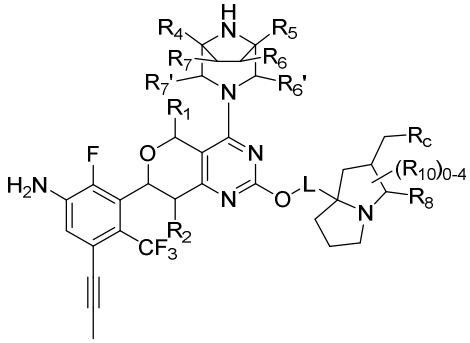
(I'-1'-ii);

iii) the compound is selected from a compound of Formula (I'-2'-i) or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof,



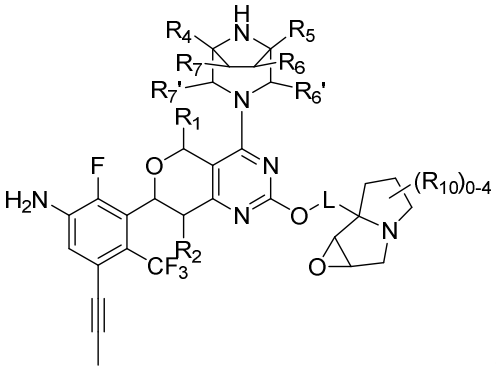
(I'-2'-i);

iv) the compound is selected from a compound of Formula (I'-2'-ii) or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof,

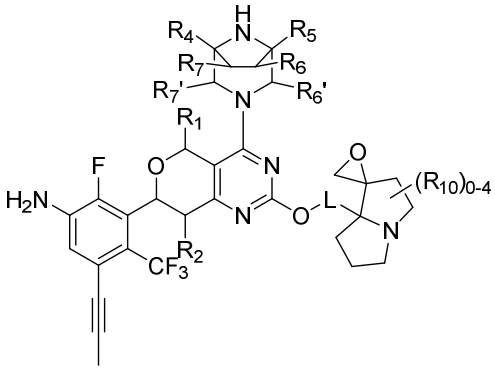


(I'-2'-ii);

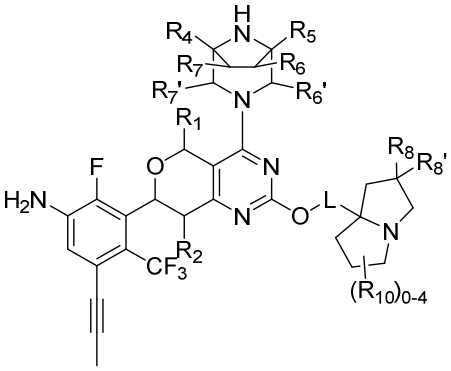
v) the compound is selected from a compound of Formula (I'-3'), (I'-4'), (I'-5'), (I'-6'), (I'-7'), (I'-8'), (I'-9'), (I'-10'), (I'-11'), (I'-12'), and (I'-13'), or a stereoisomer thereof, or a pharmaceutically acceptable salt thereof,



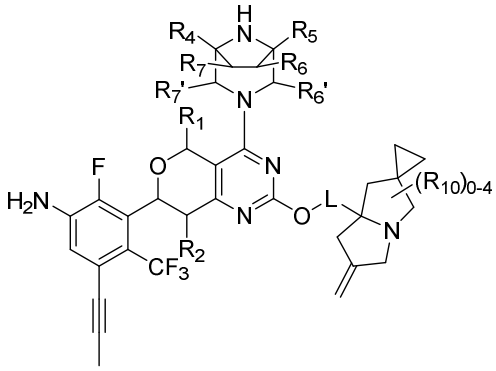
(I'-3'),



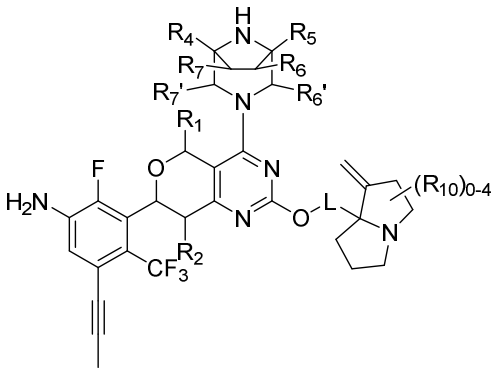
(I'-4'),



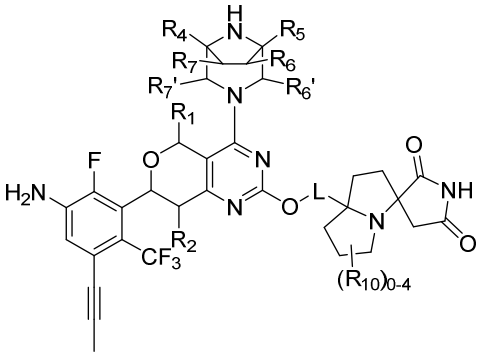
(I'-5'),



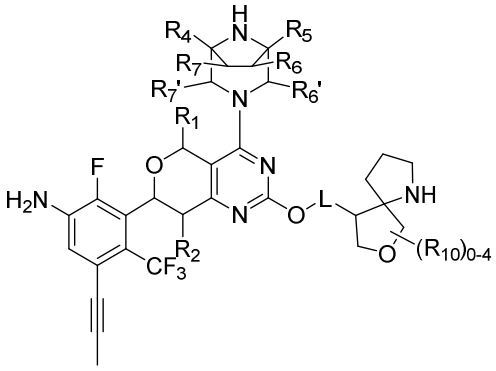
(I'-6'),



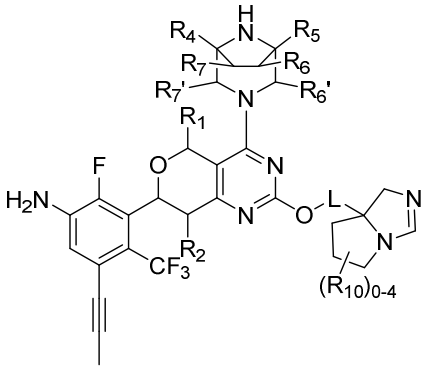
(I'-7'),



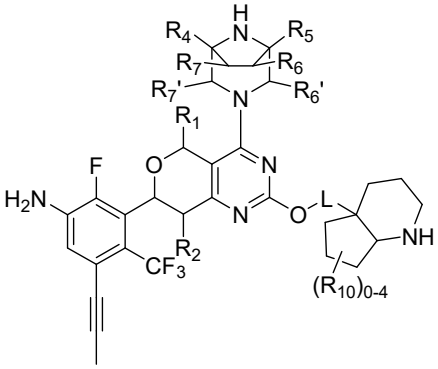
(I'-8'),



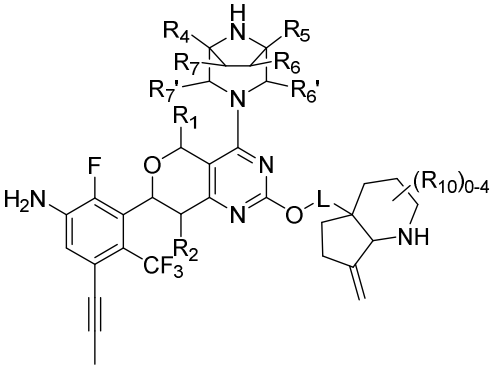
(I'-9'),



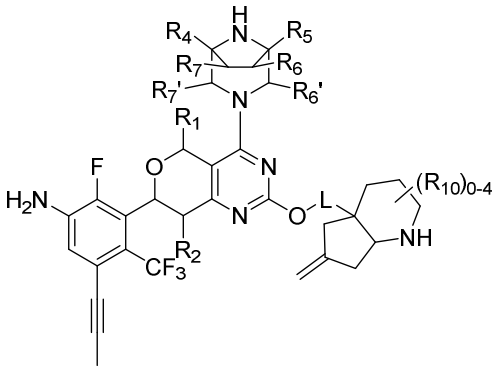
(I'-10'),



(I'-11'),



(I'-12'), or

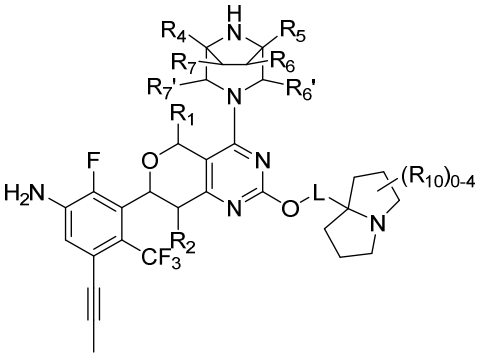


(I'-13'),

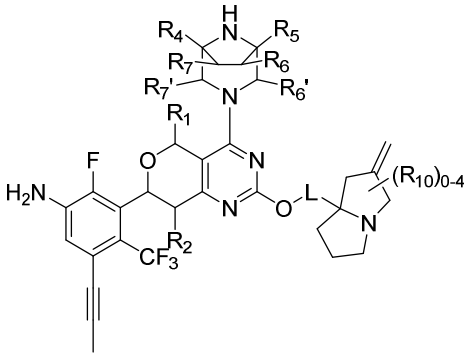
preferably, wherein R_4, R_5, R_6, R_7, $R_{6'}$, and $R_{7'}$ are selected from H;

vi) the compound is selected from a compound of Formula (I'-14') and (I'-15'), or a stereoisomer

thereof, or a pharmaceutically acceptable salt thereof,



(I'-14') and



(I'-15').

11. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to any one of claims 1-10, wherein L is selected from -C($R_{L1}R_{L2}$)-, and R_{L1} and R_{L2} are each independently selected from H and D;

alternatively, wherein L is selected from -C($R_{L1}R_{L2}$)-, and R_{L1} and R_{L2} are each selected from H;

alternatively, wherein L is selected from -C($R_{L1}R_{L2}$)-, and at least one of R_{L1} and R_{L2} is selected from C_{1-3} alkyl.

12. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to any one of claims 1-11, wherein R_1 and R_2 are selected from H.

13. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to claim 1, selected from Table 5 or Table 5a.

14. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to claim 13, selected from Table 6 and Table 6a.

15. Use of the compound or the stereoisomer or pharmaceutically acceptable salt thereof according to any one of claims 1-14, in the preparation of a medicament for the treatment of a disease or disorder associated with a KRAS mutation.

16. The compound or the stereoisomer or pharmaceutically acceptable salt thereof according to any one of claims 1-14, for use in treating a disease or disorder associated with a KRAS mutation.

17. The use of claim 15, or the compound for use of claim 16, wherein the KRAS mutation is a KRAS G12D mutation.