each R^N is independently selected from H and C_{1-6} alkyl, wherein said C_{1-6} alkyl is optionally substituted with 1, 2, or 3 substituents independently selected from halo, CN, NO_2, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$;

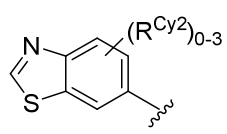
n is an integer selected from 1, 2, and 3;

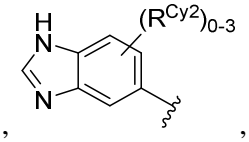
each of R^1, R^3, R^4, and R^5, is independently selected from H, halo, CN, NO_2, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, and C_{2-6} alkynyl are each optionally substituted with 1, 2, or 3 substituents independently selected from CN, NO_2, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$;

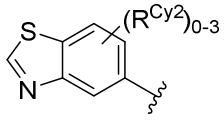
R^A is selected from Cy^{A1}, O-Cy^{A1}, and $N(R^N)$-Cy^{A1};

Cy^{A1} is selected from C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, and 4-10 membered heterocycloalkyl, each of which is optionally substituted with 1, 2, 3, 4, or 5 substituents independently selected from R^{Cy1};

R^B is selected from the group consisting of



,


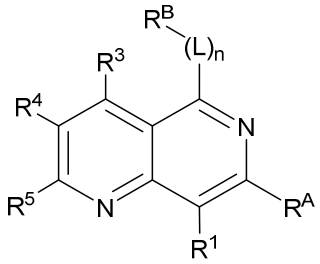
, and


; or

R^B is a 5-10 membered heteroaryl, optionally substituted with 1, 2, or 3 substituents independently selected from R^{Cy2}; and R^A is 5-10 membered heteroaryl, optionally substituted with 1, 2, or 3 substituents independently selected from R^{Cy1};

HO-C_{1-3} alkylene, C_{6-10} aryl, C_{6-10} aryloxy, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkylene, C_{3-10} cycloalkyl-C_{1-4} alkylene, (5-10 membered heteroaryl)-C_{1-4} alkylene, (4-10 membered heterocycloalkyl)-C_{1-4} alkylene, amino, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino, thio, C_{1-6} alkylthio, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyl, carbamyl, C_{1-6} alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, carboxy, C_{1-6} alkylcarbonyl, C_{1-6} alkoxycarbonyl, C_{1-6} alkylcarbonylamino, C_{1-6} alkylsulfonylamino, aminosulfonyl, C_{1-6} alkylaminosulfonyl, di(C_{1-6} alkyl)aminosulfonyl, aminosulfonylamino, C_{1-6} alkylaminosulfonylamino, di(C_{1-6} alkyl)aminosulfonylamino, aminocarbonylamino, C_{1-6} alkylaminocarbonylamino, and di(C_{1-6} alkyl)aminocarbonylamino.

In one aspect, the present disclosure refers to a compound of Formula (IIh):



(IIh),

or a pharmaceutically acceptable salt thereof, wherein:

each L is independently selected from O, S, $S(=O)_2$, C_{1-3} alkylene, C(=O), and $N(R^N)$, wherein said C_{1-3} alkylene is optionally substituted with 1, 2, or 3 substituents independently selected from halo, CN, NO_2, OH, C_{1-3} alkoxy, amino, C_{1-3} alkylamino, and di(C_{1-3} alkyl)amino;

each R^N is independently selected from H and C_{1-6} alkyl, wherein said C_{1-6} alkyl is optionally substituted with 1, 2, or 3 substituents independently selected from halo, CN, NO_2, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$;

n is an integer selected from 1, 2, and 3;

each of R^1, R^3, R^4, and R^5, is independently selected from H, halo, CN, NO_2, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, and C_{2-6} alkynyl are each optionally substituted with 1, 2, or 3 substituents independently selected from CN,

NO_2, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$;

wherein R^B is a 5-10 membered heteroaryl, optionally substituted with 1, 2, or 3 substituents independently selected from R^{Cy2};

R^A is 5-10 membered heteroaryl, optionally substituted with 1, 2, or 3 substituents independently selected from R^{Cy1};

R^{Cy1} and R^{Cy2} are each independently selected from oxo, halo, CN, NO_2, Cy^2, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, and C_{2-6} alkynyl are each optionally substituted with 1, 2, or 3 substituents independently selected from Cy^2, halo, CN, NO_2, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$;

each Cy^2 is independently selected from C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, and 4-10 membered heterocycloalkyl, each of which is optionally substituted with 1, 2, 3, 4, or 5 substituents independently selected from halo, CN, NO_2, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, and C_{2-6} alkynyl are each optionally substituted with 1, 2, or 3 substituents independently selected from halo, CN, NO_2, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$;

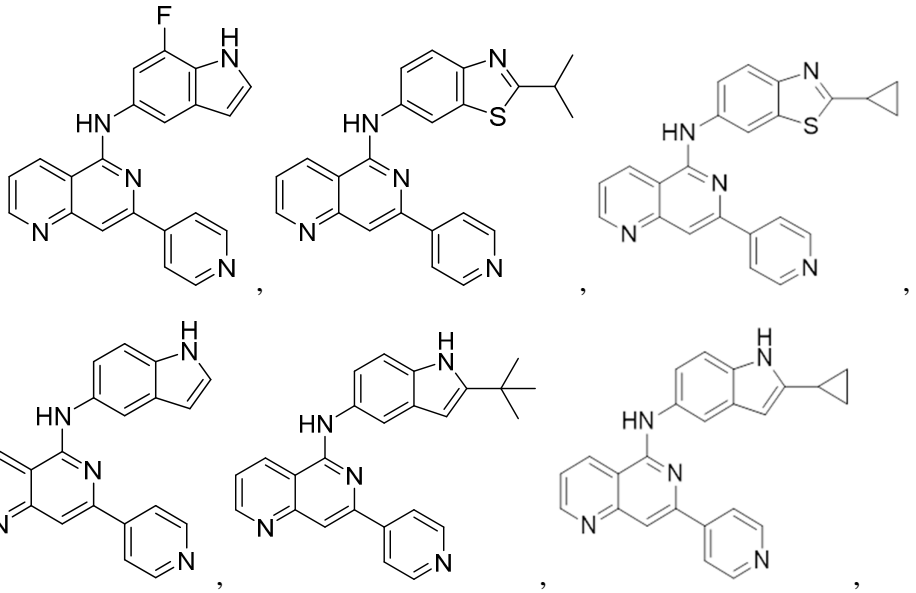
each R^{a1}, R^{b1}, R^{c1}, R^{d1}, R^{a2}, R^{b2}, R^{c2}, and R^{d2} is independently selected from H, C_{1-6} alkyl, C_{1-4} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkylene, C_{3-10} cycloalkyl-C_{1-4} alkylene, (5-10 membered heteroaryl)-C_{1-4} alkylene, and (4-10 membered heterocycloalkyl)-C_{1-4} alkylene, wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkylene, C_{3-10} cycloalkyl-C_{1-4} alkylene, (5-10 membered heteroaryl)-C_{1-4} alkylene, and (4-10 membered heterocycloalkyl)-C_{1-4} alkylene are each optionally substituted with 1, 2, 3, 4, or 5 substituents independently selected from R^g;

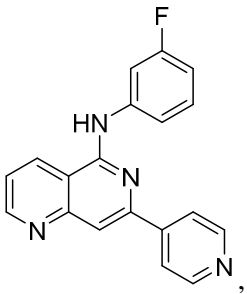
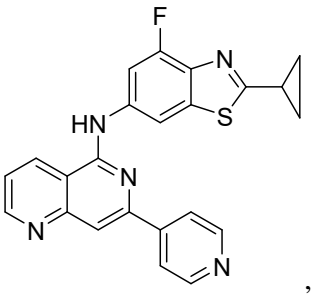
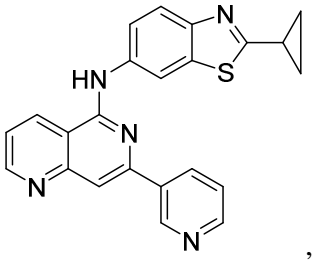
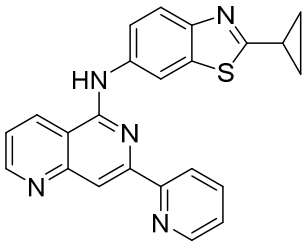
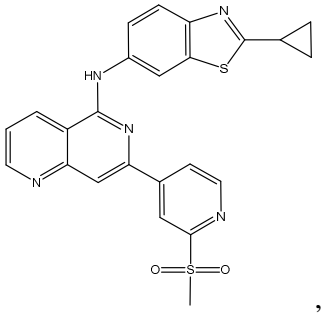
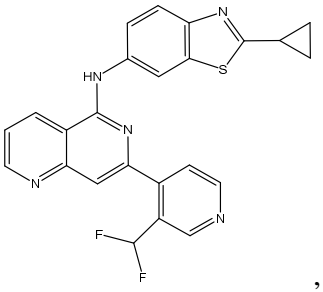
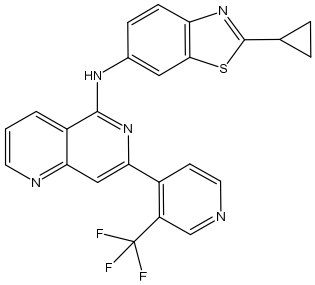
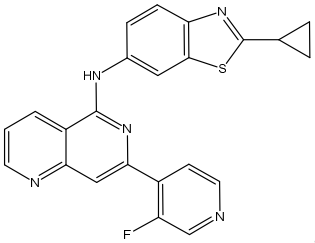
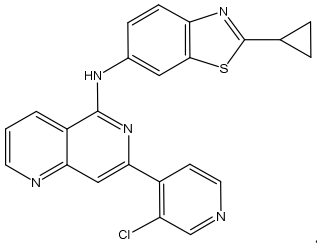
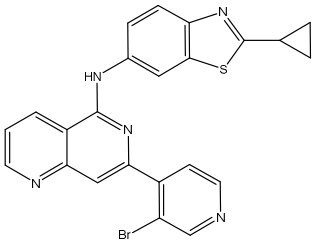
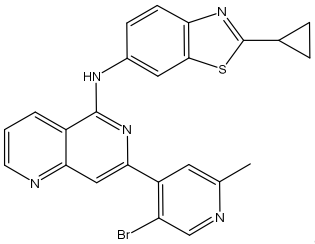
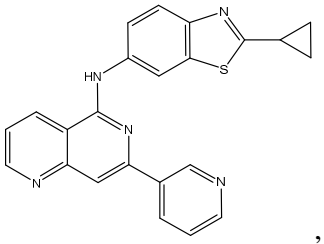
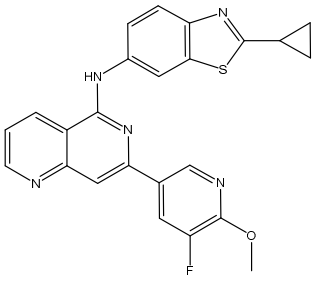
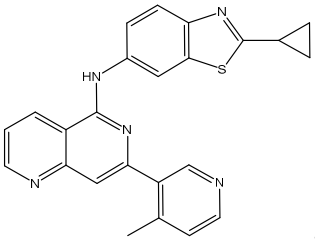
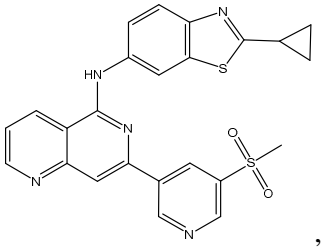
or any R^{c1} and R^{d1} together with the N atom to which they are attached form a 4-7 membered heterocycloalkyl, which is optionally substituted with 1, 2, or 3 substituents independently selected from R^g;

or any R^{c2} and R^{d2} together with the N atom to which they are attached form a 4-7 membered heterocycloalkyl, which is optionally substituted with 1, 2, or 3 substituents independently selected from R^g; and

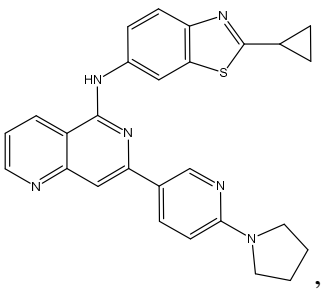
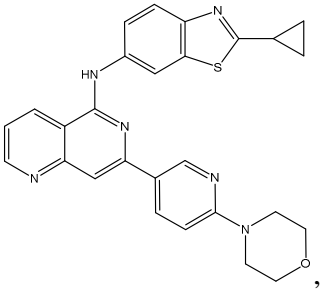
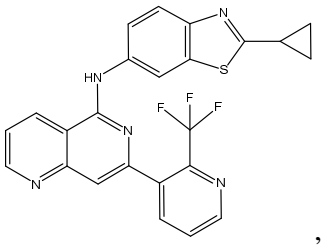
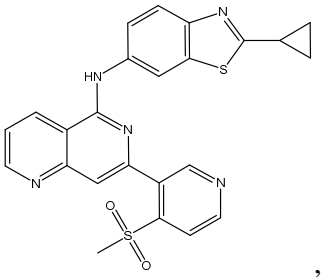
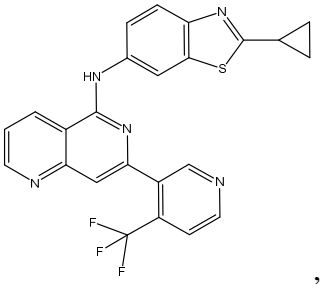
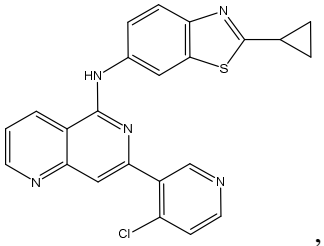
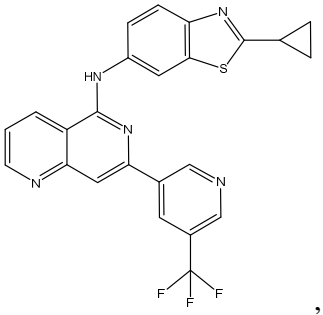
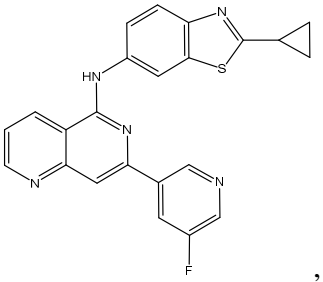
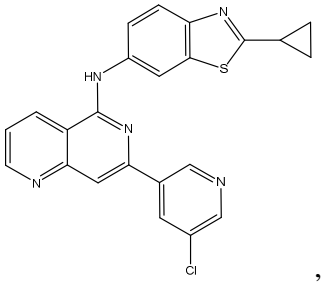
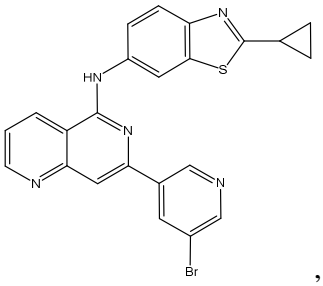
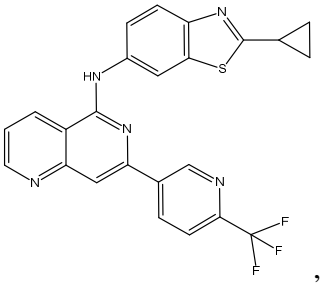
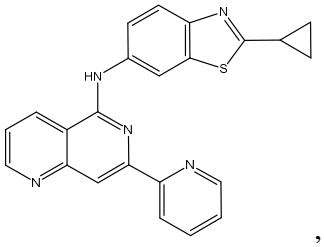
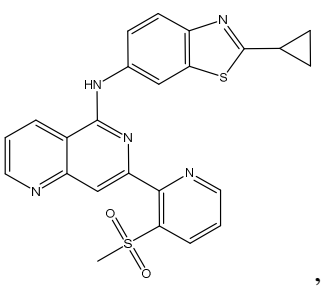
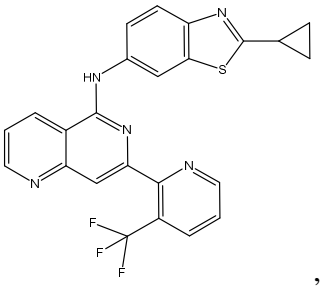
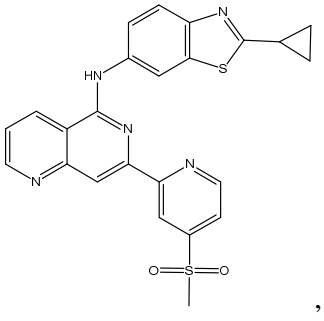
each R^g is independently selected from OH, NO_2, CN, halo, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-4} haloalkyl, C_{1-6} alkoxy, C_{1-6} haloalkoxy, cyano-C_{1-3} alkylene, HO-C_{1-3} alkylene, C_{6-10} aryl, C_{6-10} aryloxy, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkylene, C_{3-10} cycloalkyl-C_{1-4} alkylene, (5-10 membered heteroaryl)-C_{1-4} alkylene, (4-10 membered heterocycloalkyl)-C_{1-4} alkylene, amino, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino, thio, C_{1-6} alkylthio, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyl, carbamyl, C_{1-6} alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, carboxy, C_{1-6} alkylcarbonyl, C_{1-6} alkoxycarbonyl, C_{1-6} alkylcarbonylamino, C_{1-6} alkylsulfonylamino, aminosulfonyl, C_{1-6} alkylaminosulfonyl, di(C_{1-6} alkyl)aminosulfonyl, aminosulfonylamino, C_{1-6} alkylaminosulfonylamino, di(C_{1-6} alkyl)aminosulfonylamino, aminocarbonylamino, C_{1-6} alkylaminocarbonylamino, and di(C_{1-6} alkyl)aminocarbonylamino.

In one aspect, the present disclosure refers to a compound selected from the group consisting of




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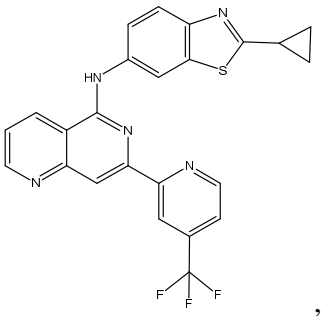
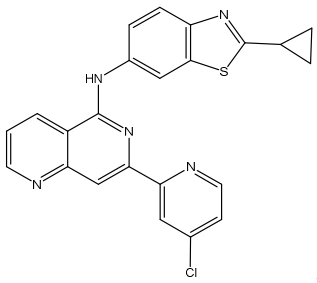
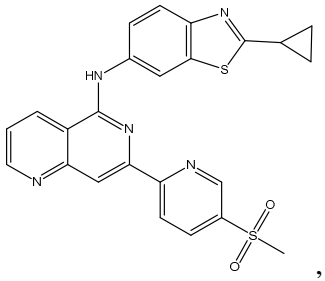
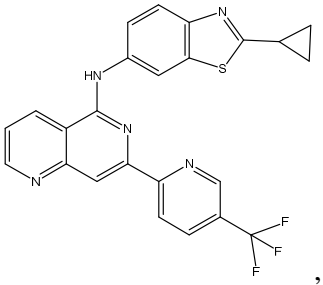
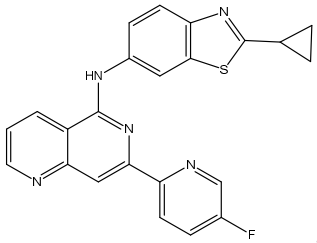
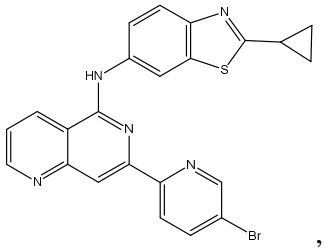
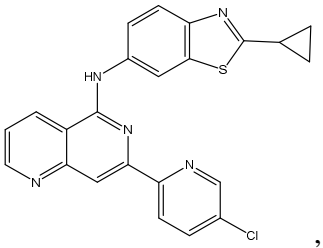
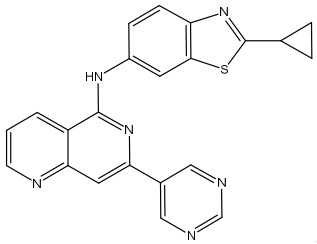
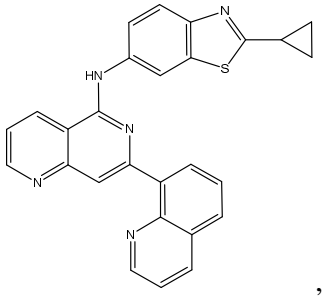
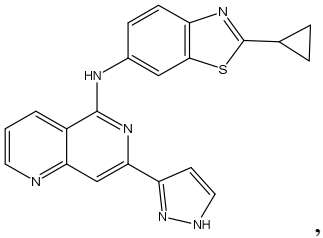
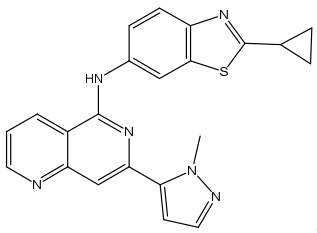
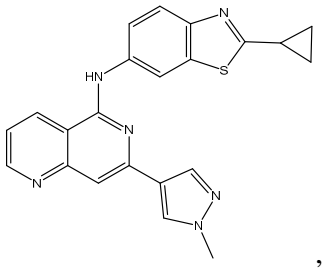
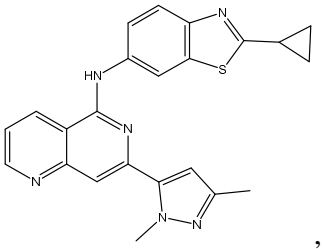
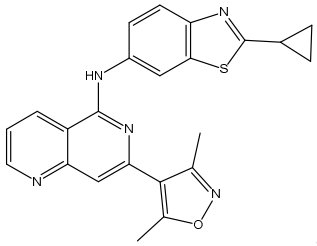
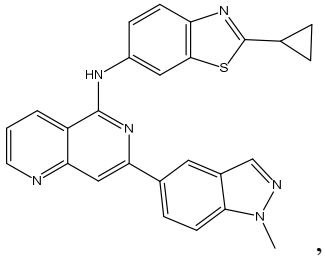
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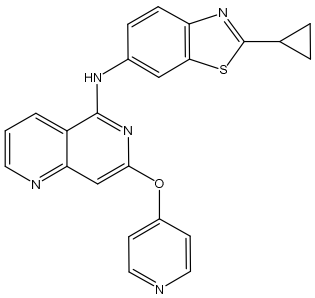
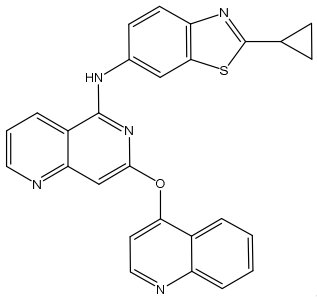
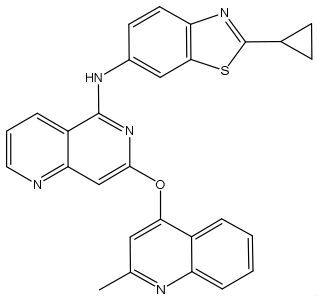
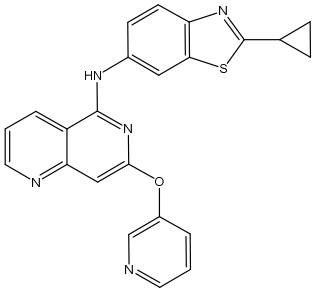
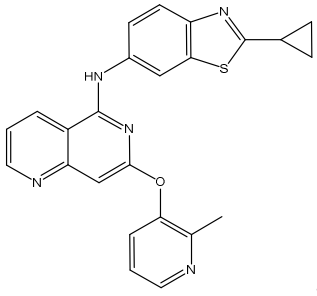
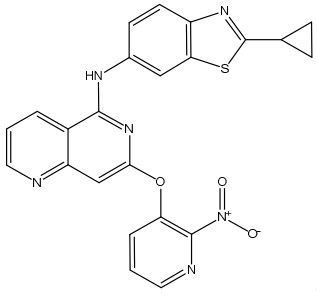
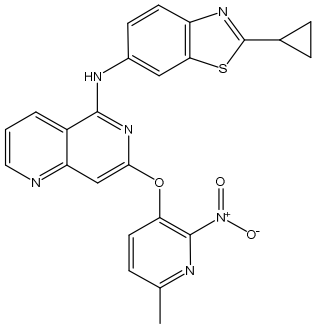
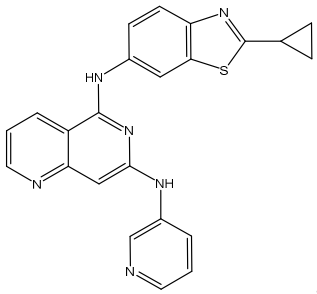
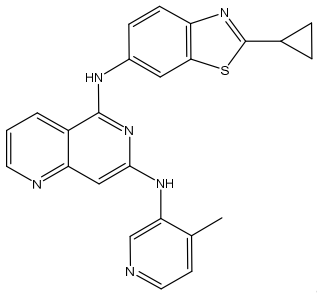
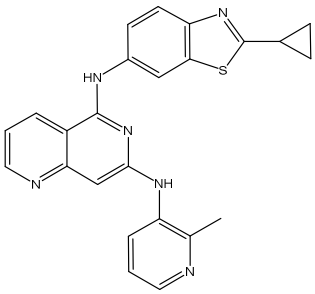
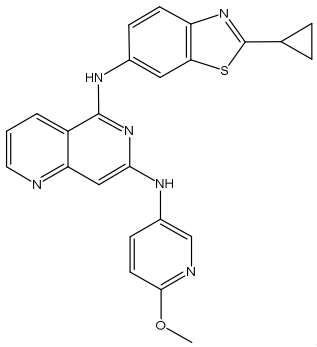
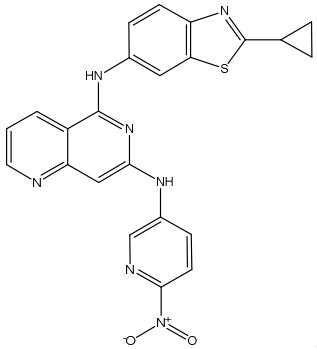
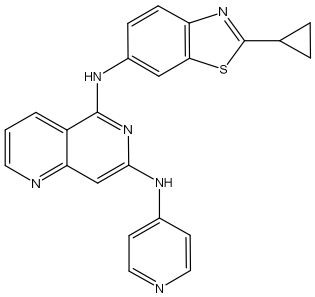
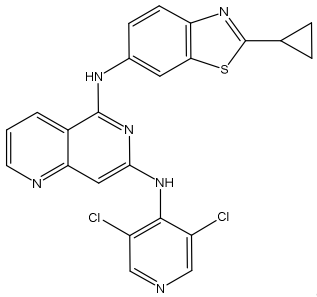
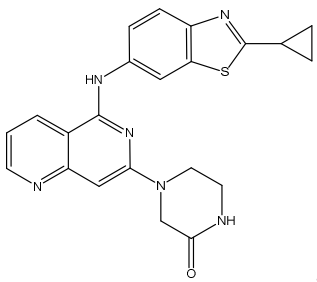
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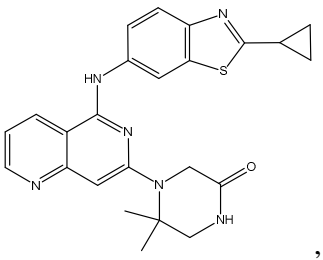
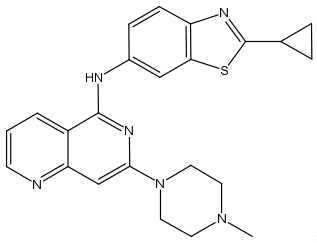
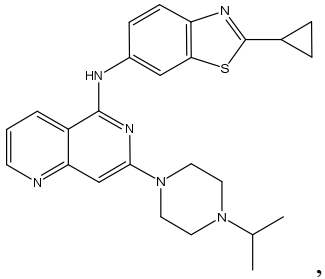
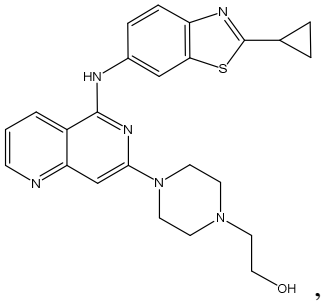
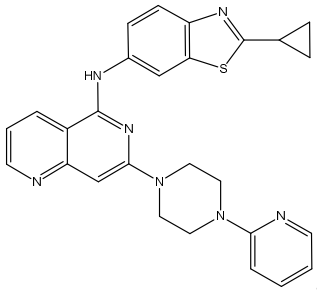
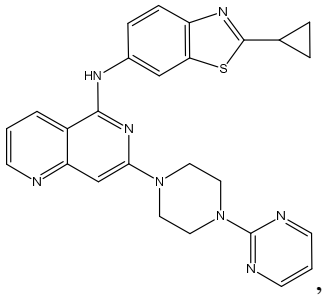
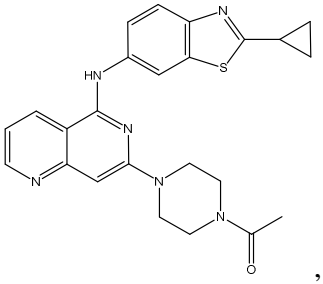
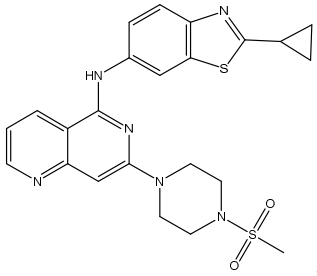
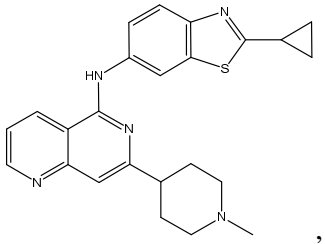
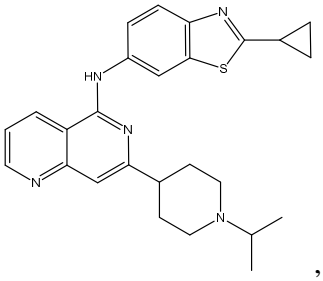
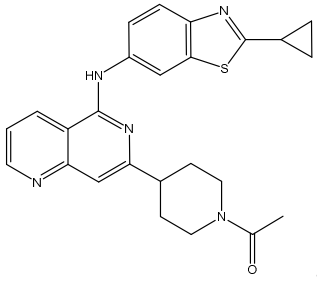
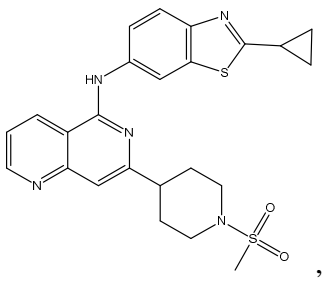
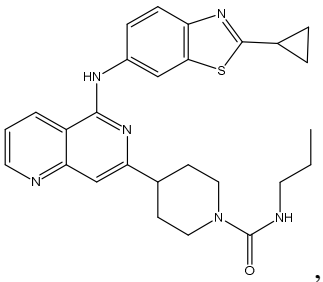
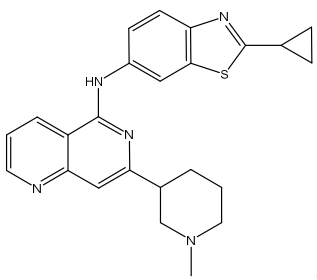
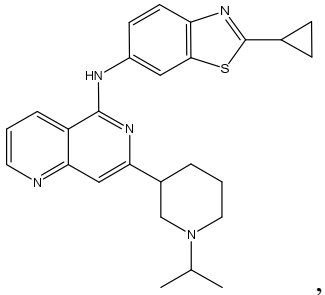
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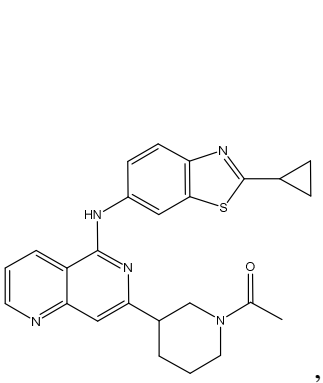
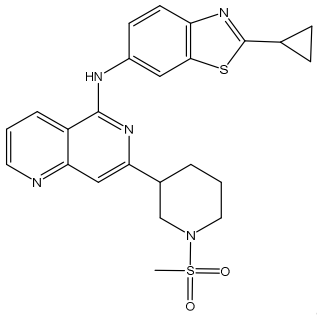
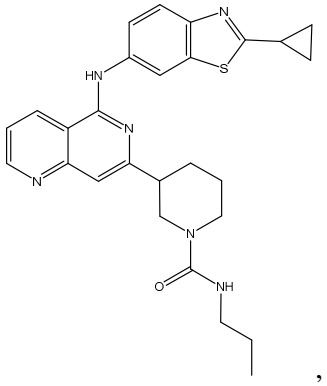
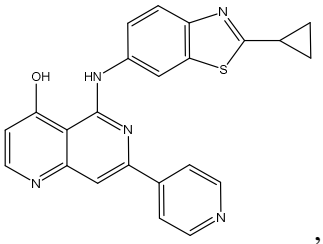
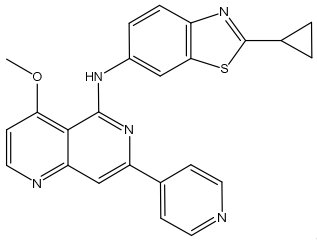
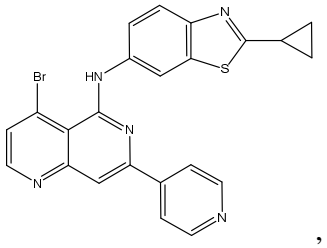
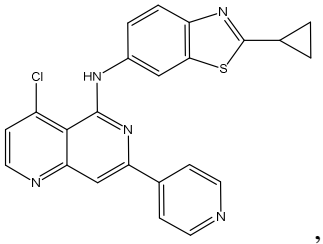
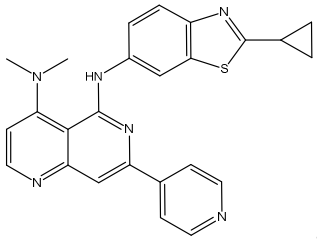
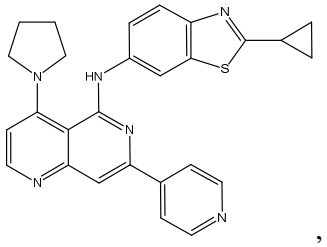
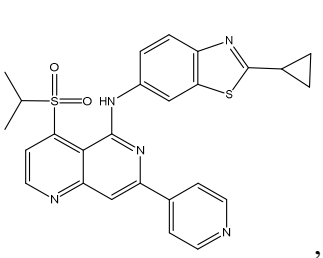
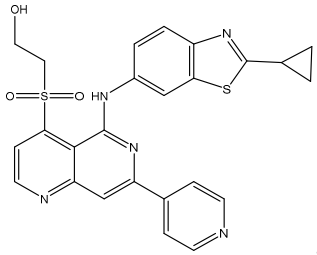
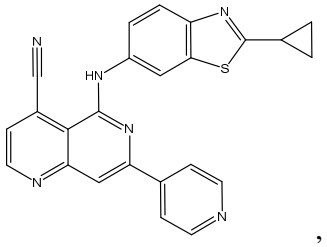
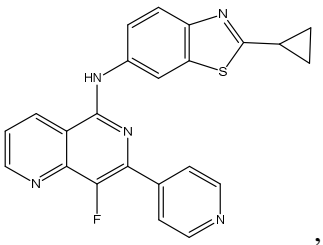
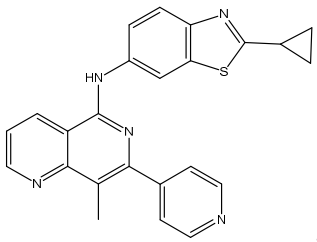
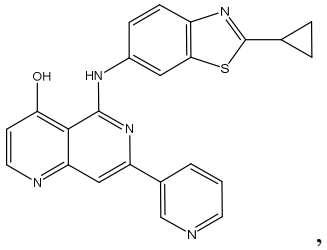
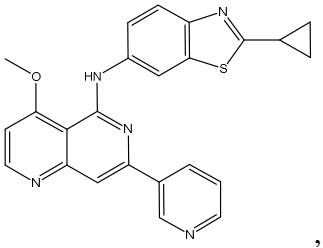
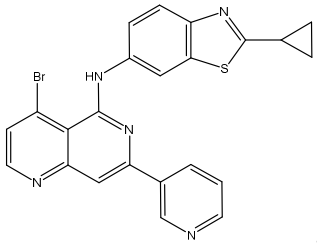
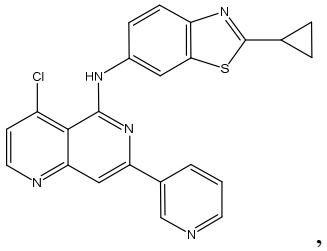
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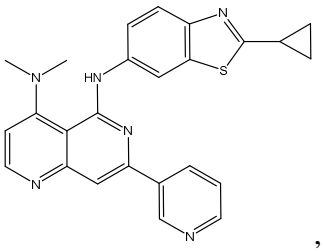
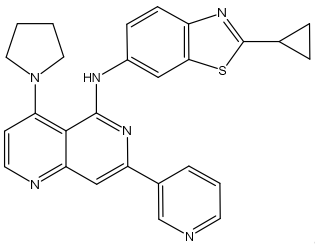
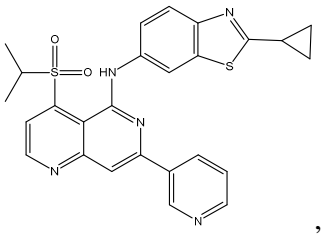
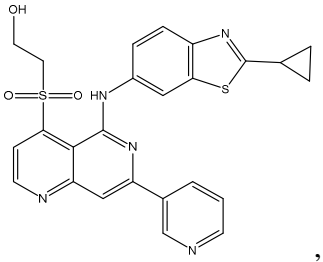
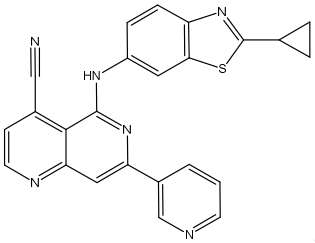
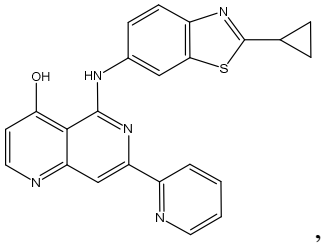
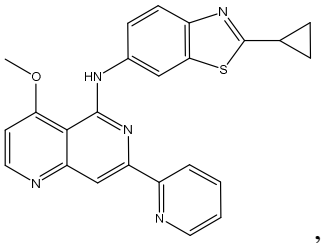
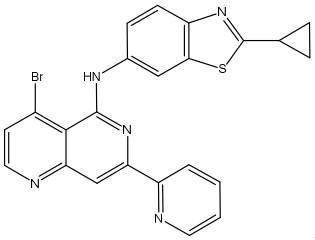
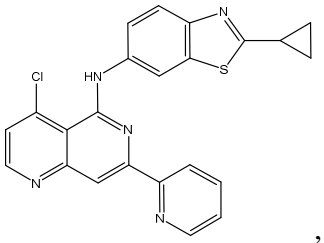
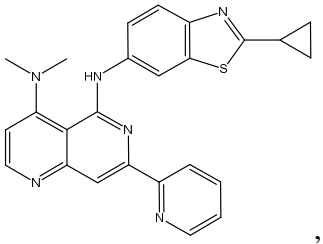
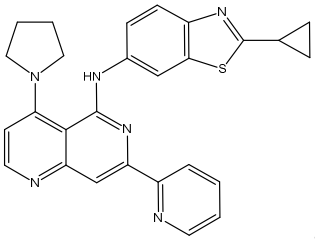
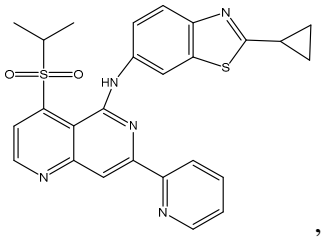
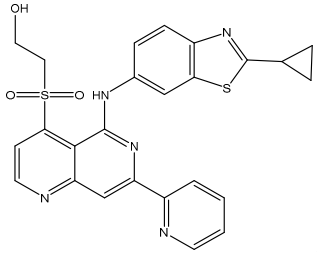
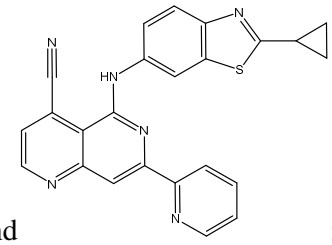

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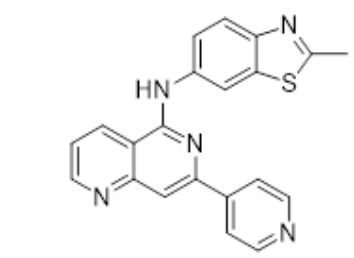
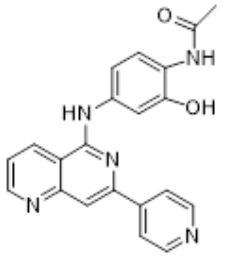
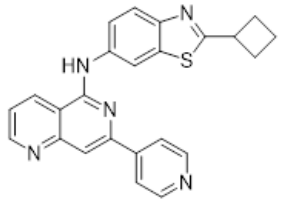
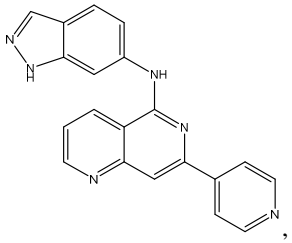
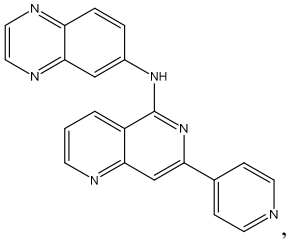
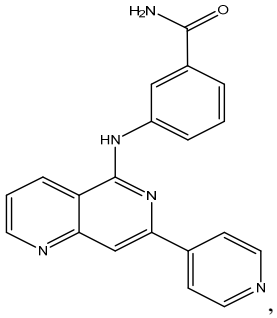
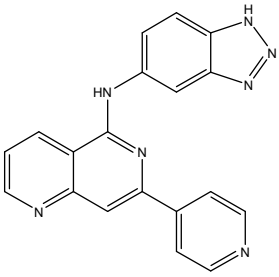
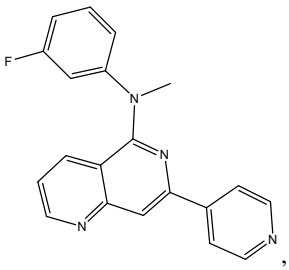
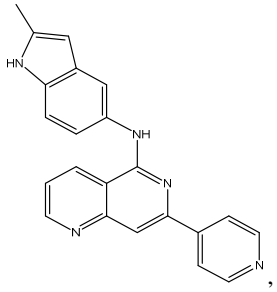
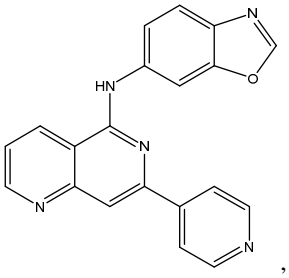
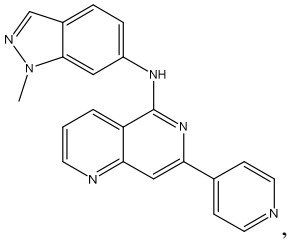
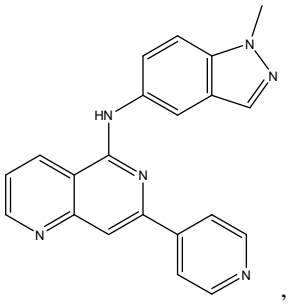
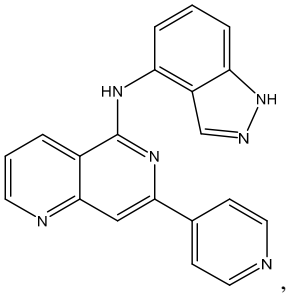
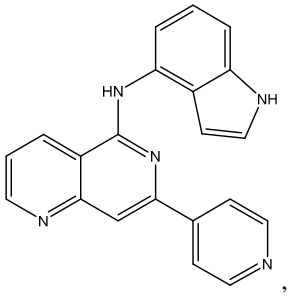
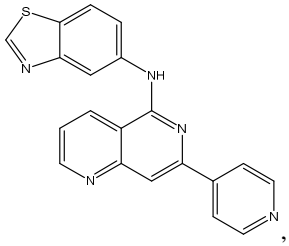
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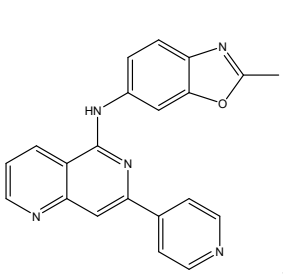
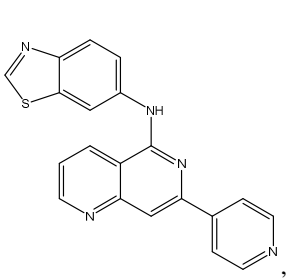
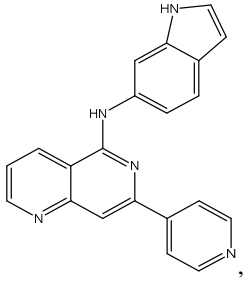
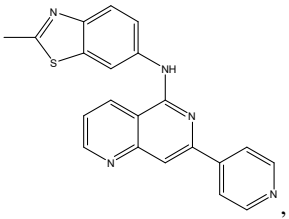
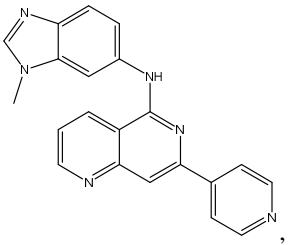
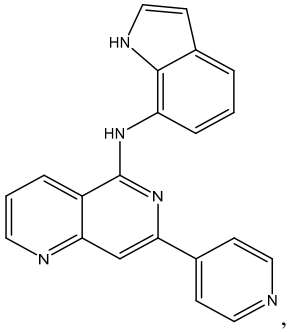
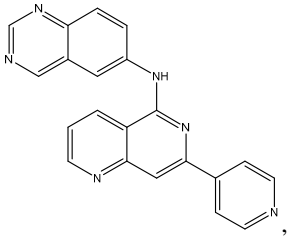
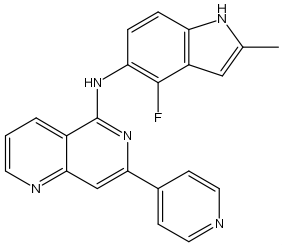
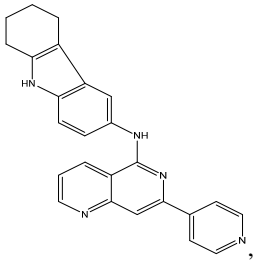
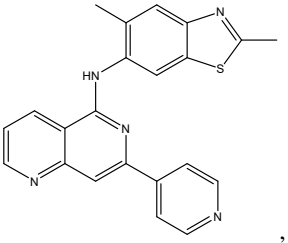
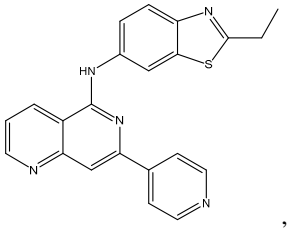
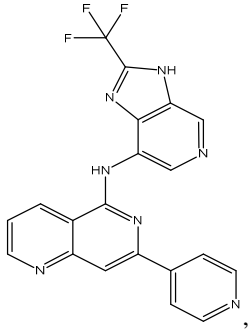
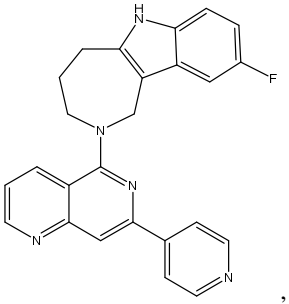
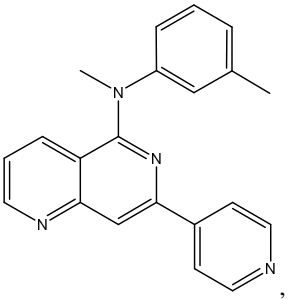
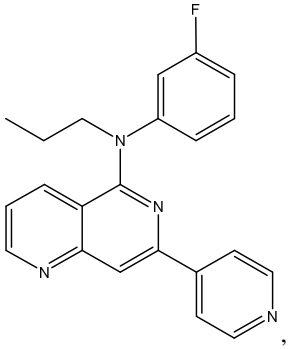
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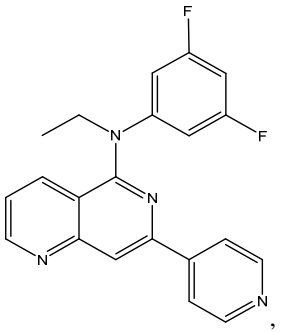
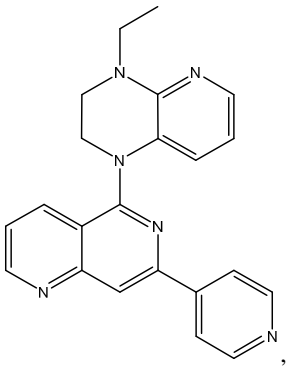
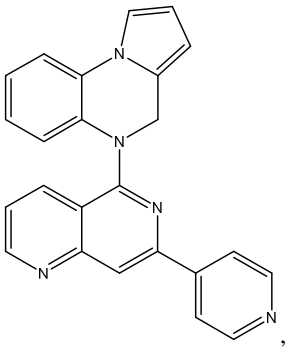
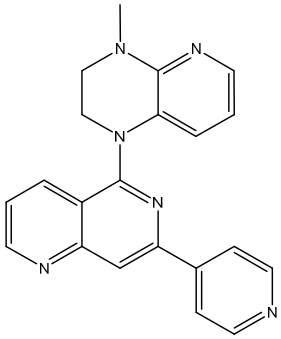
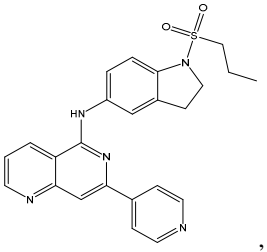
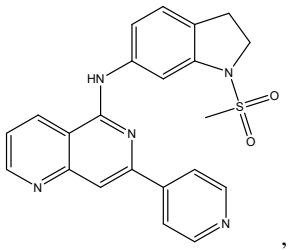
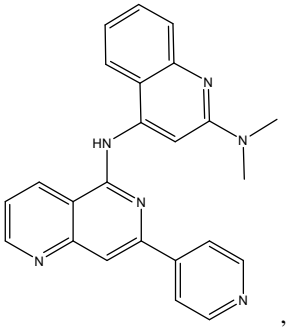
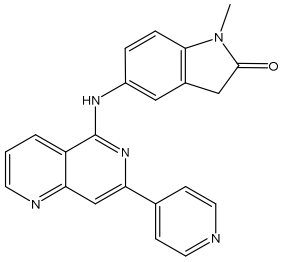
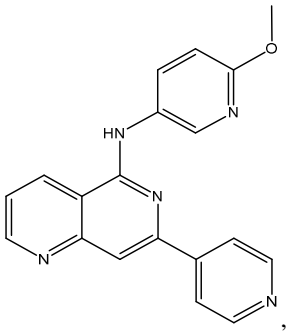
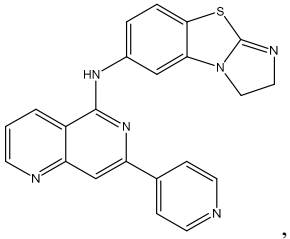
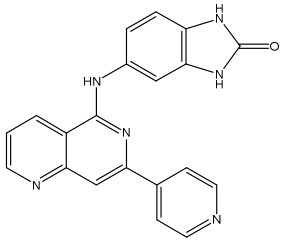
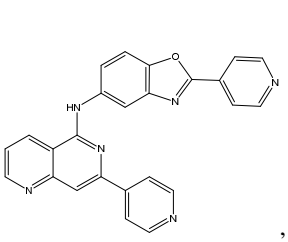
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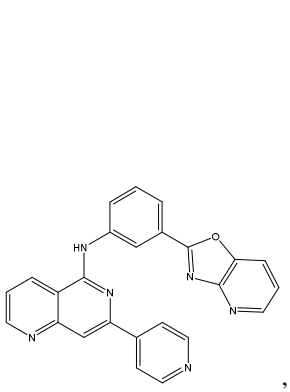
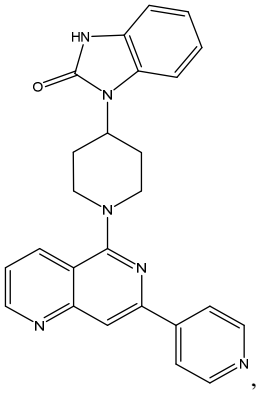
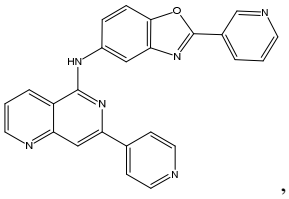
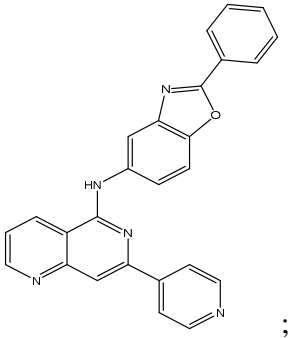
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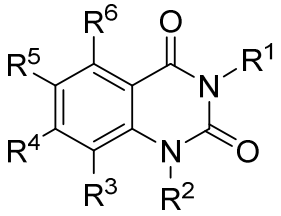
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or a pharmaceutically acceptable salt thereof.

In some examples, this document provides a compound of Formula (III):


(III),

or a pharmaceutically acceptable salt thereof, wherein R^1, R^2, R^3, R^4, R^5, and R^6 are as described herein.

In some examples, this document provides a pharmaceutical composition comprising any of the compounds described herein (or a pharmaceutically acceptable salt thereof) and a pharmaceutically acceptable carrier. In one aspect, the present disclosure refers to a pharmaceutical composition comprising an effective amount of any one of the compounds disclosed herein, or a pharmaceutically acceptable salt thereof; and a pharmaceutically acceptable carrier.

In some examples, this document provides a method for increasing TFEB polypeptide levels within a cell and/or within the nucleus of a cell. The method comprises (or consists essentially of or consists of) administering, to a mammal (e.g.,

a human) containing the cell, a therapeutically effective amount of any one or more of the compounds described herein (or one or more pharmaceutically acceptable salts thereof). In one aspect, the present disclosure refers to use of any one of the compounds disclosed herein, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating a mammal having a disease, disorder, or condition selected from a lysosomal storage disease (LSD), an acute or chronic inflammation disorder, an age-related disorder, Alzheimer's disease, ALS, Huntington's disease, Parkinson's disease, primary age-related tauopathy, progressive supranuclear palsy, frontotemporal dementia, chronic traumatic encephalopathy, traumatic brain injury, or an inherited or acquired disease of muscle.

In some examples, this document provides a method for treating a disease, disorder, or condition selected from the group consisting of lysosomal storage diseases (LSDs), acute or chronic inflammatory disorders, neurological diseases, conditions of age-related functional decline in a mammal (e.g., a human), and inherited or acquired diseases of muscle. The method comprises (or consists essentially of or consists of) administering, to a mammal (e.g., a human) having the disease, disorder, or condition, a therapeutically effective amount of any one or more of the compounds described herein (or one or more pharmaceutically acceptable salts thereof).

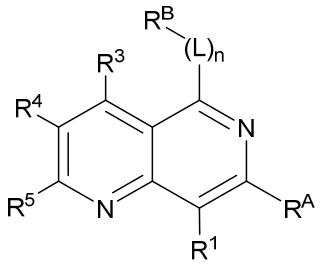
In some examples, this document provides a method for treating a disease, disorder, or condition selected from the group consisting of lysosomal storage diseases (LSDs), acute or chronic inflammatory disorders, neurological diseases, and conditions of age-related functional decline in a mammal (e.g., a human). The method comprises (or consists essentially of or consists of) administering, to a mammal (e.g., a human) having the disease, disorder, or condition, a therapeutically effective amount of any one or more of the compounds described herein (or one or more pharmaceutically acceptable salts thereof).

Unless otherwise defined, all technical and scientific terms used herein have the same meaning as commonly understood by one of ordinary skill in the art to which the present application pertains. Methods and materials are described herein for use in the present application; other, suitable methods and materials known in the art can also be used. The materials, methods, and examples are illustrative only and not intended to be limiting. All publications, patent applications, patents, sequences, database entries, and other references mentioned herein are incorporated by reference in their entirety. In case of conflict, the present specification, including definitions, will control.

Other features and advantages of the present application will be apparent from the following detailed description and figures, and from the claims.

WHAT IS CLAIMED IS:

1. A compound of Formula (IIh):



(IIh),

or a pharmaceutically acceptable salt thereof, wherein:

each L is independently selected from O, S, $S(=O)_2$, C_{1-3} alkylene, C(=O), and $N(R^N)$, wherein said C_{1-3} alkylene is optionally substituted with 1, 2, or 3 substituents independently selected from halo, CN, NO_2, OH, C_{1-3} alkoxy, amino, C_{1-3} alkylamino, and di(C_{1-3} alkyl)amino;

each R^N is independently selected from H and C_{1-6} alkyl, wherein said C_{1-6} alkyl is optionally substituted with 1, 2, or 3 substituents independently selected from halo, CN, NO_2, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$;

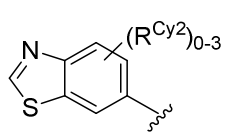
n is an integer selected from 1, 2, and 3;

each of R^1, R^3, R^4, and R^5, is independently selected from H, halo, CN, NO_2, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, and C_{2-6} alkynyl are each optionally substituted with 1, 2, or 3 substituents independently selected from CN, NO_2, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$;

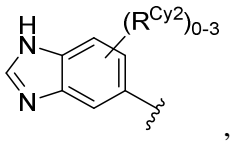
R^A is selected from Cy^{A1}, O-Cy^{A1}, and $N(R^N)$-Cy^{A1};

Cy^{A1} is selected from C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, and 4-10 membered heterocycloalkyl, each of which is optionally substituted with 1, 2, 3, 4, or 5 substituents independently selected from R^{Cy1};

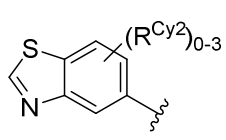
R^B is selected from the group consisting of



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, and



; or

R^B is a 5-10 membered heteroaryl, optionally substituted with 1, 2, or 3 substituents independently selected from R^{Cy2}; and R^A is 5-10 membered heteroaryl, optionally substituted with 1, 2, or 3 substituents independently selected from R^{Cy1};

R^{Cy1} and R^{Cy2} are each independently selected from oxo, halo, CN, NO_2, Cy^2, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, and C_{2-6} alkynyl are each optionally substituted with 1, 2, or 3 substituents independently selected from Cy^2, halo, CN, NO_2, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$;

each Cy^2 is independently selected from C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, and 4-10 membered heterocycloalkyl, each of which is optionally substituted with 1, 2, 3, 4, or 5 substituents independently selected from halo, CN, NO_2, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, and C_{2-6} alkynyl are each optionally substituted with 1, 2, or 3 substituents independently selected from halo, CN, NO_2, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$;

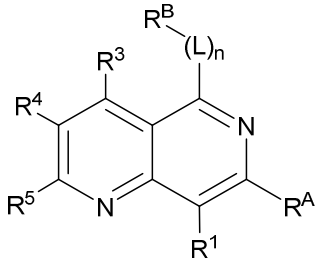
each R^{a1}, R^{b1}, R^{c1}, R^{d1}, R^{a2}, R^{b2}, R^{c2}, and R^{d2} is independently selected from H, C_{1-6} alkyl, C_{1-4} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkylene, C_{3-10} cycloalkyl-C_{1-4} alkylene, (5-10 membered heteroaryl)-C_{1-4} alkylene, and (4-10 membered heterocycloalkyl)-C_{1-4} alkylene, wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkylene, C_{3-10} cycloalkyl-C_{1-4} alkylene, (5-10 membered heteroaryl)-C_{1-4} alkylene, and (4-10 membered heterocycloalkyl)-C_{1-4} alkylene are each optionally substituted with 1, 2, 3, 4, or 5 substituents independently selected from R^g;

or any R^{c1} and R^{d1} together with the N atom to which they are attached form a 4-7 membered heterocycloalkyl, which is optionally substituted with 1, 2, or 3 substituents independently selected from R^g;

or any R^{c2} and R^{d2} together with the N atom to which they are attached form a 4-7 membered heterocycloalkyl, which is optionally substituted with 1, 2, or 3 substituents independently selected from R^g; and

each R^g is independently selected from OH, NO_2, CN, halo, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-4} haloalkyl, C_{1-6} alkoxy, C_{1-6} haloalkoxy, cyano-C_{1-3} alkylene, HO-C_{1-3} alkylene, C_{6-10} aryl, C_{6-10} aryloxy, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkylene, C_{3-10} cycloalkyl-C_{1-4} alkylene, (5-10 membered heteroaryl)-C_{1-4} alkylene, (4-10 membered heterocycloalkyl)-C_{1-4} alkylene, amino, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino, thio, C_{1-6} alkylthio, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyl, carbamyl, C_{1-6} alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, carboxy, C_{1-6} alkylcarbonyl, C_{1-6} alkoxycarbonyl, C_{1-6} alkylcarbonylamino, C_{1-6} alkylsulfonylamino, aminosulfonyl, C_{1-6} alkylaminosulfonyl, di(C_{1-6} alkyl)aminosulfonyl, aminosulfonylamino, C_{1-6} alkylaminosulfonylamino, di(C_{1-6} alkyl)aminosulfonylamino, aminocarbonylamino, C_{1-6} alkylaminocarbonylamino, and di(C_{1-6} alkyl)aminocarbonylamino.

2. A compound of Formula (IIh):



(IIh),

or a pharmaceutically acceptable salt thereof, wherein:

each L is independently selected from O, S, $S(=O)_2$, C_{1-3} alkylene, C(=O), and $N(R^N)$, wherein said C_{1-3} alkylene is optionally substituted with 1, 2, or 3 substituents independently selected from halo, CN, NO_2, OH, C_{1-3} alkoxy, amino, C_{1-3} alkylamino, and di(C_{1-3} alkyl)amino;

each R^N is independently selected from H and C_{1-6} alkyl, wherein said C_{1-6} alkyl is optionally substituted with 1, 2, or 3 substituents independently selected from halo, CN, NO_2, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$;

n is an integer selected from 1, 2, and 3;

each of R^1, R^3, R^4, and R^5, is independently selected from H, halo, CN, NO_2, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, and C_{2-6} alkynyl are each optionally substituted with 1, 2, or 3 substituents independently selected from CN, NO_2, OR^{a1}, $C(O)R^{b1}$, $C(O)NR^{c1}R^{d1}$, $C(O)OR^{a1}$, $NR^{c1}R^{d1}$, $NR^{c1}C(O)R^{b1}$, $NR^{c1}C(O)OR^{a1}$, $NR^{c1}S(O)_2R^{b1}$, $S(O)_2R^{b1}$, and $S(O)_2NR^{c1}R^{d1}$;

wherein R^B is a 5-10 membered heteroaryl, optionally substituted with 1, 2, or 3 substituents independently selected from R^{Cy2};

R^A is 5-10 membered heteroaryl, optionally substituted with 1, 2, or 3 substituents independently selected from R^{Cy1};

R^{Cy1} and R^{Cy2} are each independently selected from oxo, halo, CN, NO_2, Cy^2, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, and C_{2-6} alkynyl are each optionally substituted with 1, 2, or 3 substituents independently selected from Cy^2, halo, CN, NO_2, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$;

each Cy^2 is independently selected from C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, and 4-10 membered heterocycloalkyl, each of which is optionally substituted with 1, 2, 3, 4, or 5 substituents independently selected from halo, CN, NO_2, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$; wherein said C_{1-6} alkyl, C_{2-6} alkenyl, and C_{2-6} alkynyl are each optionally substituted with 1, 2, or 3 substituents independently selected from halo, CN, NO_2, OR^{a2}, $C(O)R^{b2}$, $C(O)NR^{c2}R^{d2}$, $C(O)OR^{a2}$, $NR^{c2}R^{d2}$, $NR^{c2}C(O)R^{b2}$, $NR^{c2}C(O)OR^{a2}$, $NR^{c2}S(O)_2R^{b2}$, $S(O)_2R^{b2}$, and $S(O)_2NR^{c2}R^{d2}$;

each R^{a1}, R^{b1}, R^{c1}, R^{d1}, R^{a2}, R^{b2}, R^{c2}, and R^{d2} is independently selected from H, C_{1-6} alkyl, C_{1-4} haloalkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkylene, C_{3-10} cycloalkyl-C_{1-4} alkylene, (5-10 membered heteroaryl)-C_{1-4} alkylene, and (4-10 membered heterocycloalkyl)-C_{1-4} alkylene, wherein said C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{6-10} aryl, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered

heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkylene, C_{3-10} cycloalkyl-C_{1-4} alkylene, (5-10 membered heteroaryl)-C_{1-4} alkylene, and (4-10 membered heterocycloalkyl)-C_{1-4} alkylene are each optionally substituted with 1, 2, 3, 4, or 5 substituents independently selected from R^g;

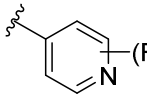
or any R^{c1} and R^{d1} together with the N atom to which they are attached form a 4-7 membered heterocycloalkyl, which is optionally substituted with 1, 2, or 3 substituents independently selected from R^g;

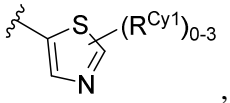
or any R^{c2} and R^{d2} together with the N atom to which they are attached form a 4-7 membered heterocycloalkyl, which is optionally substituted with 1, 2, or 3 substituents independently selected from R^g; and

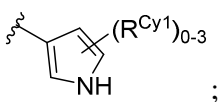
each R^g is independently selected from OH, NO_2, CN, halo, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-4} haloalkyl, C_{1-6} alkoxy, C_{1-6} haloalkoxy, cyano-C_{1-3} alkylene, HO-C_{1-3} alkylene, C_{6-10} aryl, C_{6-10} aryloxy, C_{3-10} cycloalkyl, 5-10 membered heteroaryl, 4-10 membered heterocycloalkyl, C_{6-10} aryl-C_{1-4} alkylene, C_{3-10} cycloalkyl-C_{1-4} alkylene, (5-10 membered heteroaryl)-C_{1-4} alkylene, (4-10 membered heterocycloalkyl)-C_{1-4} alkylene, amino, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino, thio, C_{1-6} alkylthio, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyl, carbamyl, C_{1-6} alkylcarbamyl, di(C_{1-6} alkyl)carbamyl, carboxy, C_{1-6} alkylcarbonyl, C_{1-6} alkoxycarbonyl, C_{1-6} alkylcarbonylamino, C_{1-6} alkylsulfonylamino, aminosulfonyl, C_{1-6} alkylaminosulfonyl, di(C_{1-6} alkyl)aminosulfonyl, aminosulfonylamino, C_{1-6} alkylaminosulfonylamino, di(C_{1-6} alkyl)aminosulfonylamino, aminocarbonylamino, C_{1-6} alkylaminocarbonylamino, and di(C_{1-6} alkyl)aminocarbonylamino.

3. The compound of claim 2, wherein

R^A is selected from the group consisting of

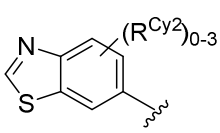


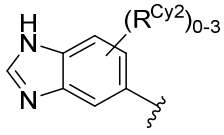
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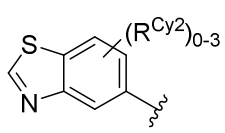
, and


; and

R^B is selected from the group consisting of



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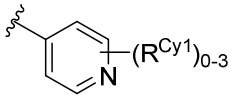
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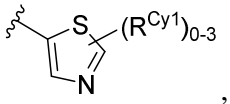
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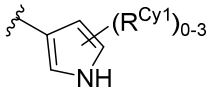
4. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein:

L is NH;

R^A is selected from the group consisting of

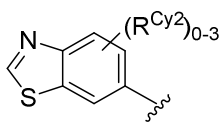


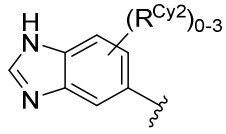
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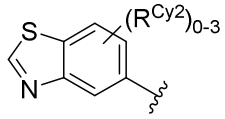
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; and

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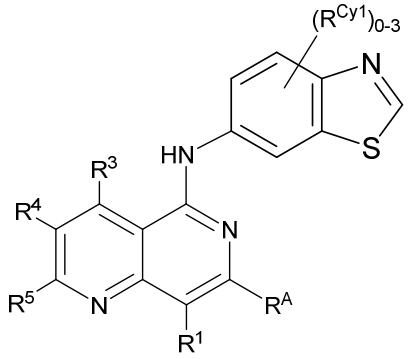


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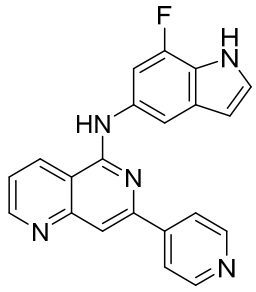
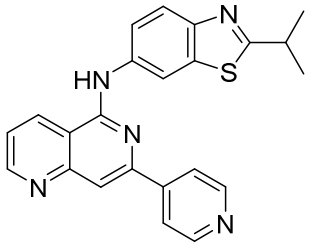
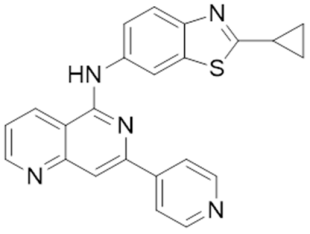
5. The compound of claim 1, wherein the compound has the Formula

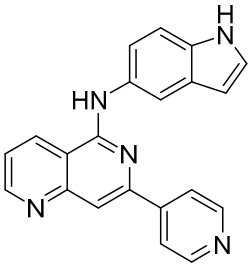
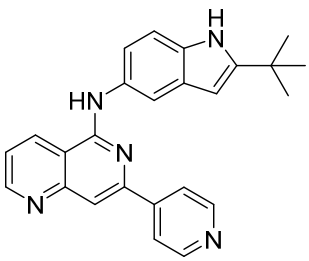
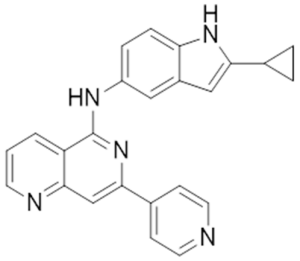


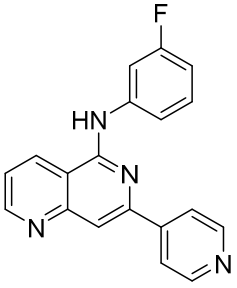
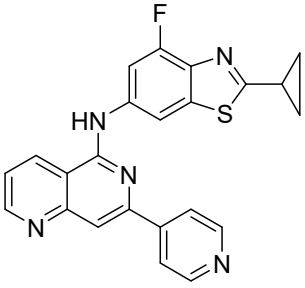
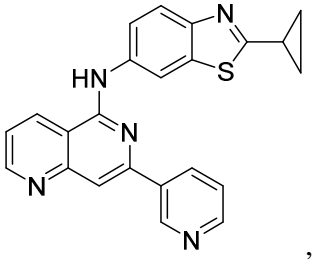
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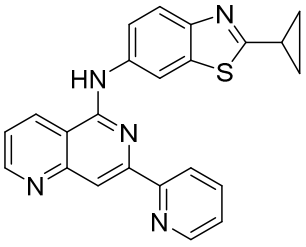
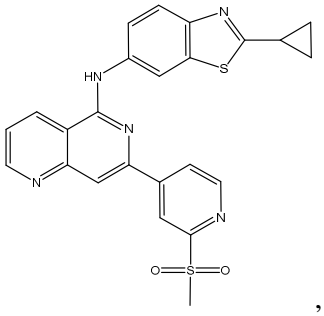
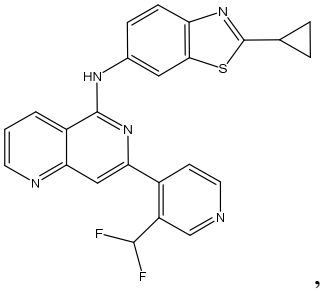
or a pharmaceutically acceptable salt thereof.

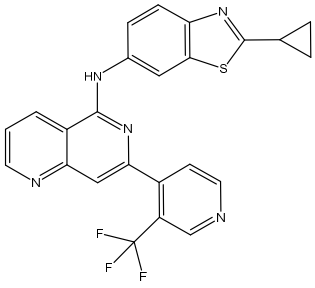
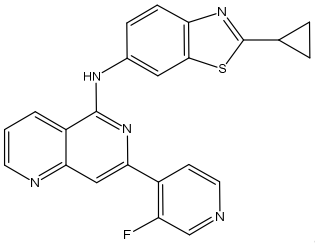
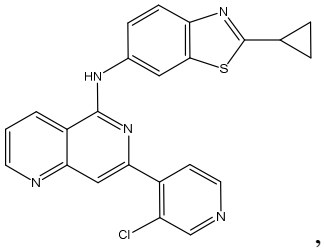
6. A compound selected from the group consisting of

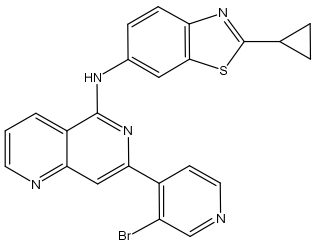
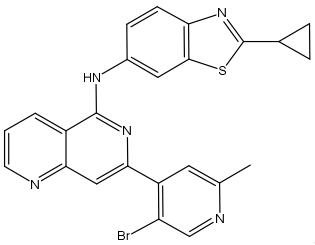
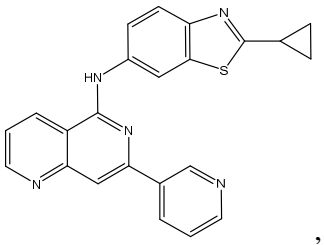
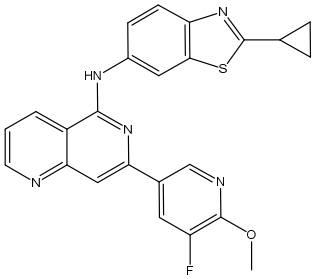
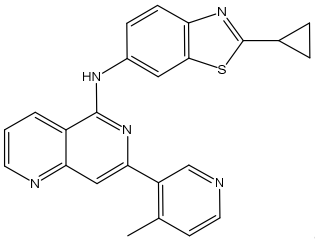
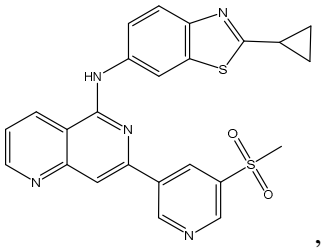
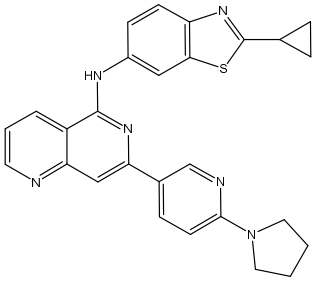
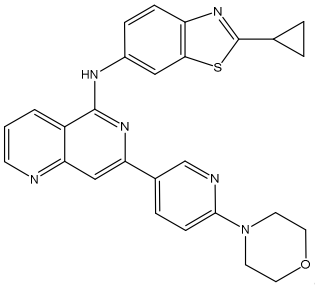
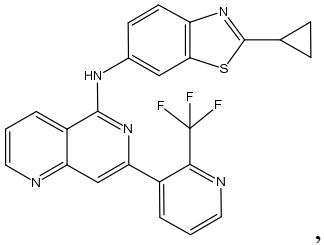
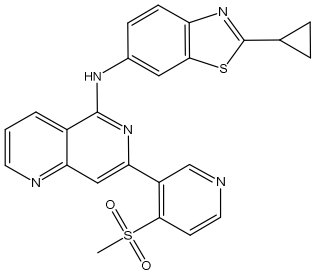
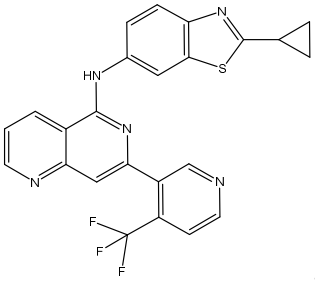
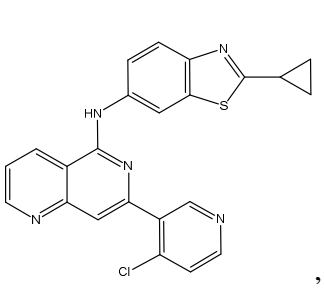
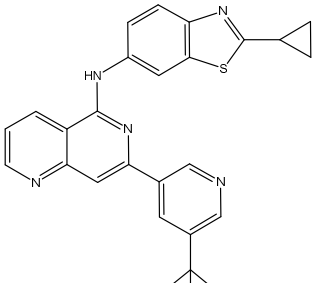
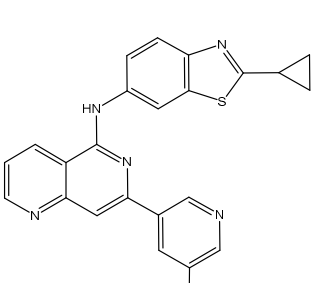
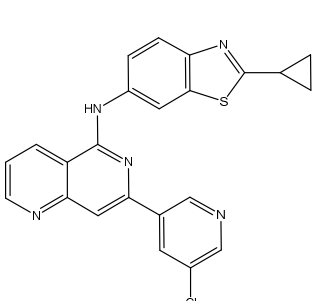
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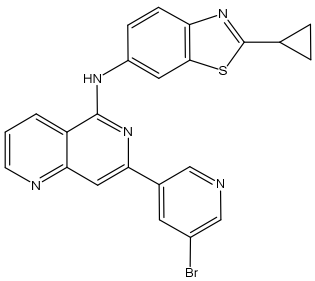
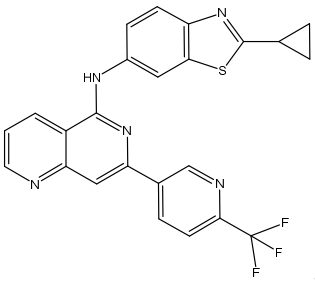
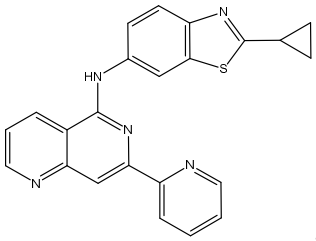
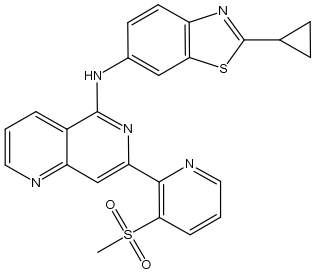
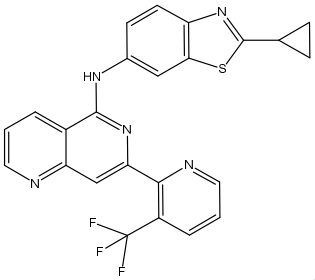
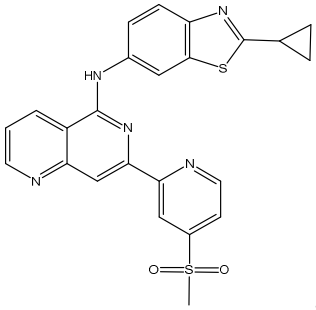
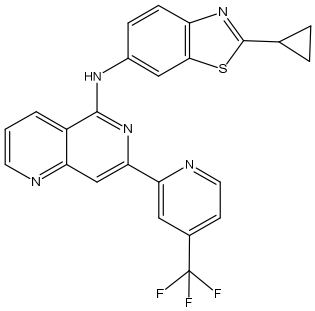
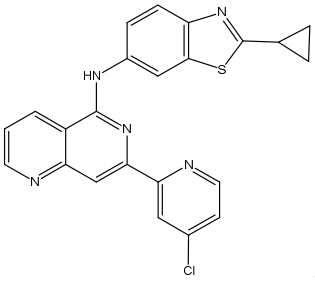
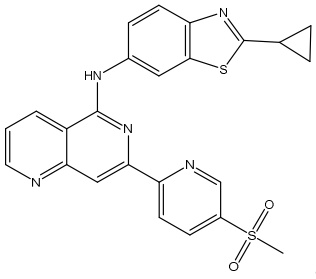
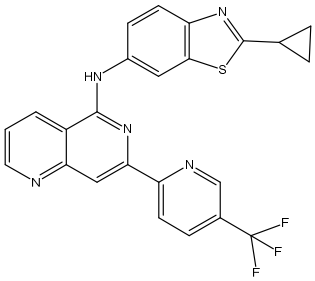
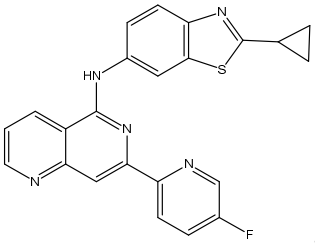
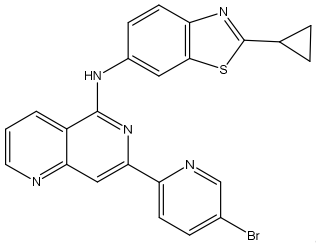
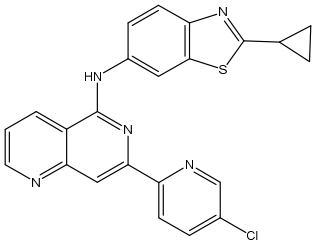
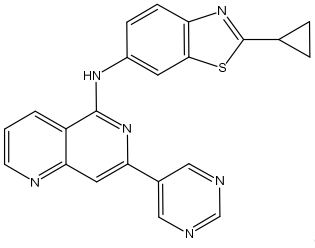
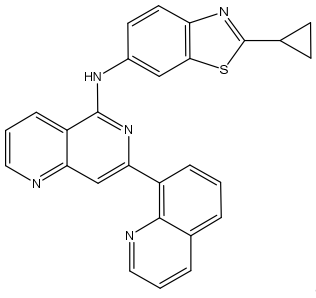
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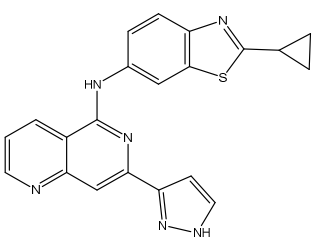
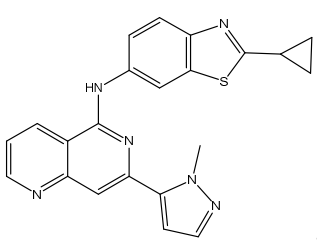
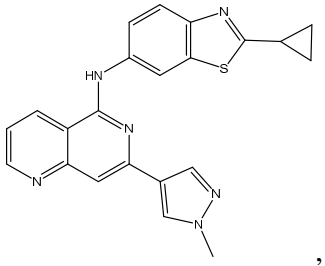
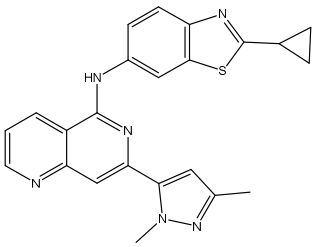
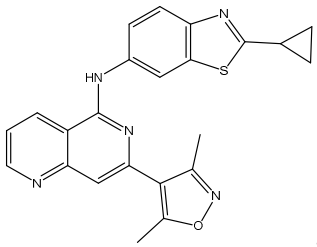
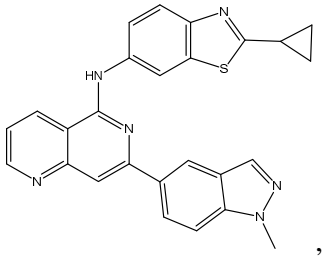
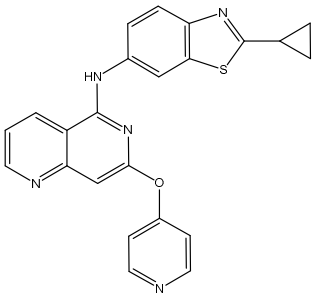
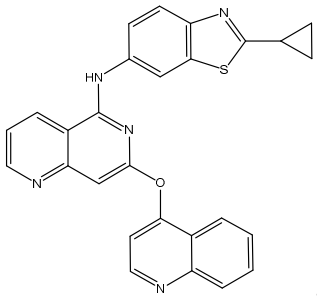
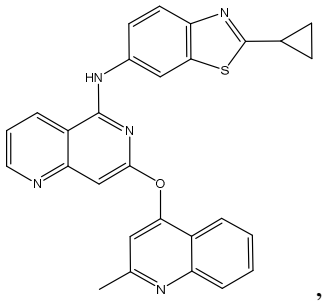
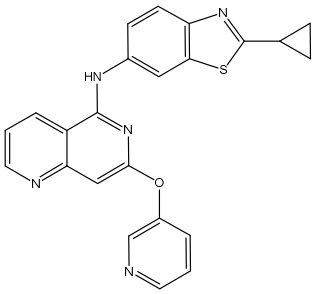
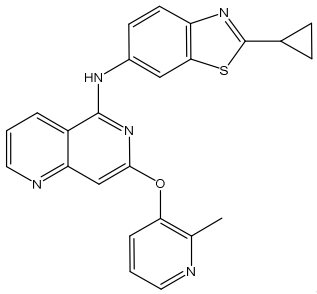
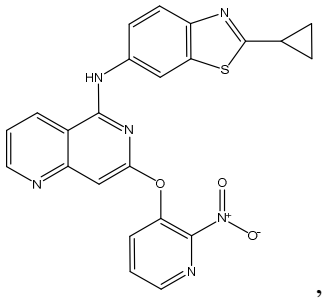
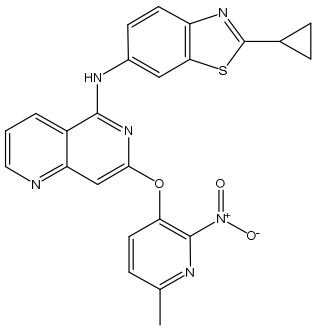
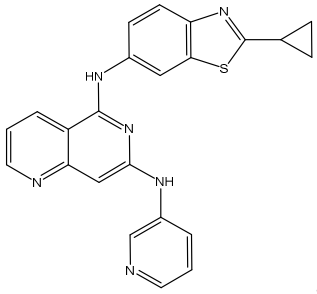
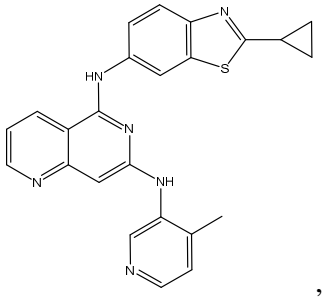
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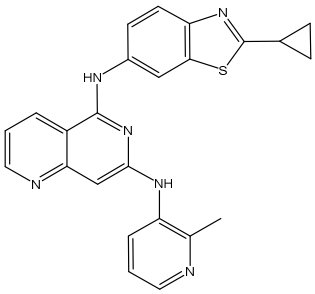
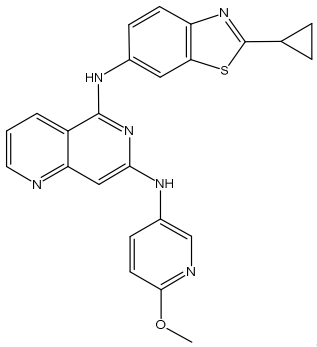
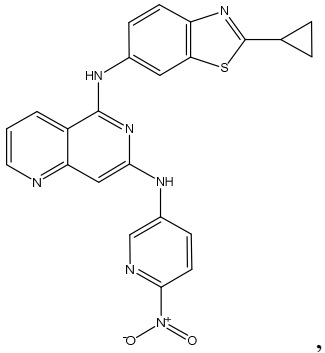
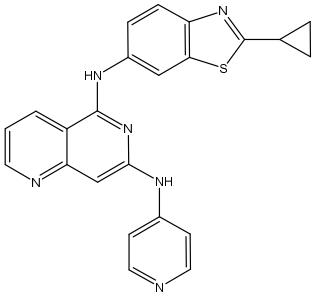
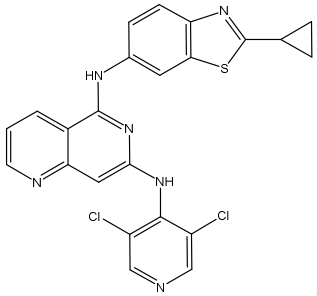
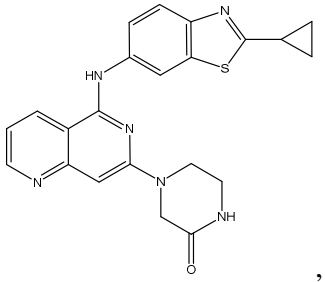
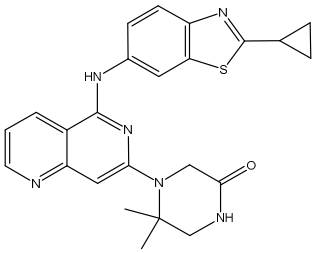
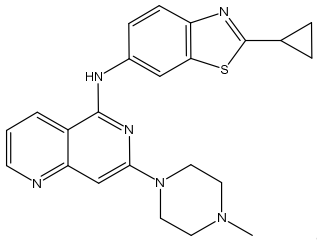
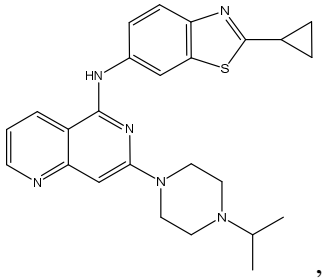
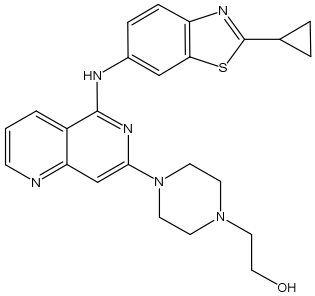
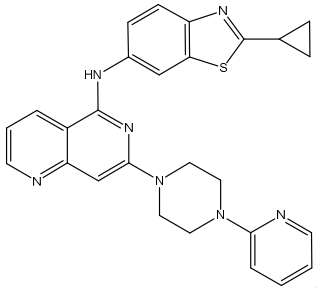
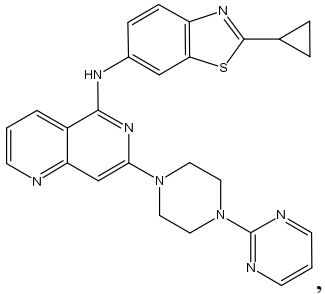
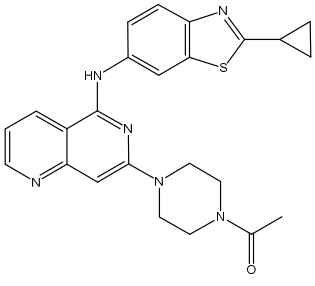
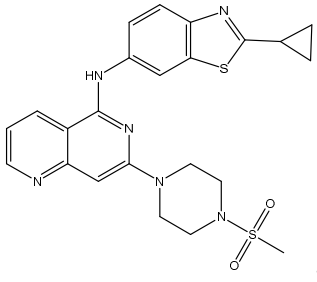
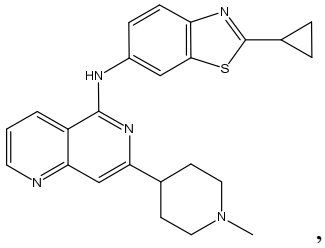

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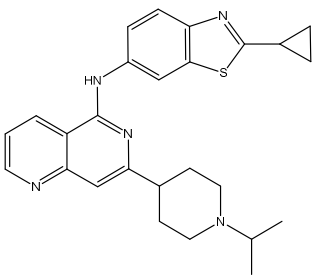
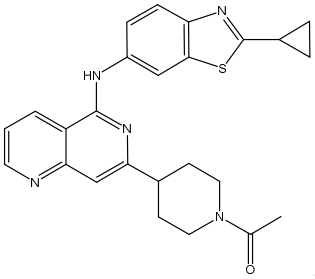
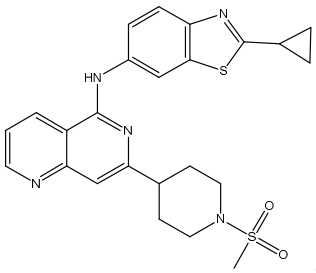
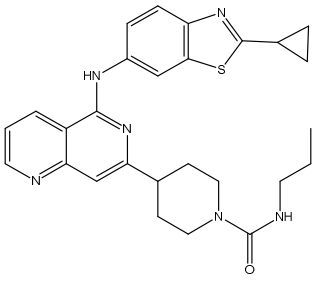
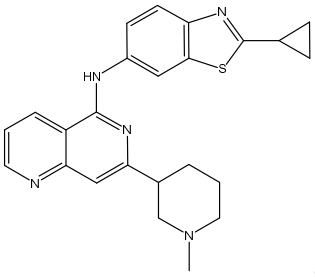
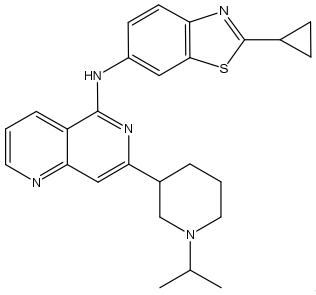
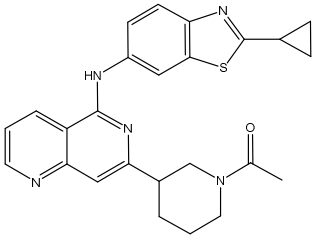
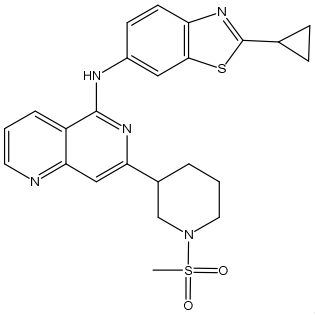
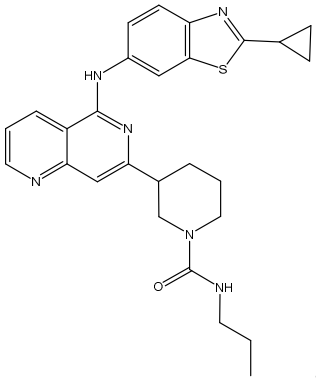
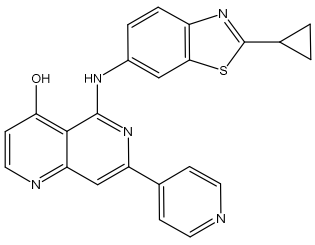
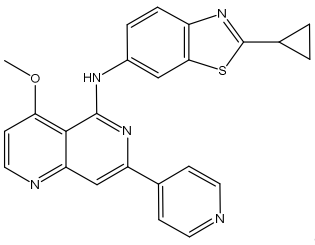
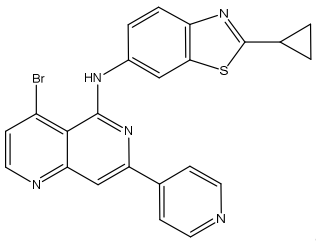
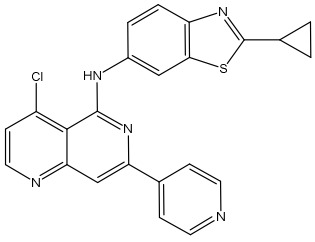
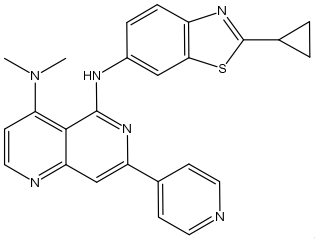
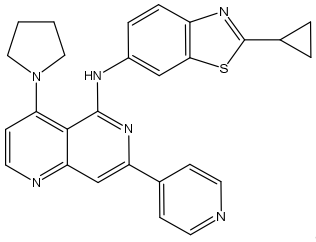
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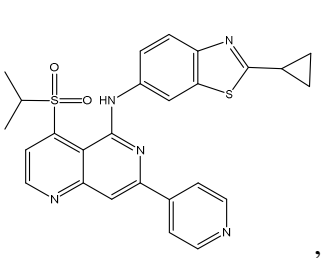
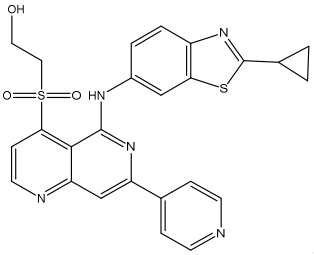
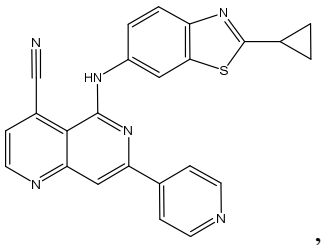
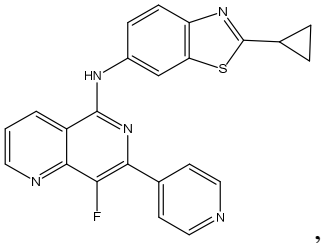
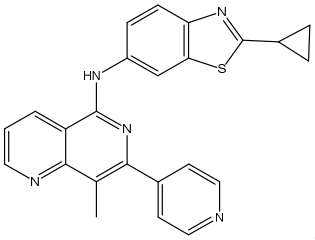
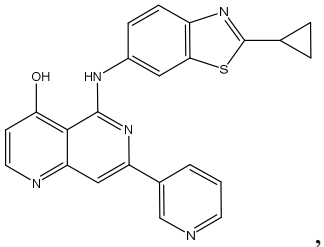
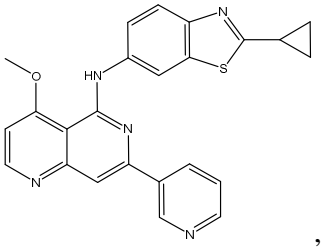
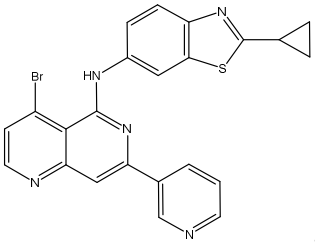
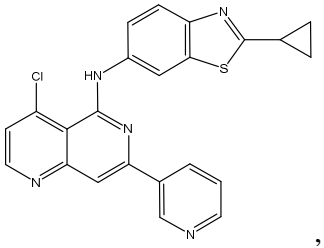
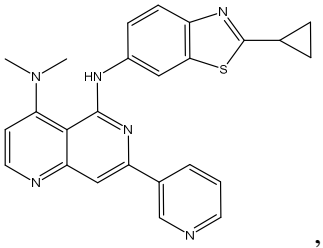
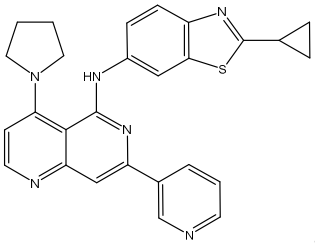
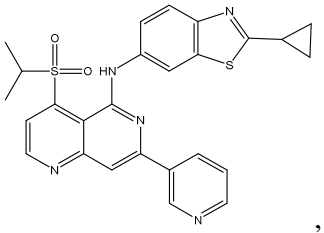
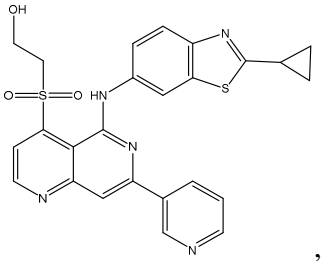
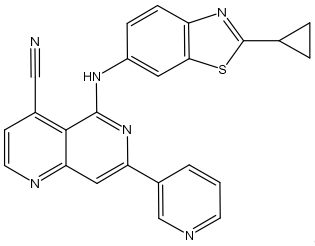
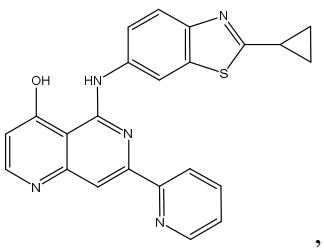
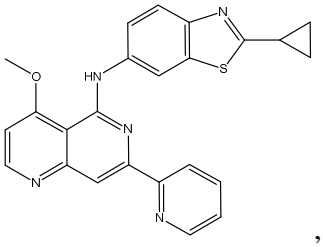
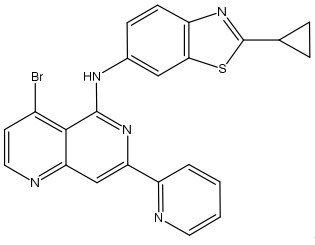
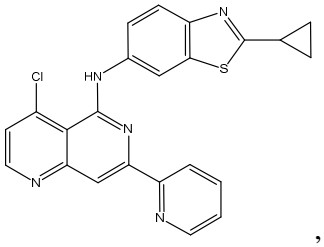

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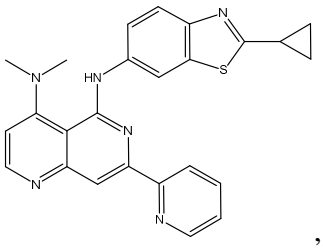
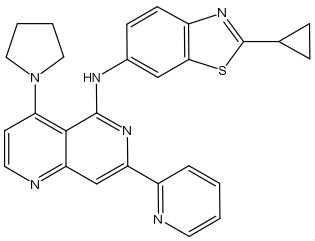
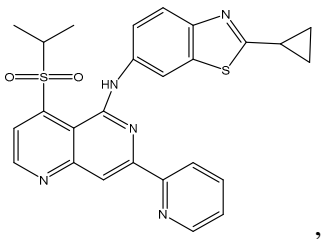
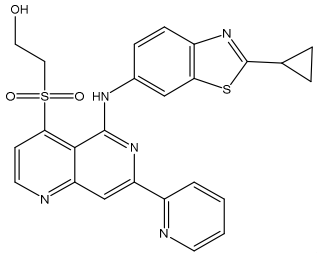
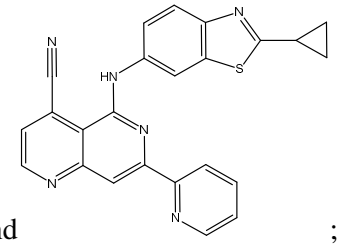
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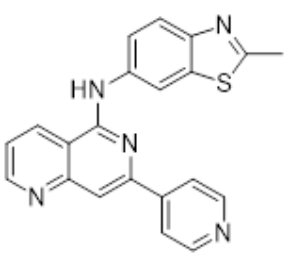
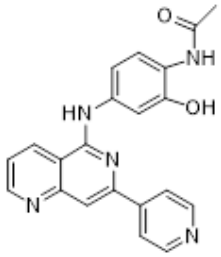
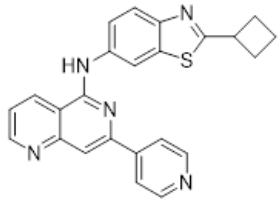
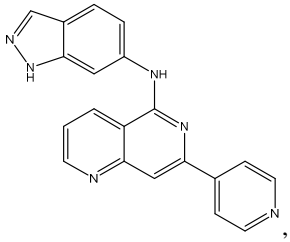
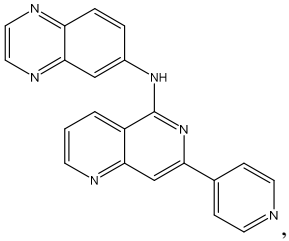
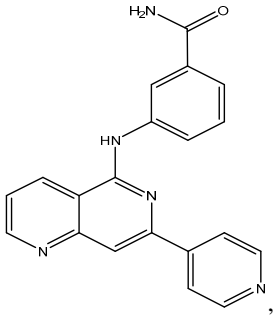
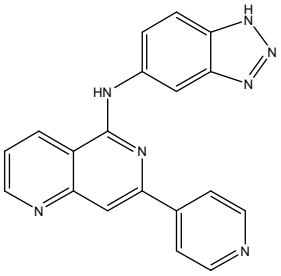
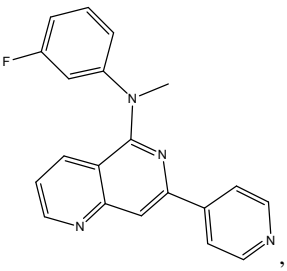
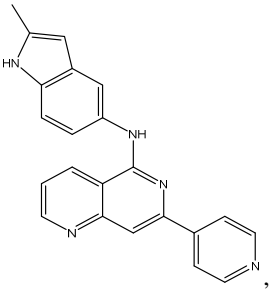
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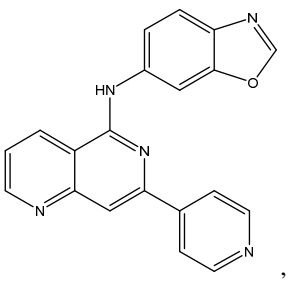
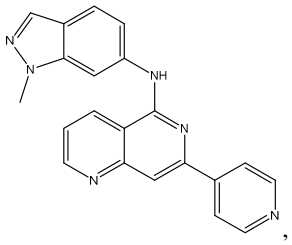
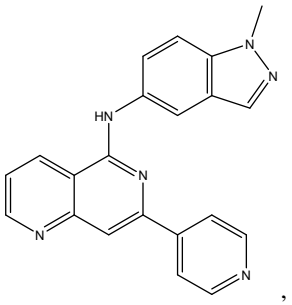
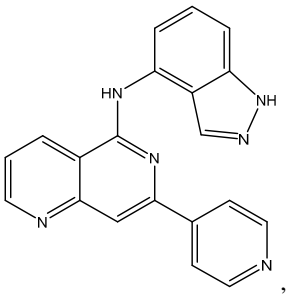
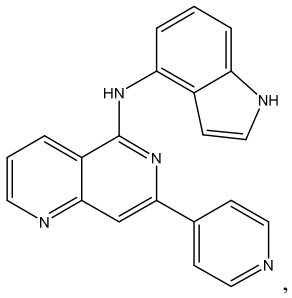
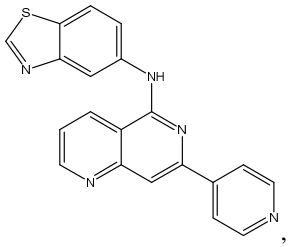
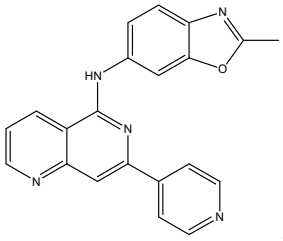
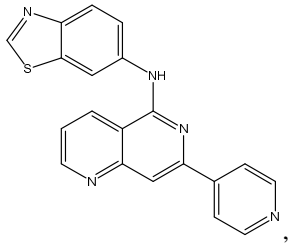
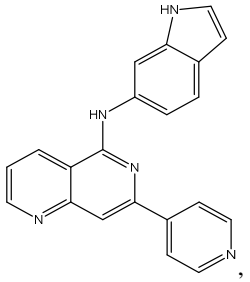
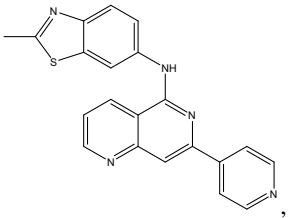
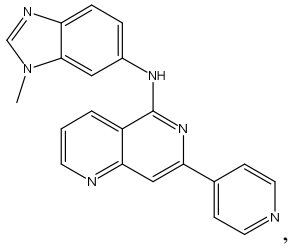
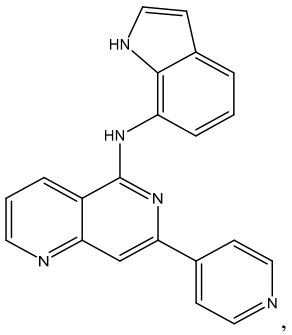
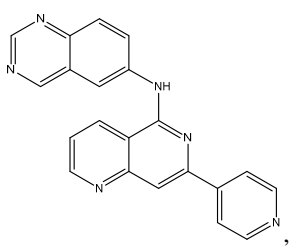
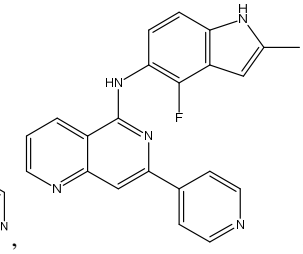
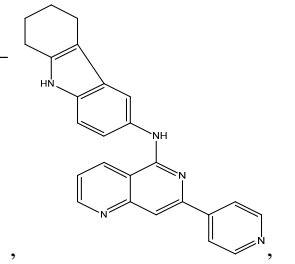
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or a pharmaceutically acceptable salt thereof.

7. A compound selected from the group consisting of

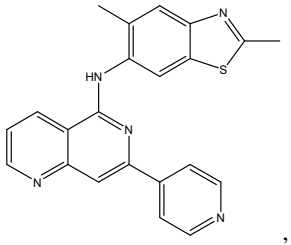
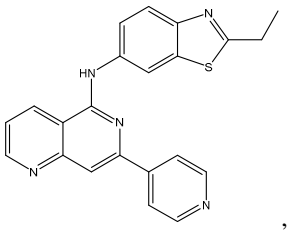
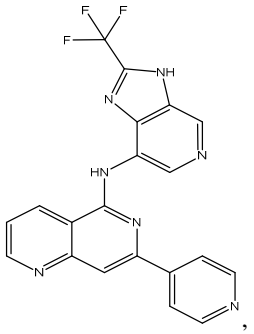
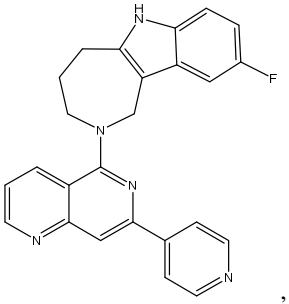
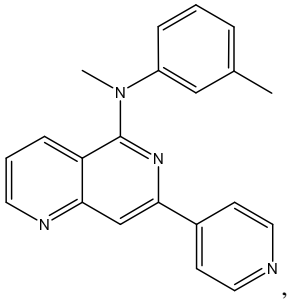
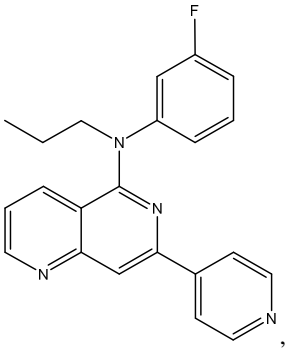
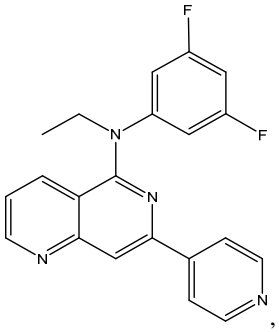
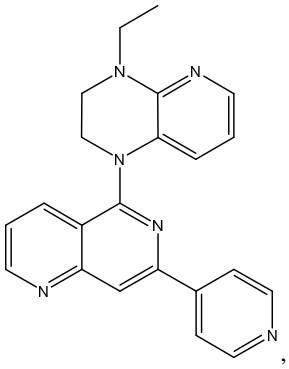
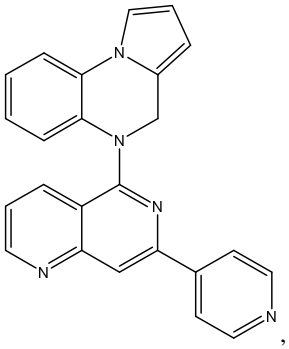
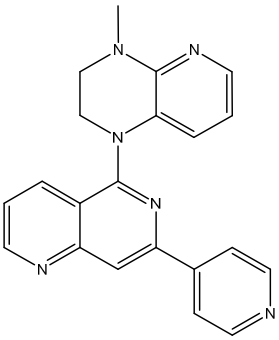
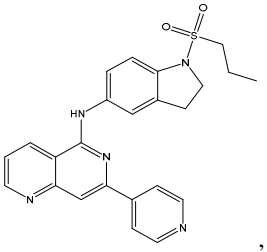
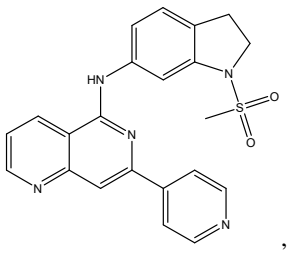

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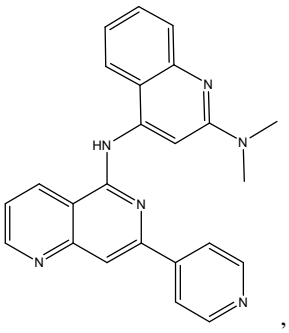
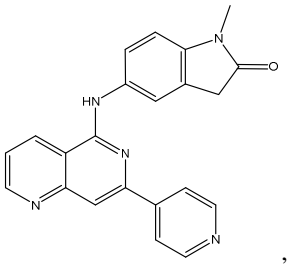
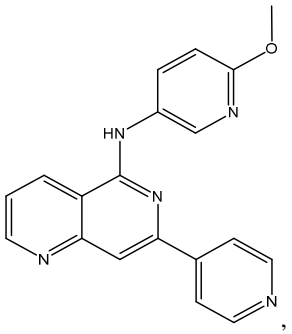
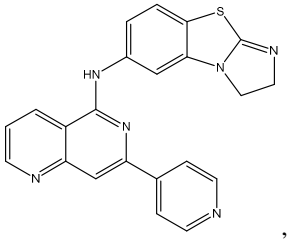
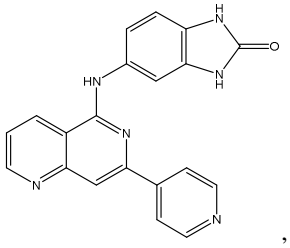
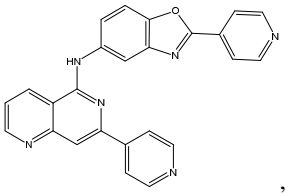
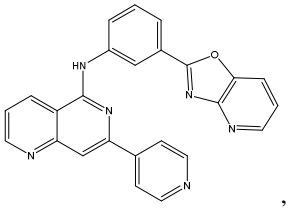
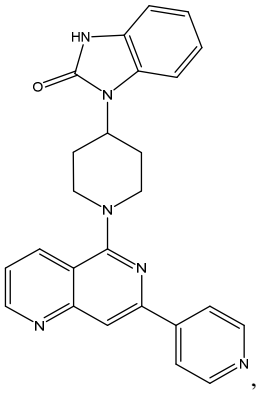
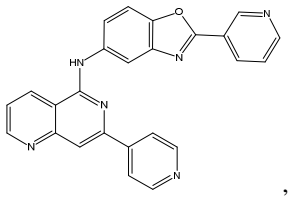
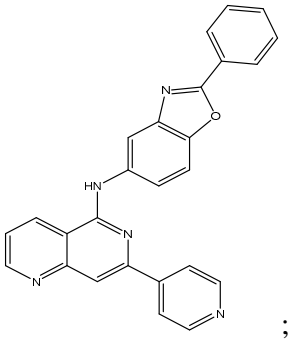

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or a pharmaceutically acceptable salt thereof.

8. A pharmaceutical composition comprising an effective amount of a compound of any one of claims 1-7, or a pharmaceutically acceptable salt thereof; and a pharmaceutically acceptable carrier.

9. Use of a compound of any one of claims 1-7, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating a mammal having a disease, disorder, or condition selected from a lysosomal storage disease (LSD), an acute or chronic inflammation disorder, an age-related disorder, Alzheimer's disease, ALS, Huntington's disease, Parkinson's disease, primary age-related tauopathy, progressive supranuclear palsy, frontotemporal dementia, chronic traumatic encephalopathy, traumatic brain injury, or an inherited or acquired disease of muscle.

10. The use of claim 9, wherein said mammal is a human.

11. The use of claim 9, wherein said mammal has a lysosomal storage disease (LSD).

12. The use of claim 11, wherein said LSD is selected from the group consisting of Krabbe disease, Sanfilippo syndrome, multiple sulfatase deficiency, alpha-mannosidosis, Fabry disease, Hunter syndrome, Scheie syndrome, Sanfilippo syndrome, Maroteaux–Lamy syndrome, hyaluronidase deficiency , sialidosis, mucolipidin 1 deficiency, neuronal ceroid lipofuscinoses (Batten Disease), mucopolysaccharidoses Type I, II, III, IV, VI, VII, and IX, Hurler–Scheie syndrome, Morquio syndrome, glycoproteinosis, multiple sulfatase deficiency, glycogen storage disease, metachromatic Leukodystrophy, Sly syndrome, I-cell disease, Danon disease, Niemann-Pick disease type A, B, C1 and C2, Sandhoff disease, lysosomal acid lipase deficiency, GM2 gangliosidoses, Tay–Sachs disease, Gaucher disease, Salla disease, Pompe disease, Danon disease, cholesteryl ester storage disease, aspartylglucosaminuria, cystinosis, mucolipidosis type I-IV, Schindler disease type I and II, Wolman disease, fucosidosis, pycnodysostosis and free sialic acid storage disease.

13. The use of claim 9, wherein said mammal has an acute or chronic inflammation disorder.

14. The use of claim 13, wherein said acute or chronic inflammation disorder is selected from the group consisting of asthma, chronic obstructive lung disease, pulmonary fibrosis, pneumonitis (e.g., hypersensitivity pneumonitis or radiation pneumonitis), pneumonia, cystic fibrosis, psoriasis, arthritis/rheumatoid arthritis, rhinitis, pharyngitis, cystitis, prostatitis, dermatitis, allergy including hayfever, nephritis, conjunctivitis, encephalitis, meningitis, opthalmitis, uveitis, pleuritis, pericarditis, myocarditis, atherosclerosis, human immunodeficiency virus related inflammation, diabetes, osteoarthritis, psoriatic arthritis, inflammatory bowel disease (e.g., Crohn's disease or ulcerative colitis), colitis, sepsis, vasculitis, bursitis, connective tissue disease, autoimmune diseases (e.g., systemic lupus erythematosis (SLE)), polymyalgia rheumatica, scleroderma, Wegener's granulomatosis, temporal arteritis, vasculitis, cryoglobulinemia, multiple sclerosis, viral or influenza-induced inflammation, chronic bacterial colonization or persistent intracellular pathogen, and impaired responsiveness to antigenic challenge or vaccines administration.

15. The use of claim 9, wherein said mammal has an age-related disorder.

16. The use of claim 15, wherein said age-related disorder is selected from the group consisting of neurodegenerative diseases, metabolic diseases, metabolic syndrome, NASH, fatty liver, diabetes, sarcopenia, fraility, age-related wet and dry macular degeneration, inherited or acquired retinal degenerative diseases, age-related hearing loss, early or late cognitive decline, early or late cognitive impairment, osteoporosis, age-related organ dysfunction, and age-related immune dysfunctions.

17. The use of claim 9, wherein said mammal has Alzheimer's disease, ALS, Huntington's disease, Parkinson's disease, primary age-related tauopathy, progressive supranuclear palsy, frontotemporal dementia, chronic traumatic encephalopathy, or traumatic brain injury.

18. The use of claim 9, wherein said mammal has an inherited or acquired disease of muscle.

19. The use of claim 18, wherein the inherited or acquired disease of muscle is selected from the group consisting of myofibrillar myopathy, sporadic inclusion body myositis, inclusion body myopathy with frontotemporal dementia (IBMFTD), and cardiomyopathy.