heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three oxo (when feasible), halogen, -OH, C_1-C_6 alkyl, or C_1-C_6 haloalkyl; and

each R^c and R^d is independently hydrogen, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein the alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three oxo (when feasible), halogen, -OH, C_1-C_6 alkyl, or C_1-C_6 haloalkyl;

or R^c and R^d are taken together with the nitrogen atom to which they are attached to form a heterocycloalkyl optionally substituted with one, two, or three oxo, halogen, C_1-C_6 alkyl, or C_1-C_6 haloalkyl.

[0006] Also disclosed herein are pharmaceutical compositions comprising a compound disclosed herein, or a pharmaceutically acceptable salt, solvate, stereoisomer, or isotopic variant thereof, and a pharmaceutically acceptable excipient.

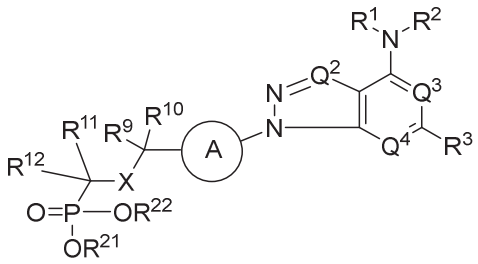
[0007] Also disclosed herein are methods of inhibiting CD73 comprising contacting CD73 with a compound disclosed herein, or a pharmaceutically acceptable salt, solvate, stereoisomer, or isotopic variant thereof.

[0008] Also disclosed herein are methods of treating cancer in a subject, comprising administering to the subject a compound disclosed herein, or a pharmaceutically acceptable salt, solvate, stereoisomer, or isotopic variant thereof or administering to the subject a pharmaceutical composition comprising a compound disclosed herein, or a pharmaceutically acceptable salt, solvate, stereoisomer, or isotopic variant thereof, and a pharmaceutically acceptable excipient.

[0009] Also disclosed herein are methods of treating an infection in a subject, comprising administering to the subject a compound disclosed herein, or a pharmaceutically acceptable salt, solvate, stereoisomer, or isotopic variant thereof or administering to the subject a pharmaceutical composition comprising a compound disclosed herein, or a pharmaceutically acceptable salt, solvate, stereoisomer, or isotopic variant thereof, and a pharmaceutically acceptable excipient.

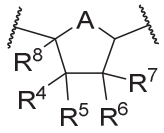
[0010] Also disclosed herein are methods of treating a neurodegenerative disease in a subject, comprising administering to the subject a compound disclosed herein, or a pharmaceutically acceptable salt, solvate, stereoisomer, or isotopic variant thereof or administering to the subject a pharmaceutical composition comprising a compound disclosed herein, or a pharmaceutically acceptable salt, solvate, stereoisomer, or isotopic variant thereof, and a pharmaceutically acceptable excipient.

[0010a] Also disclosed herein is a compound of Formula (IV), or a pharmaceutically acceptable salt thereof:



Formula (IV);

wherein:

Ring A is 

;

Q^2 is N or CW;

Q^3 is N and Q^4 is CW;

or Q^3 is CW and Q^4 is N;

each W is independently hydrogen, halogen, -CN, $-OR^b$, NR^cR^d, C_1-C_6 alkyl, or C_1-C_6 haloalkyl;

A is -O- or $-CH_2-$;

X is -O-, -S-, $-S(=O)_2-$, $-NR^{17}-$, or $-C(R^{18})_2-$;

R^1 and R^2 are independently hydrogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl); wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{1a};

or R^1 and R^2 are taken together with the nitrogen atom to which they are attached to form a heterocycloalkyl optionally substituted with one, two, or three R^{1b};

each R^{1a} and R^{1b} is independently oxo (when feasible), halogen, -CN, $-OR^b$, $-SR^b$, $-S(=O)R^a$, $-NO_2$, $-NR^cR^d$, $-S(=O)_2R^a$, $-NR^bS(=O)_2R^a$, $-S(=O)_2NR^cR^d$, $-C(=O)R^a$, $-OC(=O)R^a$, $-C(=O)OR^b$, $-OC(=O)OR^b$, $-C(=O)NR^cR^d$, $-OC(=O)NR^cR^d$, $-NR^bC(=O)NR^cR^d$, $-NR^bC(=O)R^a$, $-NR^bC(=O)OR^b$, C_1-C_6 alkyl, C_1-C_6 fluoroalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl);

R^3 is hydrogen, halogen, -CN, $-OR^b$, $-SR^b$, $-NR^cR^d$, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 haloalkyl, C_1-C_6 hydroxyalkyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl); wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{3a};

each R^{3a} is independently oxo (when feasible), halogen, -CN, $-OR^b$, $-NR^cR^d$, $-C(=O)R^a$, $-C(=O)OR^b$, $-C(=O)NR^cR^d$, C_1-C_6 alkyl, C_1-C_6 fluoroalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl;

R^4 and R^7 are independently hydrogen, halogen, $-OR^b$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl;

R^5 and R^6 are independently hydrogen, halogen, $-OR^b$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl;

R^8 is hydrogen, halogen, $-OR^b$, $-NR^cR^d$, C_1-C_6 alkyl, or C_1-C_6 haloalkyl;

R^9 and R^{10} are independently hydrogen, halogen, C_1-C_6 alkyl, or C_1-C_6 haloalkyl;

R^{11} is hydrogen, halogen, -CN, -OR^{13}, -SR^{13}, -S(=O)R^{14}, -NO_2, -$NR^{15}R^{16}$, -$S(=O)_2R^{14}$, -$NR^{13}S(=O)_2R^{14}$, -$S(=O)_2NR^{15}R^{16}$, -C(=O)R^{14}, -OC(=O)R^{14}, -C(=O)OR^{13}, -OC(=O)OR^{13}, -C(=O)$NR^{15}R^{16}$, -OC(=O)$NR^{15}R^{16}$, -$NR^{13}C(=O)NR^{15}R^{16}$, -$NR^{13}C(=O)R^{14}$, -$NR^{13}C(=O)OR^{13}$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 hydroxyalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{11a};

R^{12} is halogen, -CN, -OR^{13}, -SR^{13}, -S(=O)R^{14}, -NO_2, -$NR^{15}R^{16}$, -$S(=O)_2R^{14}$, -$NR^{13}S(=O)_2R^{14}$, -$S(=O)_2NR^{15}R^{16}$, -C(=O)R^{14}, -OC(=O)R^{14}, -C(=O)OR^{13}, -OC(=O)OR^{13}, -C(=O)$NR^{15}R^{16}$, -OC(=O)$NR^{15}R^{16}$, -$NR^{13}C(=O)NR^{15}R^{16}$, -$NR^{13}C(=O)R^{14}$, -$NR^{13}C(=O)OR^{13}$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 hydroxyalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{12a};

or R^{11} and R^{12} are taken together to form a cycloalkyl or heterocycloalkyl each optionally substituted with one, two, or three R^{11b};

each R^{11a}, R^{11b}, and R^{12a} is independently oxo (when feasible), halogen, -CN, -OR^{13}, -SR^{13}, -S(=O)R^{14}, -NO_2, -$NR^{15}R^{16}$, -$S(=O)_2R^{14}$, -$NR^{13}S(=O)_2R^{14}$, -$S(=O)_2NR^{15}R^{16}$, -C(=O)R^{14}, -OC(=O)R^{14}, -C(=O)OR^{13}, -OC(=O)OR^{13}, -C(=O)$NR^{15}R^{16}$, -OC(=O)$NR^{15}R^{16}$, -$NR^{13}C(=O)NR^{15}R^{16}$, -$NR^{13}C(=O)R^{14}$, -$NR^{13}C(=O)OR^{13}$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 hydroxyalkyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{11c};

each R^{11c} is independently oxo (when feasible), halogen, -CN, -OR^{b}, -SR^{b}, -S(=O)R^{a}, -NO_2, -$NR^{c}R^{d}$, -$S(=O)_2R^{a}$, -$NR^{b}S(=O)_2R^{a}$, -$S(=O)_2NR^{c}R^{d}$, -C(=O)R^{a}, -OC(=O)R^{a}, -C(=O)OR^{b}, -OC(=O)OR^{b}, -C(=O)$NR^{c}R^{d}$, -OC(=O)$NR^{c}R^{d}$, -$NR^{b}C(=O)NR^{c}R^{d}$, -$NR^{b}C(=O)R^{a}$, -$NR^{b}C(=O)OR^{b}$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 hydroxyalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl);

each R^{13} is independently hydrogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{13a};

each R^{14} is independently C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{14a};

each R^{15} and R^{16} is independently hydrogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{15a};

or R^{15} and R^{16} are taken together with the nitrogen atom to which they are attached to form a heterocycloalkyl optionally substituted with one, two, or three R^{15b};

each R^{13a}, R^{14a}, R^{15a}, and R^{15b} is independently oxo (when feasible), halogen, -CN, -OR^b, -SR^b, -$S(=O)R^a$, -NO_2, -NR^cR^d, -$S(=O)_2R^a$, -$NHS(=O)_2R^a$, -$S(=O)_2NR^cR^d$, -$C(=O)R^a$, -$OC(=O)R^a$, -$C(=O)OR^b$, -$OC(=O)OR^b$, -$C(=O)NR^cR^d$, -$OC(=O)NR^cR^d$, -$NR^bC(=O)NR^cR^d$, -$NR^bC(=O)R^a$, -$NR^bC(=O)OR^b$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl); wherein each alkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three oxo (when feasible), halogen, -CN, -OR^b, -$S(=O)R^a$, -NO_2, -NR^cR^d, -$S(=O)_2R^a$, -$S(=O)_2NR^cR^d$, -$C(=O)R^a$, -$C(=O)OR^b$, -$C(=O)NR^cR^d$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, or C_2-C_6 alkynyl;

R^{17} is hydrogen, -CN, -OR^b, -$S(=O)_2R^a$, -$C(=O)R^a$, -$C(=O)OR^b$, -$C(=O)NR^cR^d$, C_1-C_6 alkyl, C_1-C_6 fluoroalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl);

each R^{18} is independently hydrogen, halogen, -CN, -OR^b, -SR^b, -$S(=O)R^a$, -NO_2, -NR^cR^d, -$S(=O)_2R^a$, -$NHS(=O)_2R^a$, -$S(=O)_2NR^cR^d$, -$C(=O)R^a$, -$OC(=O)R^a$, -$C(=O)OR^b$, -$OC(=O)OR^b$, -$C(=O)NR^cR^d$, -$OC(=O)NR^cR^d$, -$NR^bC(=O)NR^cR^d$, -$NR^bC(=O)R^a$, -$NR^bC(=O)OR^b$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl);

R^{21} and R^{22} are independently hydrogen, C_1-C_{20} alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), C_1-C_6 alkyl(heterocycloalkyl); wherein each alkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{21a};

or R^{21} and R^{22} are taken together with the atoms to which they are attached to form a heterocycloalkyl optionally substituted with one, two, or three R^{21b};

each R^{21a} and R^{21b} is independently oxo (when feasible), halogen, -CN, -OR^b, -SR^b, -$S(=O)R^a$, -NO_2, -NR^cR^d, -$S(=O)_2R^a$, -$NHS(=O)_2R^a$, -$S(=O)_2NR^cR^d$, -$C(=O)R^a$, -$OC(=O)R^a$, -$C(=O)OR^b$, -$OC(=O)OR^b$, -$C(=O)NR^cR^d$, -$OC(=O)NR^cR^d$, -$NR^bC(=O)NR^cR^d$, -$NR^bC(=O)R^a$, -$NR^bC(=O)OR^b$, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl);

each R^a is independently C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein the alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl,

heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three oxo (when feasible), halogen, -OH, C_1-C_6 alkyl, or C_1-C_6 haloalkyl;

each R^b is independently hydrogen, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein the alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three oxo (when feasible), halogen, -OH, C_1-C_6 alkyl, or C_1-C_6 haloalkyl; and

each R^c and R^d is independently hydrogen, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein the alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three oxo (when feasible), halogen, -OH, C_1-C_6 alkyl, or C_1-C_6 haloalkyl;

or R^c and R^d are taken together with the nitrogen atom to which they are attached to form a heterocycloalkyl optionally substituted with one, two, or three oxo, halogen, C_1-C_6 alkyl, or C_1-C_6 haloalkyl.

[0010b] Also disclosed herein is a use of a compound as described herein, or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for treating cancer.

[0010c] Also disclosed herein is a compound as described herein, or a pharmaceutically acceptable salt thereof for use in therapy.

INCORPORATION BY REFERENCE

[0011] All publications, patents, and patent applications mentioned in this specification are herein incorporated by reference for the specific purposes identified herein.

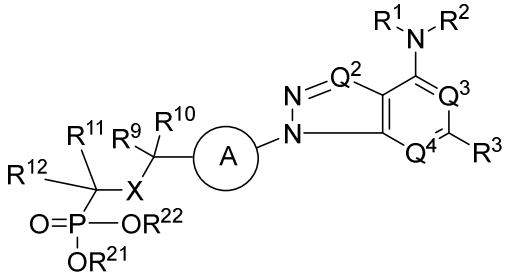
DETAILED DESCRIPTION OF THE INVENTION

[0012] CD73 is a glycosylphosphatidylinositol (GPI) anchored cell surface protein that catalyzes the hydrolysis of AMP to adenosine, and works in concert with CD39, which converts ATP into AMP. The resulting adenosine functions as a signaling molecule that activates the P1 receptors expressed on the cell

CLAIMS

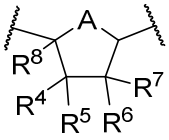
WHAT IS CLAIMED IS:

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



Formula (IV);

wherein:

Ring A is  ;

Q^2 is N or CW;

Q^3 is N and Q^4 is CW;

or Q^3 is CW and Q^4 is N;

each W is independently hydrogen, halogen, -CN, $-OR^b$, NR^cR^d, C_1-C_6 alkyl, or C_1-C_6 haloalkyl;

A is -O- or $-CH_2-$;

X is -O-, -S-, $-S(=O)_2-$, $-NR^{17}-$, or $-C(R^{18})_2-$;

R^1 and R^2 are independently hydrogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl); wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{1a};

or R^1 and R^2 are taken together with the nitrogen atom to which they are attached to form a heterocycloalkyl optionally substituted with one, two, or three R^{1b};

each R^{1a} and R^{1b} is independently oxo (when feasible), halogen, -CN, $-OR^b$, $-SR^b$, $-S(=O)R^a$, $-NO_2$, $-NR^cR^d$, $-S(=O)_2R^a$, $-NR^bS(=O)_2R^a$, $-S(=O)_2NR^cR^d$, $-C(=O)R^a$, $-OC(=O)R^a$, $-C(=O)OR^b$, $-OC(=O)OR^b$, $-C(=O)NR^cR^d$, $-OC(=O)NR^cR^d$, $-NR^bC(=O)NR^cR^d$, $-NR^bC(=O)R^a$, $-NR^bC(=O)OR^b$, C_1-C_6 alkyl, C_1-C_6 fluoroalkyl, C_2-C_6 alkenyl, C_2-C_6

alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl);

R^3 is hydrogen, halogen, -CN, -OR^b, -SR^b, -NR^cR^d, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 haloalkyl, C_1-C_6 hydroxyalkyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl); wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{3a};

each R^{3a} is independently oxo (when feasible), halogen, -CN, -OR^b, -NR^cR^d, -$C(=O)R^a$, -$C(=O)OR^b$, -$C(=O)NR^cR^d$, C_1-C_6 alkyl, C_1-C_6 fluoroalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl;

R^4 and R^7 are independently hydrogen, halogen, -OR^b, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl;

R^5 and R^6 are independently hydrogen, halogen, -OR^b, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl;

R^8 is hydrogen, halogen, -OR^b, -NR^cR^d, C_1-C_6 alkyl, or C_1-C_6 haloalkyl;

R^9 and R^{10} are independently hydrogen, halogen, C_1-C_6 alkyl, or C_1-C_6 haloalkyl;

R^{11} is hydrogen, halogen, -CN, -OR^{13}, -SR^{13}, -$S(=O)R^{14}$, -NO_2, -$NR^{15}R^{16}$, -$S(=O)_2R^{14}$, -$NR^{13}S(=O)_2R^{14}$, -$S(=O)_2NR^{15}R^{16}$, -$C(=O)R^{14}$, -$OC(=O)R^{14}$, -$C(=O)OR^{13}$, -$OC(=O)OR^{13}$, -$C(=O)NR^{15}R^{16}$, -$OC(=O)NR^{15}R^{16}$, -$NR^{13}C(=O)NR^{15}R^{16}$, -$NR^{13}C(=O)R^{14}$, -$NR^{13}C(=O)OR^{13}$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 hydroxyalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{11a};

R^{12} is halogen, -CN, -OR^{13}, -SR^{13}, -$S(=O)R^{14}$, -NO_2, -$NR^{15}R^{16}$, -$S(=O)_2R^{14}$, -$NR^{13}S(=O)_2R^{14}$, -$S(=O)_2NR^{15}R^{16}$, -$C(=O)R^{14}$, -$OC(=O)R^{14}$, -$C(=O)OR^{13}$, -$OC(=O)OR^{13}$, -$C(=O)NR^{15}R^{16}$, -$OC(=O)NR^{15}R^{16}$, -$NR^{13}C(=O)NR^{15}R^{16}$, -$NR^{13}C(=O)R^{14}$, -$NR^{13}C(=O)OR^{13}$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 hydroxyalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{12a};

or R^{11} and R^{12} are taken together to form a cycloalkyl or heterocycloalkyl each optionally substituted with one, two, or three R^{11b};

each R^{11a}, R^{11b}, and R^{12a} is independently oxo (when feasible), halogen, -CN, -OR^{13}, -SR^{13}, -$S(=O)R^{14}$, -NO_2, -$NR^{15}R^{16}$, -$S(=O)_2R^{14}$, -$NR^{13}S(=O)_2R^{14}$, -$S(=O)_2NR^{15}R^{16}$, -$C(=O)R^{14}$, -$OC(=O)R^{14}$, -$C(=O)OR^{13}$, -$OC(=O)OR^{13}$, -$C(=O)NR^{15}R^{16}$, -$OC(=O)NR^{15}R^{16}$, -$NR^{13}C(=O)NR^{15}R^{16}$, -$NR^{13}C(=O)R^{14}$, -$NR^{13}C(=O)OR^{13}$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 hydroxyalkyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{11c};

each R^{11c} is independently oxo (when feasible), halogen, -CN, -OR^b, -SR^b, -$S(=O)R^a$, -NO_2, -NR^cR^d, -$S(=O)_2R^a$, -$NR^bS(=O)_2R^a$, -$S(=O)_2NR^cR^d$, -$C(=O)R^a$, -$OC(=O)R^a$, -$C(=O)OR^b$, -$OC(=O)OR^b$, -$C(=O)NR^cR^d$, -$OC(=O)NR^cR^d$, -$NR^bC(=O)NR^cR^d$, -$NR^bC(=O)R^a$, -$NR^bC(=O)OR^b$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 hydroxyalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl);

each R^{13} is independently hydrogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{13a};

each R^{14} is independently C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{14a};

each R^{15} and R^{16} is independently hydrogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein each alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{15a};

or R^{15} and R^{16} are taken together with the nitrogen atom to which they are attached to form a heterocycloalkyl optionally substituted with one, two, or three R^{15b};

each R^{13a}, R^{14a}, R^{15a}, and R^{15b} is independently oxo (when feasible), halogen, -CN, -OR^b, -SR^b, -$S(=O)R^a$, -NO_2, -NR^cR^d, -$S(=O)_2R^a$, -$NHS(=O)_2R^a$, -$S(=O)_2NR^cR^d$, -$C(=O)R^a$, -

$OC(=O)R^a$, $-C(=O)OR^b$, $-OC(=O)OR^b$, $-C(=O)NR^cR^d$, $-OC(=O)NR^cR^d$, $-NR^bC(=O)NR^cR^d$, $-NR^bC(=O)R^a$, $-NR^bC(=O)OR^b$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl); wherein each alkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three oxo (when feasible), halogen, -CN, $-OR^b$, $-S(=O)R^a$, $-NO_2$, $-NR^cR^d$, $-S(=O)_2R^a$, $-S(=O)_2NR^cR^d$, $-C(=O)R^a$, $-C(=O)OR^b$, $-C(=O)NR^cR^d$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, or C_2-C_6 alkynyl;

R^{17} is hydrogen, -CN, $-OR^b$, $-S(=O)_2R^a$, $-C(=O)R^a$, $-C(=O)OR^b$, $-C(=O)NR^cR^d$, C_1-C_6 alkyl, C_1-C_6 fluoroalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl);

each R^{18} is independently hydrogen, halogen, -CN, $-OR^b$, $-SR^b$, $-S(=O)R^a$, $-NO_2$, $-NR^cR^d$, $-S(=O)_2R^a$, $-NHS(=O)_2R^a$, $-S(=O)_2NR^cR^d$, $-C(=O)R^a$, $-OC(=O)R^a$, $-C(=O)OR^b$, $-OC(=O)OR^b$, $-C(=O)NR^cR^d$, $-OC(=O)NR^cR^d$, $-NR^bC(=O)NR^cR^d$, $-NR^bC(=O)R^a$, $-NR^bC(=O)OR^b$, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl);

R^{21} and R^{22} are independently hydrogen, C_1-C_{20} alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), C_1-C_6 alkyl(heterocycloalkyl); wherein each alkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{21a};

or R^{21} and R^{22} are taken together with the atoms to which they are attached to form a heterocycloalkyl optionally substituted with one, two, or three R^{21b};

each R^{21a} and R^{21b} is independently oxo (when feasible), halogen, -CN, $-OR^b$, $-SR^b$, $-S(=O)R^a$, $-NO_2$, $-NR^cR^d$, $-S(=O)_2R^a$, $-NHS(=O)_2R^a$, $-S(=O)_2NR^cR^d$, $-C(=O)R^a$, $-OC(=O)R^a$, $-C(=O)OR^b$, $-OC(=O)OR^b$, $-C(=O)NR^cR^d$, $-OC(=O)NR^cR^d$, $-NR^bC(=O)NR^cR^d$, $-NR^bC(=O)R^a$, $-NR^bC(=O)OR^b$, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl);

each R^a is independently C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein the alkyl, alkenyl, alkynyl,

heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three oxo (when feasible), halogen, -OH, C_1-C_6 alkyl, or C_1-C_6 haloalkyl;

each R^b is independently hydrogen, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein the alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three oxo (when feasible), halogen, -OH, C_1-C_6 alkyl, or C_1-C_6 haloalkyl; and

each R^c and R^d is independently hydrogen, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl; wherein the alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three oxo (when feasible), halogen, -OH, C_1-C_6 alkyl, or C_1-C_6 haloalkyl;

or R^c and R^d are taken together with the nitrogen atom to which they are attached to form a heterocycloalkyl optionally substituted with one, two, or three oxo, halogen, C_1-C_6 alkyl, or C_1-C_6 haloalkyl.

2. The compound of claim 1, or a pharmaceutically acceptable salt-thereof, wherein:
Q^2 is CW.

3. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein:
Q^2 is N.

4. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein:
Q^3 is N and Q^4 is CW.

5. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein:
Q^4 is N and Q^3 is CW.

6. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein:
each W is independently hydrogen, halogen, or C_1-C_6 alkyl.

7. The compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein:
R^3 is halogen, -OR^b, C_1-C_6 alkyl, C_2-C_6 alkynyl, C_1-C_6 haloalkyl, C_1-C_6 hydroxyalkyl, or C_1-C_6 heteroalkyl; wherein each alkyl and alkynyl is independently optionally substituted with one, two, or three R^{3a}.

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

R^3 is halogen, $-OR^b$, C_2-C_6 alkynyl, or C_1-C_6 hydroxyalkyl; wherein each alkyl and alkynyl is independently optionally substituted with one, two, or three R^{3a}.

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

R^1 is C_1-C_6 alkyl, C_1-C_6 haloalkyl, cycloalkyl, heterocycloalkyl, C_1-C_6 alkyl(aryl), C_1-C_6 alkyl(heteroaryl), C_1-C_6 alkyl(cycloalkyl), or C_1-C_6 alkyl(heterocycloalkyl); wherein each alkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl is independently optionally substituted with one, two, or three R^{1a}.

10. The compound of claim 9, or a pharmaceutically acceptable salt thereof, wherein:

R^1 is C_1-C_6 alkyl, cycloalkyl, C_1-C_6 alkyl(aryl), or C_1-C_6 alkyl(cycloalkyl); wherein each alkyl, cycloalkyl, and aryl is independently optionally substituted with one, two, or three R^{1a}.

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

each R^{1a} is independently halogen or C_1-C_6 alkyl.

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

R^2 is hydrogen or C_1-C_6 alkyl.

13. The compound of claim 12, or a pharmaceutically acceptable salt thereof, wherein:

R^2 is hydrogen.

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

R^8 is hydrogen or C_1-C_6 alkyl.

15. The compound of claim 14, or a pharmaceutically acceptable salt thereof, wherein:

R^8 is hydrogen.

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

R^9 and R^{10} are independently hydrogen or C_1-C_6 alkyl.

17. The compound of claim 16, or a pharmaceutically acceptable salt thereof, wherein:

R^9 and R^{10} are hydrogen.

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

A is -O-.

19. A pharmaceutical composition comprising a compound of claim_1, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

20. Use of a compound of claim 1, or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for treating cancer.

21. A compound of claim 1, or a pharmaceutically acceptable salt thereof for use in therapy.