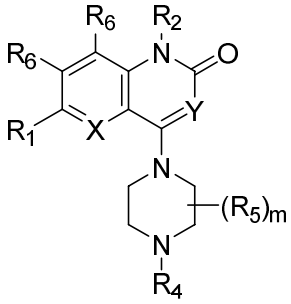
CLAIMS

What is claimed is:

1. A compound of Formula (I):



(I)

or a salt thereof, wherein:

X is CR_6 or N;

Y is CR_3 or N;

R_1 is H, F, Cl, Br, –CN, $C_{1–3}$ alkyl substituted with zero to 4 R_{1a}, $C_{3–4}$ cycloalkyl substituted with zero to 4 R_{1a}, $C_{1–3}$ alkoxy substituted with zero to 4 R_{1a}, $–C(O)NR_aR_a$, $–NR_aR_a$, $–S(O)_nR_e$, or $–P(O)R_eR_e$;

each R_{1a} is independently F, Cl, –CN, –OH, $–OCH_3$, or $–NR_aR_a$;

each R_a is independently H or $C_{1–3}$ alkyl;

each R_e is independently $C_{3–4}$ cycloalkyl or $C_{1–3}$ alkyl substituted with zero to 4 R_{1a};

R_2 is H, $C_{1–3}$ alkyl substituted with zero to 4 R_{2a}, $C_{2–3}$ alkenyl substituted with zero to 4 R_{2a}, or $C_{3–4}$ cycloalkyl substituted with zero to 4 R_{2a};

each R_{2a} is independently F, Cl, –CN, –OH, $–O(C_{1–2}$ alkyl), $C_{3–4}$ cycloalkyl, $C_{3–4}$ alkenyl, or $C_{3–4}$ alkynyl;

R_3 is H, F, Cl, Br, –CN, $C_{1–3}$ alkyl, $C_{1–2}$ fluoroalkyl, $C_{3–4}$ cycloalkyl, $C_{3–4}$ fluorocycloalkyl, $–NO_2$, or pyridinyl substituted with zero to 2 R_{3a};

each R_{3a} is halo, –CN, C_{1-3} alkyl, or C_{1-3} alkoxy;

R_4 is C_{6-10} aryl, or 5- to 14-membered heteroaryl, each substituted with zero to 4 R_{4a};

each R_{4a} is independently halo –CN, –OH, $C_{1–6}$ alkyl $–(CH_2)_{1–2}O(C_{1–3}$ alkyl), $C_{1–4}$ alkoxy, $–O(CH)_{1–3}O(C_{1–3}$ alkyl), $–O(CH)_{1–3}NR_cR_c$, $–OCH_2CH{=}CH_2$, $–OCH_2C{\equiv}CH$, $–C(O)(C_{1–4}$ alkyl), –C(O)OH, $–C(O)O(C_{1–4}$ alkyl), $–C(O)NH_2$, $–C(O)NH(C_{1–4}$ alkyl),

−C(O)N($C_{1–4}$ alkyl)$_2$, −NR_cR_c, −$NR_aS(O)_2$($C_{1–3}$ alkyl), −$NR_aC(O)$($C_{1–3}$ alkyl), −$NR_aC(O)O$($C_{1–4}$ alkyl), −P(O)($C_{1–3}$ alkyl)$_2$, −$S(O)_2$($C_{1–3}$ alkyl), −$(CH_2)_{0–3}R_{4b}$, −$O(CH_2)_{0–3}R_{4b}$, −NR_aR_{4b}, or −$C(O)R_{4b}$, wherein each of said alkyl and alkoxy is substituted with zero to 6 R_{4c};

R_{4b} is $C_{3–7}$ cycloalkyl, 4- to 7-membered heterocyclyl, phenyl, or 5- or 6-membered heteroaryl, each substituted with zero to 4 R_{4d};

each R_{4c} is independently halo, −CN, −OH, C_{1-3} alkoxy, −O(C_{1-2} fluoroalkyl), or −NR_aR_a;

each R_{4d} is independently halo, −CN, −OH, C_{1-3} alkyl, C_{1-2} fluoroalkyl, C_{1-3} alkoxy, or −NR_aR_a;

each R_c is independently H or $C_{1–2}$ alkyl;

each R_5 is independently F, Cl, −CN, −OH, $C_{1–6}$ alkyl substituted with zero to 4 R_g, $C_{1–3}$ alkoxy substituted with zero to 4 R_g, $C_{2–4}$ alkenyl substituted with zero to 4 R_g, $C_{2–4}$ alkynyl substituted with zero to 4 R_g, $C_{3–4}$ cycloalkyl substituted with zero to 4 R_g, phenyl substituted with zero to 4 R_g, oxadiazolyl substituted with zero to 3 R_g, pyridinyl substituted with zero to 4 R_g, −$(CH_2)_{1–2}$(heterocyclyl substituted with zero to 4 R_g), −$(CH_2)_{1–2}NR_cC(O)$($C_{1–4}$ alkyl), −$(CH_2)_{1–2}NR_cC(O)O$($C_{1–4}$ alkyl), −$(CH_2)_{1–2}NR_cS(O)_2$($C_{1–4}$ alkyl), −C(O)($C_{1–4}$ alkyl), −C(O)OH, −C(O)O($C_{1–4}$ alkyl), −C(O)O($C_{3–4}$ cycloalkyl), −$C(O)NR_aR_a$, or −$C(O)NR_a$($C_{3–4}$ cycloalkyl), or two R_5 attached to the same carbon atom form =O;

each R_g is independently F, Cl, −CN, −OH, $C_{1–3}$ alkoxy, $C_{1–3}$ fluoroalkoxy, −$O(CH_2)_{1–2}O$($C_{1–2}$ alkyl), C_{3-5} cycloalkyl, or −NR_cR_c;

each R_6 is H, F, Cl, −CN, −CH_3, −CH_2F, −CHF_2, −CF_3, or −OCH_3;

m is zero, 1, 2, or 3; and

n is zero, 1, or 2.

2. The compound according to Claim 1 or a salt thereof, wherein:

R_1 is H, F, Cl, Br, −CN, $C_{1–3}$ alkyl substituted with zero to 4 R_{1a}, cyclopropyl substituted with zero to 3 R_{1a}, $C_{1–3}$ alkoxy substituted with zero to 3 R_{1a}, −$C(O)NR_aR_a$, −NR_aR_a, −$S(O)_nCH_3$, or −P(O)$(CH_3)_2$;

each R_{1a} is independently F, Cl, or −CN;

each R_a is independently H or $C_{1–3}$ alkyl;

R_2 is H, $C_{1–2}$ alkyl substituted with zero to 2 R_{2a}, or $C_{2–3}$ alkenyl substituted with zero to 2 R_{2a};

each R_{2a} is independently F, Cl, –CN, –OH, –O($C_{1–2}$ alkyl), cyclopropyl, $C_{3–4}$ alkenyl, or $C_{3–4}$ alkynyl;

R_3 is H, F, Cl, Br, –CN, $C_{1–2}$ alkyl, $C_{1–2}$ fluoroalkyl, $C_{3–4}$ cycloalkyl, $–NO_2$, or pyridinyl substituted with zero to 2 R_{3a};

R_4 is phenyl, pyrrolyl, thiazolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, oxadiazolyl, pyridinyl, pyridazinyl, pyrimidinyl, pyrazinyl, triazinyl, indolyl, indazolyl, naphthalenyl, quinolinyl, isoquinolinyl, quinazolinyl, benzo[d]oxazolyl, benzothiazolyl, imidazo[1,2-a]pyridinyl, imidazo[1,2-b]pyridazinyl, pyrazolo[1,5-a] pyrimidinyl, or thieno[3,2-b]pyridinyl, each substituted with zero to 3 R_{4a};

each R_{4a} is independently F, Cl, Br, –CN, –OH, $C_{1–4}$ alkyl $–(CH_2)_{1–2}O(C_{1–3}$ alkyl), $C_{1–3}$ alkoxy, $–O(CH)_{1–2}NR_cR_c$, –C(O)($C_{1–3}$ alkyl), –C(O)OH, –C(O)O($C_{1–3}$ alkyl), $–C(O)NH_2$, –C(O)NH($C_{1–3}$ alkyl), –C(O)N($C_{1–3}$ alkyl)$_2$, $–NR_cR_c$, $–NR_aS(O)_2(C_{1–2}$ alkyl), $–NR_aC(O)(C_{1–2}$ alkyl), $–NR_aC(O)O(C_{1–3}$ alkyl), $–S(O)_2(C_{1–2}$ alkyl), $–(CH_2)_{0–3}R_{4b}$, $–O(CH_2)_{0–3}R_{4b}$, $–NR_aR_{4b}$, or $–C(O)R_{4b}$, wherein each of said alkyl and alkoxy is substituted with zero to 6 R_{4c};

R_{4b} is $C_{3–6}$ cycloalkyl, oxetanyl, tetrahydrofuranyl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, phenyl, furanyl, pyranyl, pyrrolyl, pyrazolyl, imidazolyl, isoxazolyl, oxazolyl, oxadiazolyl, triazolyl, pyridazinyl, pyridinyl, pyrimidinyl, pyrazinyl, or triazinyl, each substituted with zero to 3 R_{4d};

each R_{4c} is independently halo, –CN, –OH, –O(C_{1-2} alkyl), –O(C_{1-2} fluoroalkyl), or $–NR_aR_a$;

each R_{4d} is independently F, Cl, Br, –CN, –OH, C_{1-2} alkyl, C_{1-2} fluoroalkyl, C_{1-2} alkoxy, or $–NR_aR_a$;

each R_5 is independently F, –CN, –OH, $C_{1–5}$ alkyl substituted with zero to 4 R_g, $C_{1–2}$ alkoxy substituted with zero to 3 R_g, $C_{2–3}$ alkenyl substituted with zero to 4 R_g, $C_{2–3}$ alkynyl substituted with zero to 4 R_g, $C_{3–4}$ cycloalkyl substituted with zero to 4 R_g, phenyl substituted with zero to 3 R_g, oxadiazolyl substituted with zero to 3 R_g, pyridinyl substituted with zero to 3 R_g, $–(CH_2)_{1–2}$(heterocyclyl substituted with zero

to 4 R_g), $-(CH_2)_{1-2}NR_cC(O)(C_{1-4}$ alkyl), $-(CH_2)_{1-2}NR_cC(O)O(C_{1-4}$ alkyl), $-(CH_2)_{1-2}NR_cS(O)_2(C_{1-4}$ alkyl), $-C(O)(C_{1-4}$ alkyl), $-C(O)OH$, $-C(O)O(C_{1-4}$ alkyl), $-C(O)O(C_{3-4}$ cycloalkyl), $-C(O)NR_aR_a$, or $-C(O)NR_a(C_{3-4}$ cycloalkyl), or two R_5 attached to the same carbon atom form =O;

each R_6 is H, F, or $-CH_3$; and

m is zero, 1, 2, or 3.

3. The compound according to any one of claims 1-2 or a salt thereof, wherein:

X is N and Y is CR_3; or

X is N and Y is N;

R_1 is –CN;

R_2 is $-CH_3$;

R_3 is H;

R_4 is phenyl, thiazolyl, quinolinyl, isoquinolinyl, benzo[d]oxazolyl, benzo[d]thiazolyl, imidazo[1,2-a]pyridinyl, imidazo[1,2-b]pyridazinyl, pyrazolo[1,5-a]pyrimidinyl, or thieno[3,2-b]pyridinyl, each substituted with zero to 2 R_{4a};

each R_{4a} is independently F, Br, –OH, –CN, $-CH_3$, $-CF_3$, $-OCH_3$, $-OCF_3$, or fluorophenyl;

each R_5 is independently hydrogen, $-CH_3$, or $-CH_2CH_3$; and

each R_6 is H.

4. The compound according to any one of claims 1-3 or a salt thereof, wherein:

X is N; and

Y is CR_3.

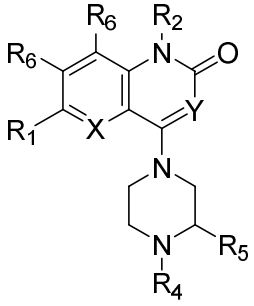
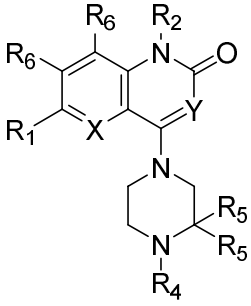
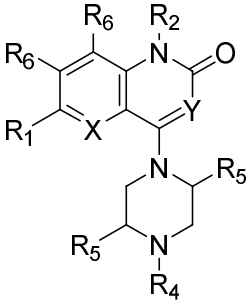
5. The compound according to any one of claims 1-3 or a salt thereof, wherein:

X is N; and

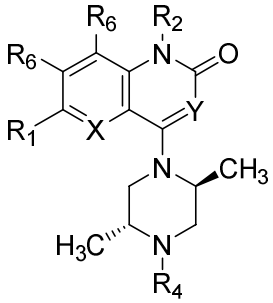
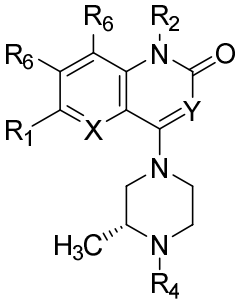
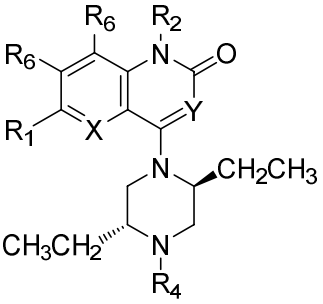
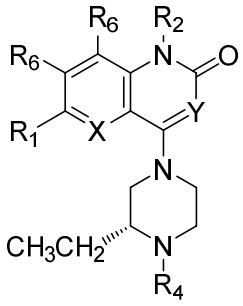
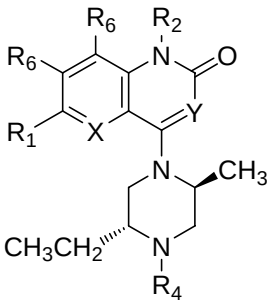
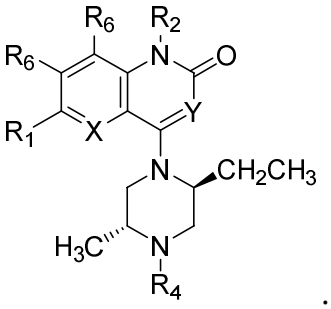
Y is N.

6. The compound according to any one of claims 1-5 or a salt thereof, wherein m is 1 or 2.

7. The compound according to any one of claims 1-3 and 6 or a salt thereof, having a structure selected from:



and

.

8. The compound according to any one of claims 1-3 or 6 or a salt thereof, having a structure selected from:






and

.

9. The compound according to any one of claims 1-3 or a salt thereof, wherein said compound is:

4-((2S,5R)-2,5-diethyl-4-(4-(trifluoromethyl)phenyl)piperazin-1-yl)-1-methyl-2-oxo-1,2-dihydropyrido[3,2-d]pyrimidine-6-carbonitrile (1);

4-((2S,5R)-2,5-diethyl-4-(3-(trifluoromethyl)phenyl)piperazin-1-yl)-1-methyl-2-oxo-1,2-dihydropyrido[3,2-d]pyrimidine-6-carbonitrile (2);

4-((2S,5R)-5-ethyl-4-(3-fluoro-4-(trifluoromethyl)phenyl)-2-methylpiperazin-1-yl)-1-

methyl-2-oxo-1,2-dihydropyrido[3,2-d]pyrimidine-6-carbonitrile (3);

4-((2S,5R)-5-ethyl-2-methyl-4-(4-(trifluoromethoxy)phenyl)piperazin-1-yl)-1-methyl-2-oxo-1,2-dihydropyrido[3,2-d]pyrimidine-6-carbonitrile (4);

(S)-5-methyl-8-(2-methyl-4-(quinolin-8-yl)piperazin-1-yl)-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (5);

8-((2S,5R)-4-(6-fluoroquinolin-8-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (6);

8-((2S,5R)-2,5-dimethyl-4-(thieno[3,2-b]pyridin-3-yl)piperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (7);

8-((2S,5R)-4-(imidazo[1,2-b]pyridazin-3-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (8);

(S)-5-methyl-8-(2-methyl-4-(quinolin-8-yl)piperazin-1-yl)-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (9);

8-((2S,5R)-4-(8-bromo-6-methylquinolin-2-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (10);

8-((2S,5R)-4-(isoquinolin-1-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (11);

8-((2S,5R)-4-(4-bromoisoquinolin-1-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (12);

8-((2S,5R)-4-(5-fluoroquinolin-8-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (13);

8-((2S,5R)-4-(3-bromopyrazolo[1,5-a]pyrimidin-5-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (14);

8-((2S,5R)-2,5-dimethyl-4-(7-(trifluoromethyl)quinolin-4-yl)piperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (15);

8-((2S,5R)-4-(5,7-difluoroquinolin-4-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (16);

8-((2S,5R)-2,5-dimethyl-4-(quinolin-4-yl)piperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (17);

8-((2S,5R)-4-(imidazo[1,2-a]pyridin-8-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (18);

8-((2S,5R)-4-(isoquinolin-4-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-

dihydro-1,5-naphthyridine-2-carbonitrile (19);

8-((2S,5R)-4-(benzo[d]oxazol-7-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (20);

8-((2S,5R)-4-(3-hydroxy-6-(trifluoromethoxy)quinolin-8-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (21);

8-((2S,5R)-2,5-dimethyl-4-(2-methylquinolin-8-yl)piperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (22);

8-((2S,5R)-4-(6-fluoroquinolin-4-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (23);

8-((2S,5R)-4-(3-methoxy-6-methylquinolin-8-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (24);

8-((2S,5R)-4-(6-fluorobenzo[d]thiazol-2-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (25);

8-((2S,5R)-4-(4-(4-fluorophenyl)thiazol-2-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (26); or

8-((2S,5R)-4-(4-(4-fluorophenyl)-2-methylthiazol-5-yl)-2,5-dimethylpiperazin-1-yl)-5-methyl-6-oxo-5,6-dihydro-1,5-naphthyridine-2-carbonitrile (27).

10. A pharmaceutical composition comprising a compound according to any one of claims 1-9 or a pharmaceutically-acceptable salt thereof; and a pharmaceutically acceptable carrier.

11. ~~Use of a~~ A compound according to any one of claims 1-9 or a pharmaceutically-acceptable salt thereof, for use in the treatment of cancer or viral infections.

12. Use of a compound according to any one of claims 1-9 or a pharmaceutically-acceptable salt thereof in the manufacture of a medicament for the treatment of cancer or viral infections.

13~~12~~. The compound for use of claim 11 or the use of claim 12~~11~~, wherein said cancer is selected from cancer of the colon, pancreatic cancer, breast cancer, prostate cancer, lung cancer, ovarian cancer, cervical cancer, renal cancer, cancer of the head and neck,

lymphoma, leukemia, and melanoma.

1413. ~~Use of a~~ A compound according to any one of claims 1-9 or a pharmaceutically-acceptable salt thereof~~,~~ for use in inhibiting activity of at least one of diacylglycerol kinase selected from diacylglycerol kinase alpha (DGKα) and diacylglycerol kinase zeta (DGKζ).