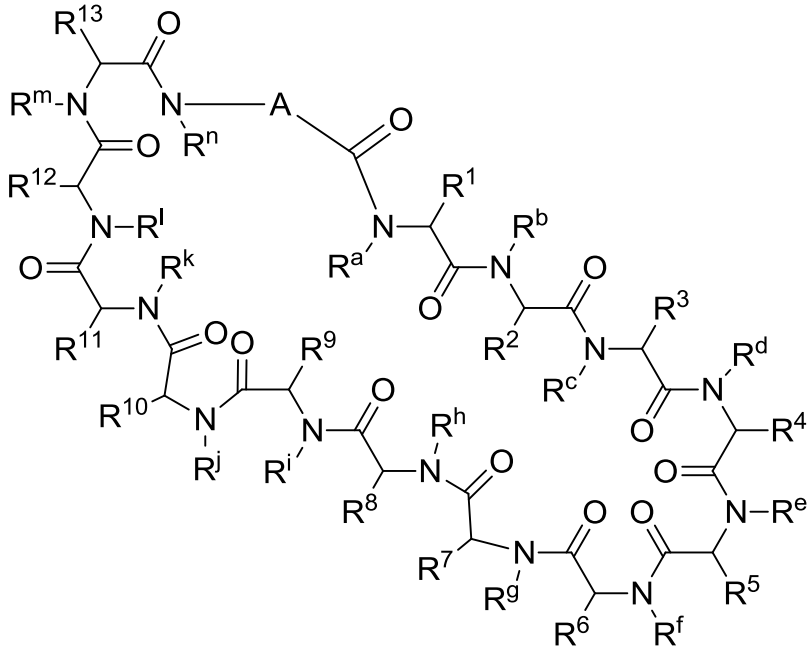
CLAIMS

WHAT IS CLAIMED IS:

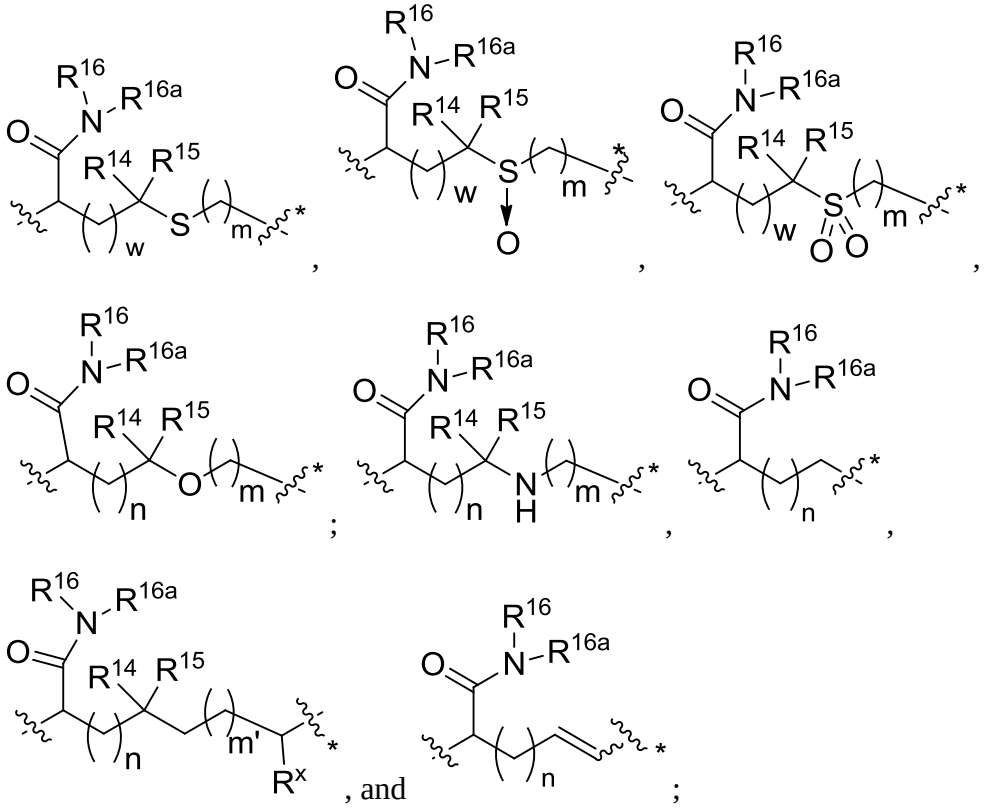
1. A compound of formula (I)



(I),

or a pharmaceutically acceptable salt thereof, wherein:

A is selected from



wherein:

$\sim\!\!*$ denotes the point of attachment to the carbonyl group and $\sim$ denotes the point of attachment to the nitrogen atom;

n is 0 or 1;

m is 1 or 2;

m' is 0 or 1;

w is 0, 1, or 2;

R^x is selected from hydrogen, amino, hydroxy, and methyl;

R^{14} and R^{15} are independently selected from hydrogen and methyl;

R^{16a} is selected from hydrogen and C_1-C_6 alkyl;

R^{16} is selected from

$-(C(R^{17a})_2)_2$-X-R^{30},

$-C(R^{17a})_2C(O)N(R^{16a})C(R^{17a})_2$-X'-$R^{31}$,

$-C(R^{17a})_2[C(O)N(R^{16a})C(R^{17a})_2]_{w'}$ -X-R^{31},

$-(C(R^{17a})(R^{17})C(O)NR^{16a})_{n'}$-H; and

$-(C(R^{17a})(R^{17})C(O)NR^{16a})_{m'}$-$C(R^{17a})(R^{17})$-$CO_2H$;

wherein:

w' is 2 or 3;

n' is 1-6;

m' is 0-5;

X is a chain of between 1 and 172 atoms wherein the atoms are selected from carbon and oxygen and wherein the chain may contain one, two, three, or four groups selected from -NHC(O)NH-, and -C(O)NH- embedded therein; and wherein the chain is optionally substituted with one to six groups independently selected from $–CO_2H$, $-C(O)NH_2$, $-CH_2C(O)NH_2$, and $–(CH_2)CO_2H$;

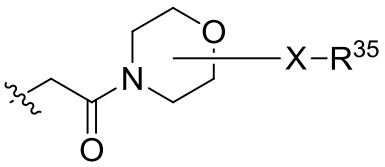
X' is a chain of between 1 and 172 atoms wherein the atoms are selected from carbon and oxygen and wherein the chain may contain one, two, three, or four groups selected from -NHC(O)NH-, and -C(O)NH- embedded therein; and wherein the chain is optionally substituted with one to six groups independently selected from $–CO_2H$, $-C(O)NH_2$, and $–CH_2CO_2H$, provided that X' is other than unsubstituted PEG;

R^{30} is selected from $–CO_2H$, $-C(O)NR^wR^x$, and $-CH_3$ wherein R^w and R^x are independently selected from hydrogen and C_1-C_6alkyl, provided that when X is all carbon, R^{30} is other than $–CH_3$;

R^{31} is $-CO_2H$, $-C(O)NR^wR^x$, $-CH_3$, alexa-5-SDP, and biotin;

each R^{17a} is independently selected from hydrogen, C_1-C_6alkyl, $-CH_2OH$, $-CH_2CO_2H$, $-(CH_2)_2CO_2H$,

each R^{17} is independently selected from hydrogen, $-CH_3$, $(CH_2)_zN_3$, $-(CH_2)_zNH_2$, $-X-R^{31}$, $-(CH_2)_zCO_2H$, $–CH_2OH$, $CH_2C{\equiv}CH$, and $-(CH_2)_z$-triazolyl-X-R^{35}, wherein z is 1-6 and R^{35} is selected from $-CO_2H$, $-C(O)NR^wR^x$, CH_3, biotin, -2-fluropyridine, $-C(O)-(CH_2)_2–C(O)O$-vitamin E,–C(O)O-vitamin E; and



provided at least one R^{17} is other than hydrogen, $-CH_3$, or $–CH_2OH$;

R^c, R^f, R^h, R^i, R^m, and R^n are hydrogen;

R^a, R^e, R^j, and R^k, are each independently selected from hydrogen and methyl;

R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, and R^{13} are independently selected from a natural amino acid side chain and an unnatural amino acid side chain or form a ring with the corresponding vicinal R group as described below;

R^e and R^k can each form a ring with the corresponding vicinal R group and the atoms to which they are attached selected from azetidine, pyrollidine, morpholine, piperidine, piperazine, and tetrahydrothiazole; wherein each ring is optionally substituted with one to four groups independently selected from amino, cyano, methyl, halo, and hydroxy;

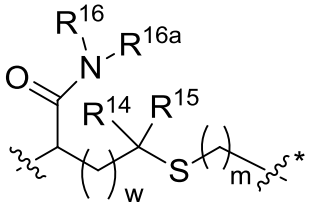
R^b is methyl or, R^b and R^2, together with the atoms to which they are attached, form a ring selected from azetidine, pyrollidine, morpholine, piperidine, piperazine, and tetrahydrothiazole; wherein each ring is optionally substituted with one to four groups independently selected from amino, cyano, methyl, halo, and hydroxy;

R^d is hydrogen or methyl, or, R^d and R^4, together with the atoms to which they are attached, can form a ring selected from azetidine, pyrollidine, morpholine, piperidine, piperazine, and tetrahydrothiazole; wherein each ring is optionally substituted with one to four groups independently selected from amino, cyano, methyl, halo, hydroxy, and phenyl;

R^g is hydrogen or methyl or R^g and R^7, together with the atoms to which they are attached, can form a ring selected from azetidine, pyrollidine, morpholine, piperidine, piperazine, and tetrahydrothiazole; wherein each ring is optionally substituted with one to four groups independently selected from amino, benzyl optionally substituted with a halo group, benzyloxy, cyano, cyclohexyl, methyl, halo, hydroxy, isoquinolinyloxy optionally substituted with a methoxy group, quinolinyloxy optionally substituted with a halo group, and tetrazolyl; and wherein the pyrrolidine and the piperidine ring are optionally fused to a cyclohexyl, phenyl, or indole group; and

R^l is methyl or, R^l and R^{12}, together with the atoms to which they are attached, form a ring selected from azetidine and pyrollidine, wherein each ring is optionally substituted with one to four independently selected from amino, cyano, methyl, halo, and hydroxy.

2. A compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein A is



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3. A compound of claim 2, or a pharmaceutically acceptable salt thereof, wherein:

m and w are 1; and

R^{14}, R^{15}, and R^{16a} are each hydrogen.

4. A compound of claim 3, or a pharmaceutically acceptable salt thereof, wherein R^{16} is $–(C(R^{17a})_2)_2\text{-}X\text{-}R^{30}$.

5. A compound of claim 4, or a pharmaceutically acceptable salt thereof, wherein:

each R^{17a} is hydrogen;

X is a chain of between 8 and 46 atoms wherein the atoms are selected from carbon and oxygen and wherein the chain may contain one, two, or three C(O)NH groups embedded therein; and wherein the chain is optionally substituted with one or two groups independently selected from $–CO_2H$, $\text{-}C(O)NH_2$, $\text{-}CH_2C(O)NH_2$, and $–CH_2CO_2H$; and

R^{30} is selected from $–CH_3$, $\text{-}CO_2H$, and $\text{-}C(O)NH_2$; provided that when X is all carbon, R^{30} is other than $–CH_3$.

6. A compound of claim 3, or a pharmaceutically acceptable salt thereof, wherein R^{16} is $\text{-}C(R^{17a})_2C(O)N(R^{16a})C(R^{17a})_2\text{-}X'\text{-}R^{31}$.

7. A compound of claim 6, or a pharmaceutically acceptable salt thereof, wherein

each R^{17a} is selected from hydrogen, $\text{-}CO_2H$, and $–CH_2CO_2H$;

X' is a chain of between 8 and 48 atoms wherein the atoms are selected from carbon and oxygen and wherein the chain may contain one, two, or three C(O)NH groups embedded therein; and wherein the chain is optionally substituted with one or two groups independently selected from $–CO_2H$, $-C(O)NH_2$, $-CH_2C(O)NH_2$, and $–CH_2CO_2H$; provided that X' is other than unsubstituted PEG; and

R^{30} is selected from $–CH_3$, $-CO_2H$, and $-C(O)NH_2$.

8. A compound of claim 3, or a pharmaceutically acceptable salt thereof, wherein R^{16} is $-C(R^{17a})_2[C(O)N(R^{16a})C(R^{17a})_2]_{w'}$ -X-R^{31}.

9. A compound of claim 8, or a pharmaeutically acceptable salt thereof, wherein

each R^{17a} is selected from hydrogen, $-CO_2H$, and $–CH_2CO_2H$;

X is a chain of between 8 and 48 atoms wherein the atoms are selected from carbon and oxygen and wherein the chain may contain one, two, or three C(O)NH groups embedded therein; and wherein the chain is optionally substituted with one or two groups independently selected from $–CO_2H$, $-C(O)NH_2$, $-CH_2C(O)NH_2$, and $–CH_2CO_2H$; and

R^{31} is selected from $–CH_3$, $-CO_2H$, and $-C(O)NH_2$.

10. A compound of claim 3, or a pharmaceutically acceptable salt thereof, wherein R^{16} is $-(C(R^{17a})(R^{17})C(O)NR^{16a})_{n'}$-H.

11. A compound of claim 10, or a pharmaceutically acceptable salt thereof, wherein

each R^{17a} is hydrogen; and

each R^{17} is selected from hydrogen, $-CH_3$, $(CH_2)_zN_3$, $-(CH_2)_zNH_2$, -X-R^{31}, $-(CH_2)_zCO_2H$, $–CH_2OH$, $CH_2C{\equiv}CH$, and $-(CH_2)_z$-triazolyl-X-R^{35}; provided at least one R^{17} is other than hydrogen, $-CH_3$, or $–CH_2OH$;

z is 1-4;

R^{31} is selected from $–CH_3$, $-CO_2H$, and $-C(O)NH_2$;

X is a chain of between 7 and 155 atoms wherein the atoms are selected from carbon and oxygen and wherein the chain may contain one, two, or three C(O)NH

groups embedded therein; and wherein the chain is optionally substituted with one or two groups independently selected from $–CO_2H$, $-C(O)NH_2$, $-CH_2C(O)NH_2$, and $–CH_2CO_2H$; and

R^{35} is selected from $-CO_2H$, $-C(O)NR^wR^x$, CH_3, biotin, -2-fluropyridine, $-C(O)-(CH_2)_2–C(O)O$-vitamin E, and $–C(O)O$-vitamin E.

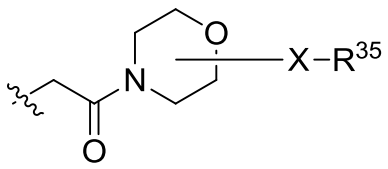
12. A compound of claim 3, or a pharmaceutically acceptable salt thereof, wherein R^{16} is $-(CR^{17a})(R^{17})C(O)NR^{16a})_{m'}-C(R^{17a})(R^{17})-CO_2H$.

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

m' is 1-3;

each R^{17a} is hydrogen;

each R^{17} is selected from hydrogen, $-CH_3$, $(CH_2)_zN_3$, $-(CH_2)_zNH_2$, $-X-R^{31}$, $-(CH_2)_zCO_2H$, $–CH_2OH$, $CH_2C\equiv CH$, $-(CH_2)_z$-triazolyl-$X-R^{35}$, and C(O)O-vitamin E; and



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provided at least one R^{17} is other than hydrogen, $-CH_3$, or $–CH_2OH$;

z is 1-4;

R^{31} is selected from $–CH_3$, $-CO_2H$, and $-C(O)NH_2$;

X is a chain of between 20 and 60 atoms wherein the atoms are selected from carbon and oxygen and wherein the chain may contain one, two, or three C(O)NH groups embedded therein; and wherein the chain is optionally substituted with one or two groups independently selected from $–CO_2H$, $-C(O)NH_2$, $-CH_2C(O)NH_2$, and $–CH_2CO_2H$; and

R^{35} is selected from $-CO_2H$, $-C(O)NR^wR^x$, CH_3, biotin, 2-fluropyridine, $-C(O)-(CH_2)_2–C(O)O$-vitamin E, and $–C(O)O$-vitamin E.

14. A compound of claim 2, or a pharmaceutically acceptable salt thereof, wherein R^1 is phenylC_1-C_3alkyl wherein the phenyl part is optionally substituted with

hydroxyl, halo, or methoxy; R^2 is C_1-C_7alkyl or, R^2 and R^b, together with the atoms to which they are attached, form a piperidine ring; R^3 is NR^xR^y(C_1-C_7alkyl), NR^uR^vcarbonylC_1-C_3alkyl, or carboxyC_1-C_3alkyl; R^4 and R^d, together with the atoms to which they are attached, form a pyrrolidine ring; R^5 is hydroxyC_1-C_3alkyl, imidazolylC_1-C_3alkyl, or NR^xR^y(C_1-C_7alkyl); R^6 is carboxyC_1-C_3alkyl, NR^uR^vcarbonylC_1-C_3alkyl, NR^xR^y(C_1-C_7alkyl), or C_1-C_7alkyl; R^7 and R^g, together with the atoms to which they are attached, form a pyrrolidine ring optionally substituted with hydroxy; R^8 and R^{10} are benzothienyl or indolylC_1-C_3alkyl optionally substituted with carboxyC_1-C_3alkyl; R^9 is hydroxyC_1-C_3alkyl, aminoC_1-C_3alkyl, or C_1-C_7alkyl, R^{11} is C_1-C_3alkoxyC_1-C_3alkyl or C_1-C_7alkyl; R^{12} is C_1-C_7alkyl or hydroxyC_1-C_3alkyl; and R^{13} is C_1-C_7 alkyl, carboxyC_1-C_3alkyl, or $–(CH_2)_3NHC(NH)NH_2$.

15. A compound of claim 2, or a pharmaceutically acceptable salt thereof, wherein:

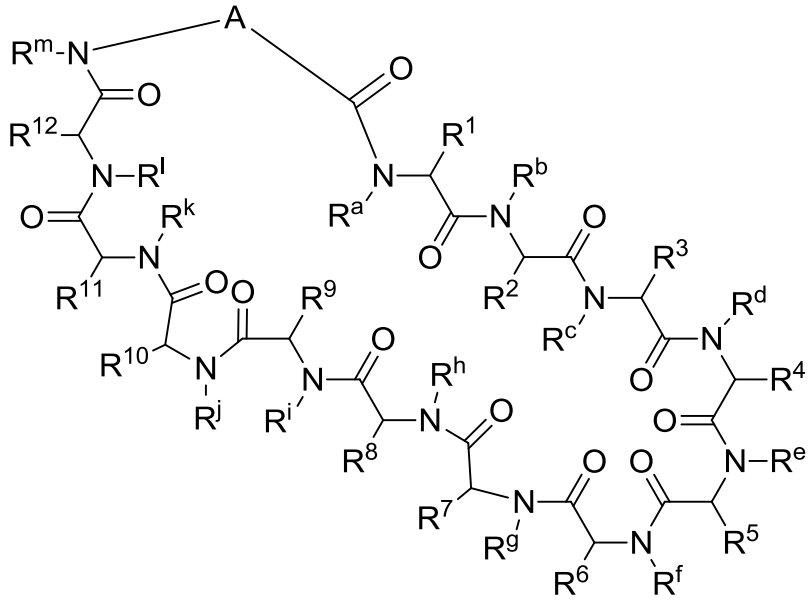
R^d is methyl or, R^d and R^4, together with the atoms to which they are attached, form a ring selected from azetidine, pyrollidine, morpholine, piperidine, piperazine, and tetrahydrothiazole; wherein each ring is optionally substituted with one or two groups independently selected from amino, cyano, methyl, halo, hydroxy, and phenyl;

R^g is methyl or, R^g and R^7, together with the atoms to which they are attached, form a ring selected from azetidine, pyrollidine, morpholine, piperidine, piperazine, and tetrahydrothiazole; wherein each ring is optionally substituted with one or two groups independently selected from amino, benzyl optionally substituted with a halo group, benzyloxy, cyano, cyclohexyl, methyl, halo, hydroxy, isoquinolinyloxy optionally substituted with a methoxy group, quinolinyloxy optionally substituted with a halo group, and tetrazolyl; and wherein the pyrrolidine and the piperidine ring are optionally fused to a cyclohexyl, phenyl, or indole group; and

R^k is methyl or, R^k and R^{11}, together with the atoms to which they are attached,

form a ring selected from azetidine, pyrollidine, morpholine, piperidine, piperazine, and tetrahydrothiazole; wherein each ring is optionally substituted with one or two groups independently selected from amino, cyano, methyl, halo, and hydroxy.

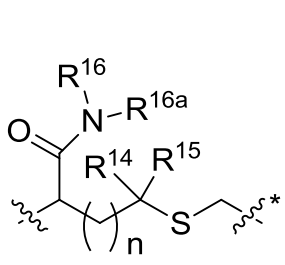
16. A compound of formula (II)



(II),

or a pharmaceutically acceptable salt thereof, wherein:

A is selected from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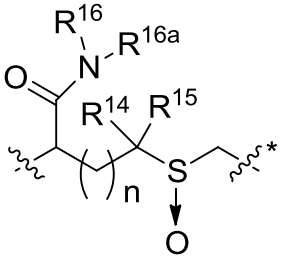
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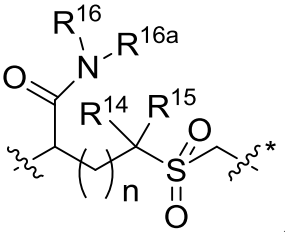
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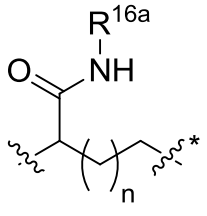
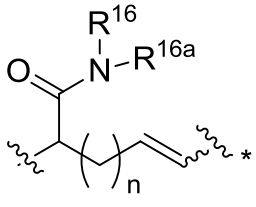

, and

;

wherein:

n is 0 or 1;

R^{14} and R^{15} are independently selected from hydrogen and methyl;

R^{16a} is selected from hydrogen and C_1-C_6 alkyl;

R^{16} is selected from

$–(C(R^{17a})_2)_2$-X-R^{30},

-$C(R^{17a})_2C(O)N(R^{16a})C(R^{17a})_2$-X'-$R^{31}$,

-$C(R^{17a})_2[C(O)N(R^{16a})C(R^{17a})_2]_{w'}$ -X-R^{31},

-$(C(R^{17a})(R^{17})C(O)NR^{16a})_{n'}$-H; and

-$(CR^{17a})(R^{17})C(O)NR^{16a})_{m'}$-$C(R^{17a})(R^{17})$-$CO_2H$; wherein:

w' is 2 or 3;

n' is 1-6;

m' is 1-5;

X is a chain of between 1 and 172 atoms wherein the atoms are selected from carbon and oxygen and wherein the chain may contain one, two, three, or four groups selected from -NHC(O)NH-, and -C(O)NH embedded therein; and wherein the chain is optionally substituted with one to six groups independently selected from $–CO_2H$, $-C(O)NH_2$, $-CH_2C(O)NH_2$, and $–CH_2CO_2H$,

X' is a chain of between 1 and 172 atoms wherein the atoms are selected from carbon and oxygen and wherein the chain may contain one, two, three, or four groups selected from -NHC(O)NH-, and -C(O)NH embedded therein; and wherein the chain is optionally substituted with one to six groups independently selected from $–CO_2H$, $-C(O)NH_2$, and $–CH_2CO_2H$, provided that X' is other than unsubstituted PEG;

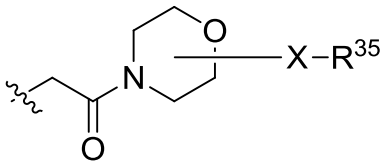
R^{30} is selected from $–CO_2H$, $-C(O)NR^wR^x$, and $-CH_3$ wherein R^w and R^x are independently selected from hydrogen and C_1-C_6alkyl, provided that when X is all carbon, R^{30} is other than $–CH_3$;

R^{31} is $-CO_2H$, $-C(O)NR^wR^x$, $-CH_3$, alexa-5-SDP, and biotin;

each R^{17a} is independently selected from hydrogen, C_1-C_6alkyl, $-CH_2OH$, $-CH_2CO_2H$, $-(CH_2)_2CO_2H$,

each R^{17} is independently selected from hydrogen, $-CH_3$, $(CH_2)_zN_3$, $-(CH_2)_zNH_2$, -X-R^{31}, $-(CH_2)_zCO_2H$, $–CH_2OH$, $CH_2C\equiv CH$, and $-(CH_2)_z$-triazolyl-X-R^{35}, wherein z is 1-6 and R^{35} is selected from $-CO_2H$, $-C(O)NR^wR^x$, CH_3, biotin, -2-

fluropyridine, -C(O)-$(CH_2)_2$–C(O)O-vitamin E, –C(O)O-vitamin E, and



;

provided at least one R^{17} is other than hydrogen, -CH_3, or –CH_2OH;

R^a, R^f, R^j, R^k, R^l, and R^m are hydrogen;

R^b and R^c are methyl;

R^g is selected from hydrogen and methyl;

R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, and R^{12} are independently selected from a natural amino acid side chain and an unnatural amino acid side chain or form a ring with the corresponding vicinal R group as described below;

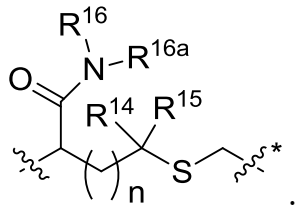
R^d is selected from hydrogen and methyl, or, R^d and R^4, together with the atoms to which they are attached, form a ring selected from azetidine, pyrollidine, morpholine, piperidine, piperazine, and tetrahydrothiazole; wherein each ring is optionally substituted with one to four groups independently selected from amino, cyano, methyl, halo, halomethyl, and hydroxy;

R^e is selected from hydrogen and methyl, or, R^e and R^5, together with the atoms to which they are attached, form a ring selected from azetidine, pyrollidine, morpholine, piperidine, piperazine, and tetrahydrothiazole; wherein each ring is optionally substituted with one to four groups independently selected from amino, cyano, methyl, halo, halomethyl, and hydroxy;

R^h is selected from hydrogen and methyl, or, R^h and R^8, together with the atoms to which they are attached, form a ring selected from azetidine, pyrollidine, morpholine, piperidine, piperazine, and tetrahydrothiazole; wherein each ring is optionally substituted with one one to four groups independently selected from amino, cyano, methyl, halo, halomethyl, and hydroxy; and

R^i is selected from hydrogen and methyl, or, R^i and R^9, together with the atoms to which they are attached selected from azetidine, pyrollidine, morpholine, piperidine, piperazine, and tetrahydrothiazole; wherein each ring is optionally substituted with one to four groups independently selected from amino, cyano, methyl, halo, halomethyl, and hydroxy.

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

A is ;

n is 1;

R^{16} is $-(CR^{17a})(R^{17})C(O)NR^{16a})_{m'}-C(R^{17a})(R^{17})-CO_2H$;

each R^{16a} is hydrogen;

m' is 2, 3, or 4;

each R^{17a} is hydrogen;

each R^{17} is independently selected from hydrogen, $-(CH_2)_zNH_2$, -X-$R^{31}$and $-CH_2C{\equiv}CH$,

z is 4;

X is a chain of between 26 and 155 atoms wherein the atoms are selected from carbon and oxygen and wherein the chain may contain one, two, or three C(O)NH groups embedded therein; and wherein the chain is optionally substituted with one or two groups independently selected from $–CO_2H$, $-C(O)NH_2$, $-CH_2C(O)NH_2$, and $–CH_2CO_2H$; and

R^{31} is $-CH_3$, alexa-5-SDP, and biotin.

18. A compound selected from:

INT 1300B, Example 14089, Example 14090, Example 3214, Example 3619, Example 3620, Example 3621, Example 3622, Example 3623, Example 3624, Example 3625, Example 3626, INT 1300C, INT 1400K, INT 1400L, Example 11012, Example 11032, Example 11033, Example 11035, Example 11036, Example 11040, Example 11041, Example 11042, Example 11044, Example 11045, Example 11046, Example 11047, Example 11060, Example 11061, Example 11062, Example 11064, Example 11066, Example 11067, Example 11073, Example 11074, Example 11075, Example 11076, Example 11080, Example 11081, Example 11082, Example 11083, Example 11085, Example 11086, Example 11087, Example 11088, Example

11089, Example 11090, Example 11102, Example 11115, and Example 11119; or a pharmaceutically acceptable salt thereof.

19. A compound selected from:
Example 11129, Example 11130, Example 11131, Example 11132, Example 11133, Example 11013, Example 11015, Example 11028, Example 11029, Example 11034, Example 11038, Example 11063, Example 11065, Example 11068, Example 11072, Example 11077, Example 11084, Example 11112, Example 11124, Example 11125, Example 11128, Example 11017, Example 11018, Example 11071, Example 11078, Example 11101, Example 11104, Example 11107, Example 11109, Example 11069, Example 11070, Example 11079, Example 11091, Example 11092, Example 11093, Example 11094, Example 11095, Example 11096, Example 11097, Example 11098, Example 11099, Example 11100, Example 11110, Example 11111, Example 11108, Example 11120, INT 1300V, INT 1300W, and INT 1300X; or a pharmaceutically acceptable salt thereof.

20. A compound selected from:
INT 1300Y, Example 11001, Example 11019, INT 1300A, INT 1400A, INT 1400B, INT 1400C, INT 1400D, INT 1400E, INT 1400F, INT 1400G, INT 1400H, INT 1400I, INT 1400J, Example 11002, Example 11007, Example 11008, Example 11020, Example 11031, Example 11134, Example 11005, Example 11006, Example 11009, Example 11010, Example 11011, Example 11016, Example 11014, Example 11030, Example 11103, Example 11116, Example 11123, Example 11126, Example 11003, Example 11004, Example 11021, Example 11022, Example 11023, Example 11024, Example 11025, Example 11026, Example 11027, Example 11114, Example 11135, Example 11136, Example 11137, Example 11138, Example 11139, Example 11140, Example 11141, and Example 11142; or a pharmaceutically acceptable salt thereof.

21. A compound selected from:
Example 11143, Example 11144, Example 11145, Example 11146, Example 11147, Example 11148, Example 11149, Example 11150, Example 11151, Example 11152,

Example 11153, Example 11154, Example 11155, Example 11156, Example 11157, Example 11158, Example 11159, Example 11160, Example 11161, Example 11162, Example 11163, Example 11164, Example 11165, Example 11166, Example 11167, Example 11168, Example 11169, Example 11170, Example 11171, Example 11172, Example 11173, Example 11174, Example 11175, Example 11176, Example 11177, Example 11178, Example 11179, Example 11180, Example 11181, Example 11182, Example 11183, Example 11184, Example 11185, Example 11186, Example 11187, Example 11188, Example 11189, Example 11190, Example 11191, Example 11192, Example 11193, Example 11194, Example 11195, Example 11196, and Example 11197; or a pharmaceutically acceptable salt thereof.

22. A compound selected from:
Example 11198, Example 11199, Example 11200, Example 11201, Example 11202, Example 11203, Example 11204, Example 11205, Example 11206, Example 11207, Example 11208, Example 11209, Example 11210, Example 11211, Example 11212, Example 11213, Example 11214, Example 11215, Example 11216, Example 11217, Example 11218, Example 11219, Example 11220, Example 11221, Example 11222, Example 11223, Example 11224, Example 11225, Example 11226, Example 11227, Example 11228, Example 11229, Example 11230, Example 11231, Example 11232, Example 11233, Example 11234, Example 11235, Example 11236, Example 11237, Example 11238, Example 11239, Example 11240, Example 11241, Example 11242, and Example 11243; or a pharmaceutically acceptable salt thereof.

23. A compound selected from:
Example 11244, Example 11245, Example 11246, Example 11247, Example 11248, Example 11249, Example 11250, Example 11251, Example 11252, Example 11253, Example 11254, Example 11255, Example 11256, Example 14051, Example 14052, Example 14053, Example 14054, Example 14055, Example 14056, Example 14057, Example 14058, Example 14060, Example 14085, Example 14086, Example 14087, Example 14088, Example 14082, Example INT130AA, Example INT130AB, Example INT130AF, Example INT130AG, Example INT130AI, Example INT130AD, Example INT130AE, Example INT130AH, Example INT130AJ,

Example INT130AK, Example INT130AL, Example 13051, Example 13052, Example 13122, Example 13123, Example 13124, Example 13125, Example 13126, Example 13127, Example 13128, Example 13129, Example 13130, Example 13131, Example 13132, Example 13133, Example 14059, and Example 14061; or a pharmaceutically acceptable salt thereof.

24. A compound selected from:
Example 14062, Example 14063, Example 14064, Example 14065, Example 14066, Example 14067, Example 14068, Example 14069, Example 14070, Example 14071, Example 14072, Example 14073, Example 14074, Example 14075, Example 14076, Example 14077, Example 14078, Example 14079, Example 14080, Example 14081, Example 14083, Example 14084, Example 14092, Example 14093, Example 14094, Example 14095, Example 14096, Example 14068, Example 14097, Example 14098, Example 14099, Example 14100, Example 14101, Example 14069, Example 14070, Example 14071, Example 14072, Example 14073, Example 14074, Example 14075, Example 14076, Example 14077, Example 14078, Example 14079, Example 14080, Example 14081, Example 14083, Example 14084, and Example 14092; or a pharmaceutically acceptable salt thereof.

25. A compound selected from:
Example 14102/14103, Example 14104, Example 14105, Example 14106, Example 14107, Example 14121, Example 14122, Example 13141, Example 13142, Example 13143, Example 14123, Example 13144, Example 13145, Example 14124, Example 13146, Example 13147, Example 13148, Example 13149, Example 13150, Example 13151, Example 13152, Example 13153, Example 13154, Example 13155, Example 13156, Example 13157, Example 13158, Example 13159, Example 13160, Example 13161, Example 13162, Example 13163, Example 13164, Example 14125, Example 14126, Example 11257, Example 11258, Example 11259, Example 11260, Example 11261, Example 11262, Example 11263, Example 11264, Example 11265, Example 11266, Example 11267, Example 11268, Example 11269, Example 11270, and Example 11271; or a pharmaceutically acceptable salt thereof.

26. A compound of claim 1, or a therapeutically acceptable salt thereof, for use in the treatment of a medical condition which can be treated by enhancing, stimulating, and/or increasing the immune response in a subject in need thereof, wherein the compound is to be administered to the subject.

27. The compound of claim 26, or a therapeutically acceptable salt thereof, wherein an additional agent is to be administered prior to, after, or simultaneously with the compound or the therapeutically acceptable salt thereof.

28. The compound of claim 27, or the therapeutically acceptable salt thereof, wherein the additional agent is an antimicrobial agent, an antiviral agent, a cytotoxic agent, and/or an immune response modifier.

29. The compound of claim 27, or the therapeutically acceptable salt thereof, wherein the additional agent is an HDAC inhibitor.

30. The compound of claim 27, or the therapeutically acceptable salt thereof, wherein the additional agent is a TLR7 and/or TLR8 agonist.

31. A compound of claim 1, or a therapeutically acceptable salt thereof, for use in the treatment of cancer by inhibiting growth, proliferation, or metastasis of cancer cells in a subject in need thereof, wherein the compound is to be administered to the subject.

32. The compound of claim 31, or the therapeutically acceptable salt thereof, wherein the cancer is selected from melanoma, renal cell carcinoma, squamous non-small cell lung cancer (NSCLC), non-squamous NSCLC, colorectal cancer, castration-resistant prostate cancer, ovarian cancer, gastric cancer, hepatocellular carcinoma, pancreatic carcinoma, squamous cell carcinoma of the head and neck, carcinomas of the esophagus, gastrointestinal tract and breast, and hematological malignancies.

33. A compound of claim 1, or a therapeutically acceptable salt thereof, for use in the treatment of an infectious disease in a subject in need thereof, wherein the compound is to be administered to the subject.

34. The compound of claim 33, wherein the infectious disease is caused by a virus.

35. The compound of claim 34, wherein the virus is selected from HIV, Hepatitis A, Hepatitis B, Hepatitis C, herpes viruses, and influenza.

36. A compound of claim 1, or a therapeutically acceptable salt thereof, for use in the treatment of septic shock in a subject in need thereof, wherein the compound is to be administered to the subject.

37. A compound of claim 1, or a therapeutically acceptable salt thereof, for use in the treatment of a medical condition which can be treated by blocking the interaction of PD-L1 with PD-1 and/or CD80 in a subject, wherein the compound is to be administered to the subject.

38. Use of the compound of claim 1, or a therapeutically acceptable salt thereof, in the manufacture of a medicament for the treatment of a medical condition that can be treated by enhancing, stimulating, and/or increasing the immune response in a subject in need thereof, wherein the medicament is to be administered to the subject.

39. The use of claim 38, wherein an additional agent is to be administered prior to, after, or simultaneously with the medicament.

40. The use of claim 39, wherein the additional agent is an antimicrobial agent, an antiviral agent, a cytotoxic agent, and/or an immune response modifier.

41. The use of claim 39, wherein the additional agent is an HDAC inhibitor.

42. The use of claim 39, wherein the additional agent is a TLR7 and/or TLR8 agonist.

43. Use of the compound of claim 1, or a therapeutically acceptable salt thereof, in the manufacture of a medicament for the treatment of cancer by inhibiting growth, proliferation, or metastasis of cancer cells in a subject in need thereof, wherein the medicament is to be administered to the subject.

44. The use of claim 43, wherein the cancer is selected from melanoma, renal cell carcinoma, squamous non-small cell lung cancer (NSCLC), non-squamous NSCLC, colorectal cancer, castration-resistant prostate cancer, ovarian cancer, gastric cancer, hepatocellular carcinoma, pancreatic carcinoma, squamous cell carcinoma of the head and neck, carcinomas of the esophagus, gastrointestinal tract and breast, and hematological malignancies.

45. Use of the compound of claim 1, or a therapeutically acceptable salt thereof, in the manufacture of a medicament for the treatment of an infectious disease in a subject in need thereof, wherein the medicament is to be administered to the subject.

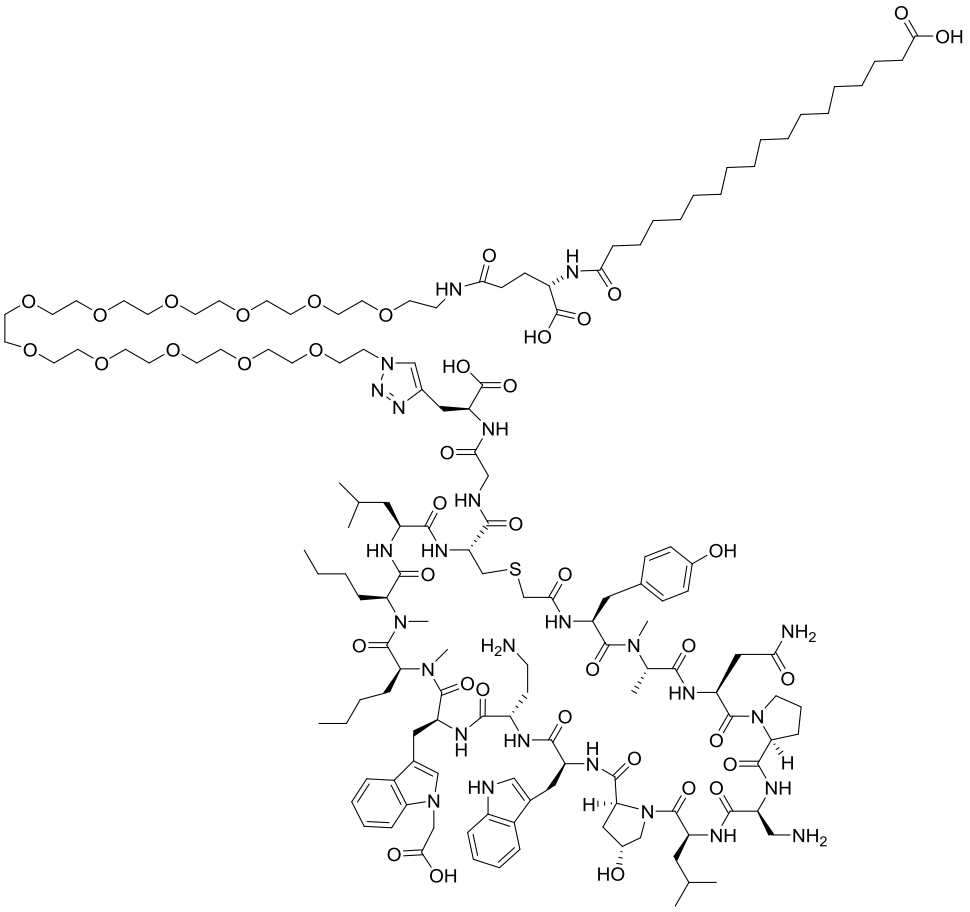
46. The use of claim 45, wherein the infectious disease is caused by a virus.

47. The use of claim 45, wherein the virus is selected from HIV, Hepatitis A, Hepatitis B, Hepatitis C, herpes viruses, and influenza.

48. Use of the compound of claim 1, or a therapeutically acceptable salt thereof, in the manufacture of a medicament for the treatment of septic shock in a subject in need thereof, wherein the medicament is to be administered to the subject.

49. Use of the compound of claim 1, or a therapeutically acceptable salt thereof, in the manufacture of a medicament for the treatment of a medical condition which can be treated by blocking the interaction of PD-L1 with PD-1 and/or CD80 in a subject, wherein the medicament is to be administered to the subject.

50. A compound which is:



or a pharmaceutically acceptable salt thereof.