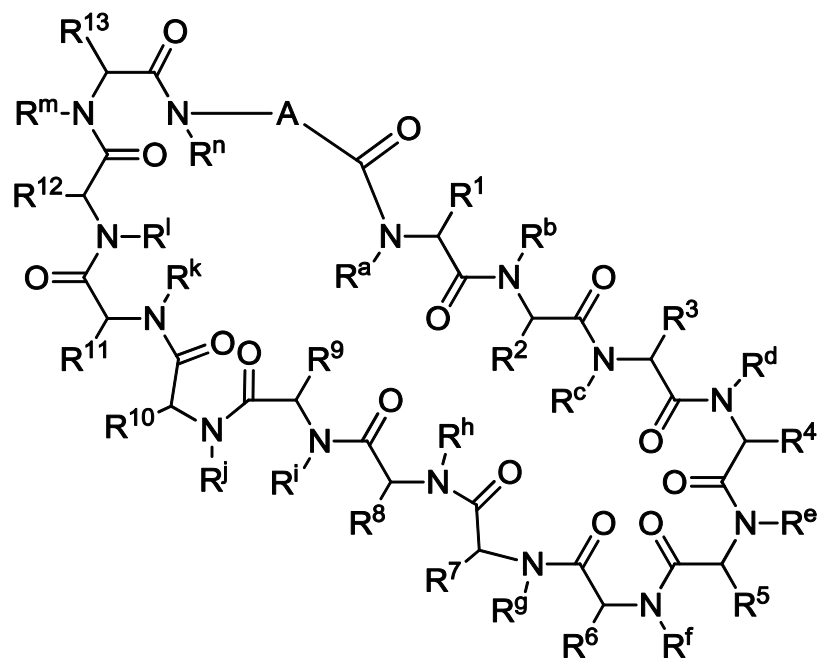


CLAIMS

WHAT IS CLAIMED IS:

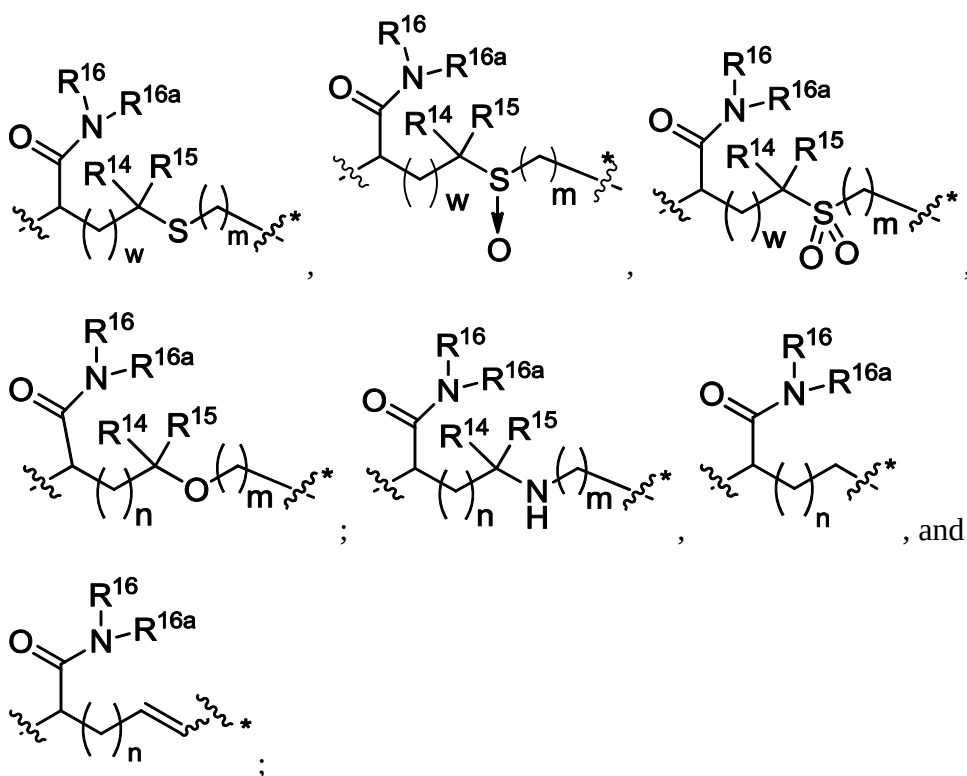
1. A compound of formula (I)



(I),

or a pharmaceutically acceptable salt thereof, wherein:

A is selected from



wherein:

denotes the point of attachment to the carbonyl group and denotes the point of attachment to the nitrogen atom;

n is 0 or 1;

m is 1 or 2;

w is 0, 1, or 2;

R¹⁴ and R¹⁵ are independently selected from hydrogen and methyl;

R^{16a} is selected from hydrogen and C₁-C₆ alkyl;

R¹⁶ is selected from

-(C(R^{17a})₂)-C(O)-NR⁵⁰R⁵¹;

wherein:

each R^{17a} is independently selected from hydrogen and C₁-C₆alkyl;

one of R⁵⁰ and R⁵¹ is selected from hydrogen and C₁-C₆alkyl and the other is selected from -(CH₂)_nX, C₁-C₆alkyl, C₃-C₇cycloalkyl, heterocyclyl, and phenyl, wherein the cycloalkyl is optionally substituted with one, two, or three groups independently selected from C₁.C₃alkoxy, C₁.C₃alkyl, amino, cyano, and hydroxy, or;

R^{50} and R^{51} , together with the nitrogen atom to which they are attached, form a four-, five-, six- or seven-membered saturated or unsaturated ring optionally containing one or two additional heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is optionally substituted with one, two, or three groups selected from C_1 - C_6 alkoxy, C_1 - C_3 alkyl, cyano, halo, halo C_1 - C_3 alkyl, hydroxy, hydroxy(C_1 - C_3 alkyl), $-NR^{70}R^{71}$, oxo, and phenyl; wherein the phenyl is further optionally substituted with one, two, or three groups independently selected from C_1 - C_3 alkoxy, cyano, and halo;

n' is 1-5;

X is selected from $-\text{C}\equiv\text{CH}$, $-\text{C}(\text{H})=\text{CH}_2$, C_2 - C_6 alkoxymethyl, C_1 - C_6 alkoxycarbonylmethyl, C_1 - C_6 alkylsulfanylmethyl, C_1 - C_6 alkylsulfonylmethyl, azidomethyl, *tert*-butoxymethyl, C_3 - C_7 cycloalkyl, haloalkoxymethyl, halomethyl, heterocyclyl, hydroxymethyl, isopropoxymethyl, $(NR^{70}R^{71})$ methyl, phenyl, phenoxymethyl, phenylsulfanylmethyl,

one of R^{70} and R^{71} is selected from hydrogen, C_1 - C_6 alkyl, and hydroxy C_2 - C_6 alkyl and the other is selected from C_1 - C_6 alkoxycarbonyl, C_1 - C_6 alkylcarbonyl, C_1 - C_6 alkylsulfonyl, and hydroxy C_2 - C_6 alkyl;

 denotes the point of attachment to the carbonyl group and  denotes the point of attachment to the nitrogen atom;

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, pyrrolidine, 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, pyrrolidine, 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, pyrrolidine, 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, pyrrolidine, 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 pyrrolidine, 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

R^d and R^4 , together with the atoms to which they are attached, form a pyrrolidine ring;

R^g and R^7 , together with the atoms to which they are attached, form a pyrrolidine ring, wherein said ring is optionally substituted with one hydroxy group; and

R^k is methyl.

3. A compound of claim 2, or a therapeutically acceptable salt thereof, wherein:
- R^a, R^e, and R^j hydrogen;
 - R^b, R^k, and R^l are methyl;
 - Rⁿ is hydrogen;
 - R¹ is phenylmethyl wherein the phenyl is substituted with hydroxy;
 - R² is methyl;
 - R³ is selected from -CH₂C(O)NH₂ and -CH₂CO₂H;
 - R⁵ is selected from -CH₂NH₂, -CH₂OH, and -CH₂C(O)NH₂;
 - R⁶ is selected from -CH₂CH(CH₃)₂, -(CH₂)₂CO₂H, and (CH₂)₂C(O)NH₂;
 - R⁸ and R¹⁰ are -CH₂(indolyl), wherein the indolyl is optionally substituted with -CH₂CO₂H;
 - R⁹ is selected from hydrogen, -(CH₂)₂NH₂, CH₂OH, and -CH₂C(O)NH₂;
 - R¹¹ and R¹² are -(CH₂)₃CH₃; and
 - R¹³ is selected from methyl, -CH₂CH(CH₃)₂, and -(CH₂)₂CO₂H.
4. A compound selected from:
- Example 13080, Example 13081, Example 13082, Example 13083, Example 13084, Example 13085, Example 13086, Example 13087, Example 13088, Example 13089, Example 13090, Example 13091, Example 13092, Example 13093, Example 13094, Example 13095, Example 13096, Example 13097, Example 13098, Example 13099, Example 13100, Example 13101, Example 13102, Example 13103, Example 13104, Example 13105, Example 13106, Example 13107, Example 13108, Example 13109, Example 13110, Example 13111, Example 13112, Example 13113, Example 13114, Example 13115, Example 13116, Example 13117, Example 13118, and Example 13119; or a pharmaceutically acceptable salt thereof.
5. A compound of claim 1, or a therapeutically acceptable salt thereof, for use in 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 compound is to be administered to the subject.

6. The compound of claim 5, or the therapeutically acceptable salt thereof, further wherein an additional agent is to be administered prior to, after, or simultaneously with the compound. or the therapeutically acceptable salt thereof.
7. The compound of claim 6, 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.
8. 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.
9. The compound of claim 8, or a 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.
10. 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.
11. 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.
12. 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.

13. The use of claim 12, further wherein an additional agent is to be administered prior to, after, or simultaneously with the medicament.

14. The use of claim 13, wherein the additional agent is an antimicrobial agent, an antiviral agent, a cytotoxic agent, and/or an immune response modifier.

15. 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.

16. The use of claim 15, 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.

17. 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.

18. 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.