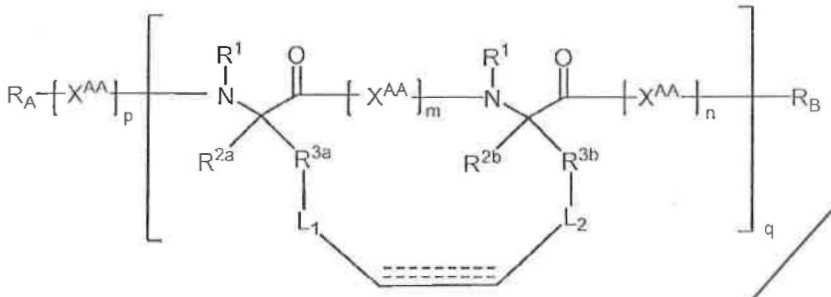
What is claimed is:

1. A polypeptide of Formula (**I**):



(**I**)

or a pharmaceutically acceptable salt thereof; wherein:

each instance of ========== independently represents a single bond or a double bond;

each instance of R^1 is, independently, hydrogen; acyl; substituted or unsubstituted C_{1-6} alkyl; or an amino protecting group;

each of R^{2a} and R^{2b} is, independently, substituted or unsubstituted alkyl; substituted or unsubstituted alkenyl; substituted or unsubstituted alkynyl; substituted or unsubstituted heteroalkyl; substituted or unsubstituted carbocyclyl; substituted or unsubstituted heterocyclyl;

each of R^{3a} and R^{3b} is, independently, substituted or unsubstituted alkylene; unsubstituted heteroalkylene; substituted or unsubstituted carbocyclylene; or substituted or unsubstituted heterocyclylene; or optionally R^{2a} and R^{3a} are joined to form a ring; or optionally R^{2b} and R^{3b} are joined to form a ring;

L_1 is independently, a bond, substituted or unsubstituted C_{1-10} alkylene, or –$C(=O)OR^{L1}$–;

L_2 is independently, a bond, substituted or unsubstituted C_{1-10} alkylene, or –$C(=O)OR^{L2}$–; provided that when neither R^{2a} and R^{3a} nor R^{2b} and R^{3b} forms a ring, L_1 is –$C(=O)OR^{L1}$– or L_2 is –$C(=O)OR^{L1}$–;

each of R^{L1} and R^{L2} is independently optionally substituted C_{1-10} alkylene;

R_A is, independently, $-R_C$, $-OR_C$, $-N(R_C)_2$, or $-SR_C$, wherein each instance of R_C is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; a hydroxyl,

amino, or thiol protecting group; or two R_A groups together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

R_B is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; an amino protecting group; a label optionally joined by a linker, wherein the linker is selected from cyclic or acyclic, branched or unbranched alkylene; cyclic or acyclic, branched or unbranched alkenylene; cyclic or acyclic, branched or unbranched alkynylene; cyclic or acyclic, branched or unbranched heteroalkylene; cyclic or acyclic, branched or unbranched heteroalkenylene; cyclic or acyclic, branched or unbranched heteroalkynylene; arylene; heteroarylene; or acylene; or R_A and R_B together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

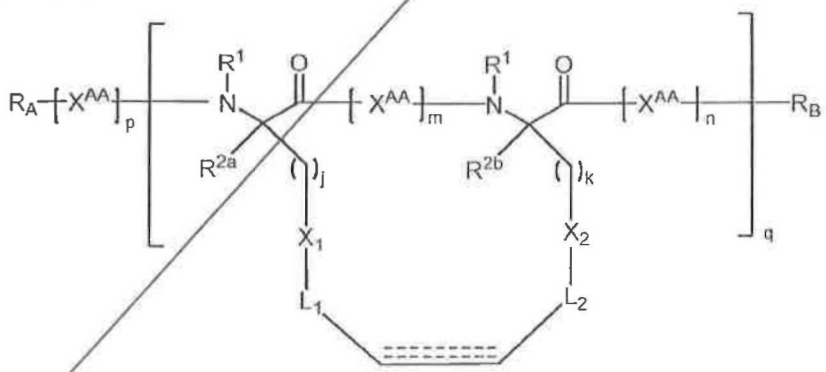
each instance of X_{AA} is, independently, an amino acid;

m is independently, an integer between 2 and 6, inclusive;

each instance of p and n is, independently, 0 or an integer between 1 and 100, inclusive; and

q is independently an integer between 1 and 10, inclusive.

2. The polypeptide of claim 1, wherein the polypeptide is of Formula (II):



(II)

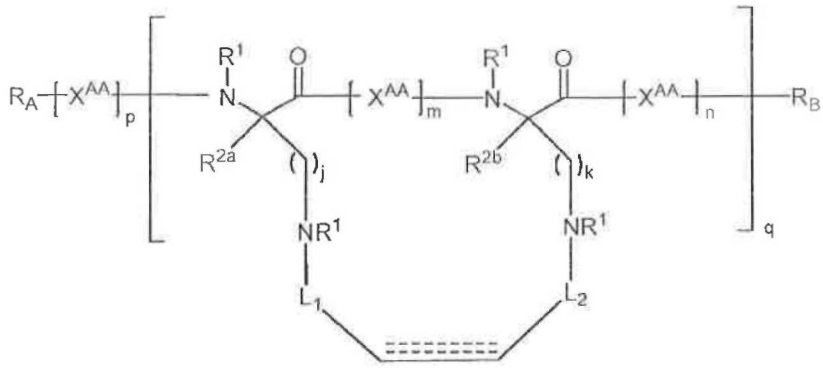
or a pharmaceutically acceptable salt thereof; wherein:

each of X_1 and X_2 is independently a bond, $-CR^5R^6-$ or $-NR^1-$, provided that at least one of X_1 and X_2 is $-NR^1-$;

each of R^5 and R^6 is independently hydrogen, halogen, $-NO_2$, $-OH$, $-CN$, or C_{1-6} alkyl; and

each of j and k is independently an integer between 0 and 10, inclusive.

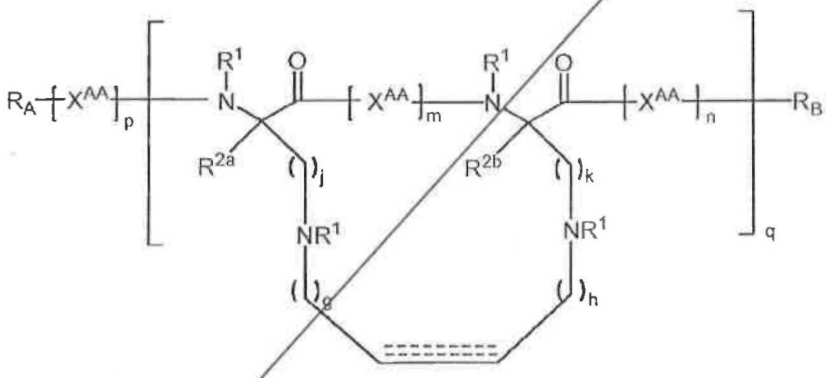
3. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-a**):



(II-a)

or a pharmaceutically acceptable salt thereof.

4. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-a-1**):



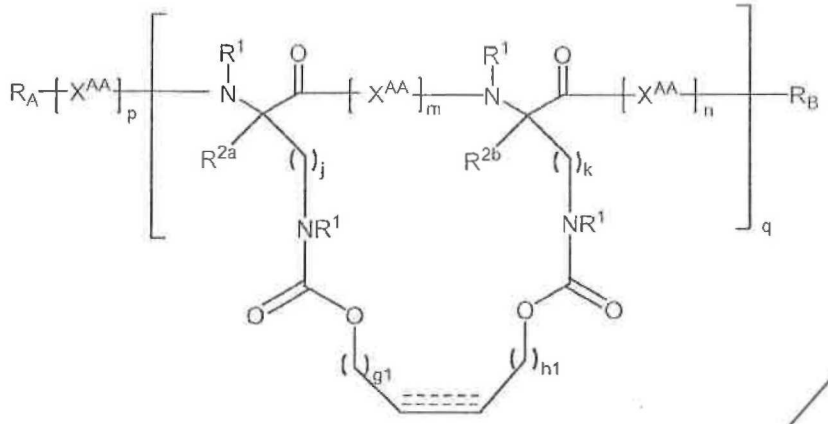
(II-a-1)

or a pharmaceutically acceptable salt thereof;

wherein

each of g and h is independently zero or an integer between 1 and 10, inclusive.

5. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-a-2**):



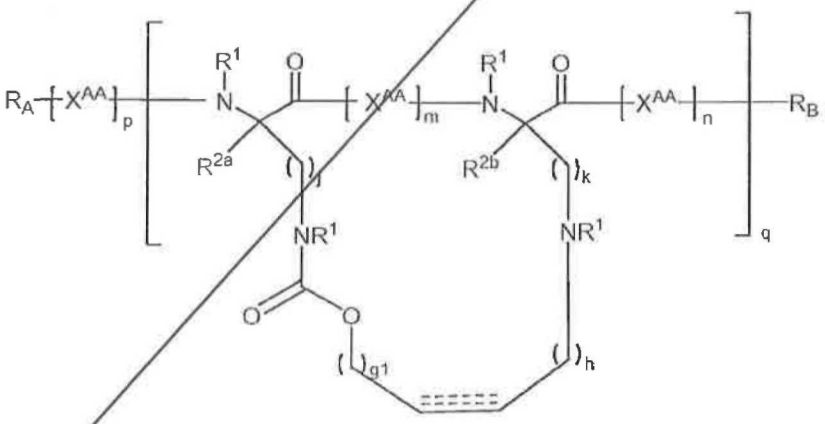
(II-a-2)

or a pharmaceutically acceptable salt thereof;

wherein

each of g1 and h1 is independently zero or an integer between 1 and 10, inclusive.

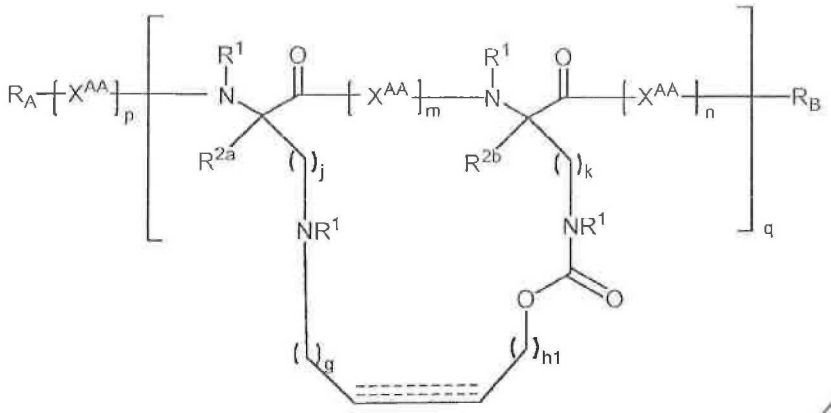
6. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-a-3**):



(II-a-3)

or a pharmaceutically acceptable salt thereof; wherein each of g1 and h is independently zero or an integer between 1 and 10, inclusive.

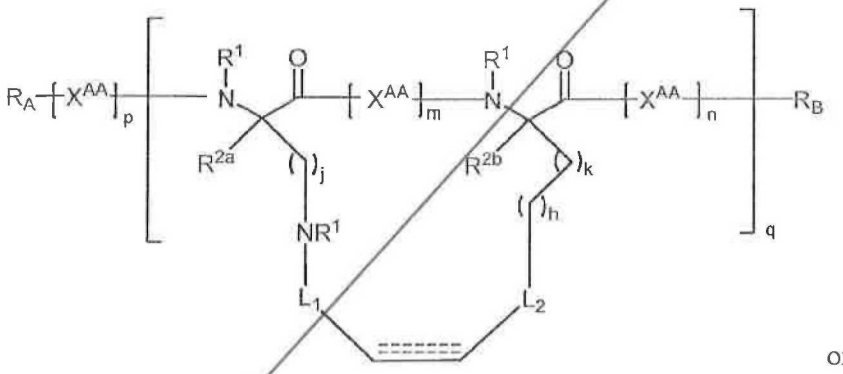
7. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-a-4**):



(II-a-4)

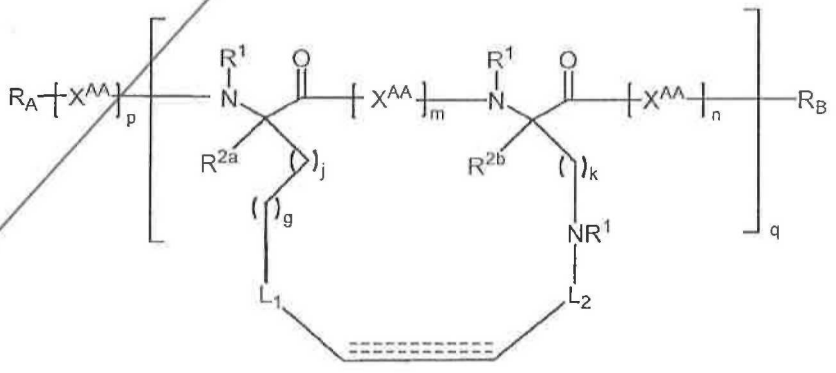
or a pharmaceutically acceptable salt thereof; wherein each of g and h1 is independently zero or an integer between 1 and 10, inclusive.

8. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-b**) or (**II-c**):



or

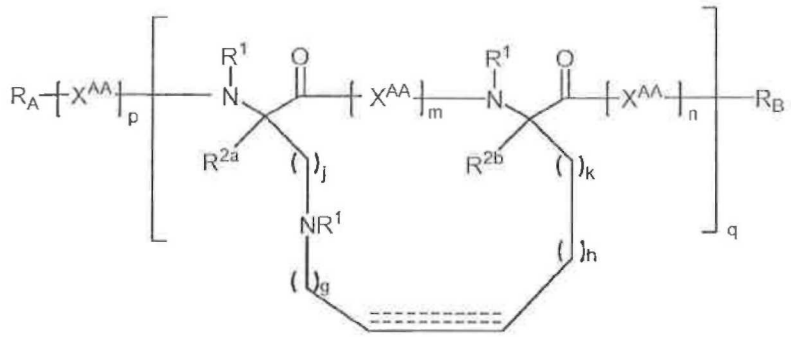
(II-b)



(II-c)

or a pharmaceutically acceptable salt thereof; wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

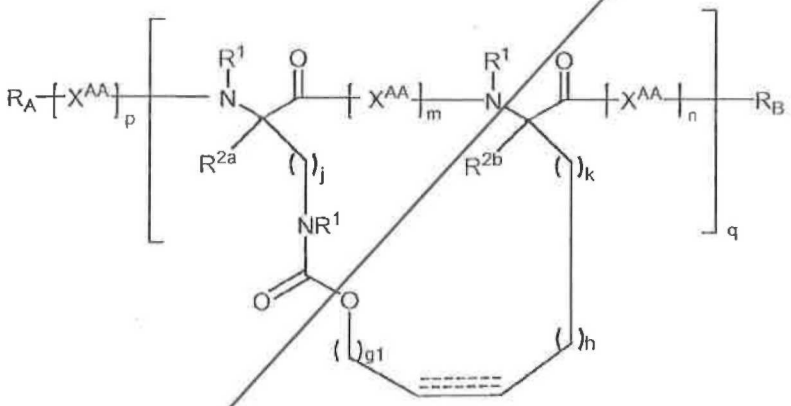
9. The polypeptide of claim 8, wherein the polypeptide is of Formula (**II-b-1**):



(**II-b-1**)

or a pharmaceutically acceptable salt thereof, wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

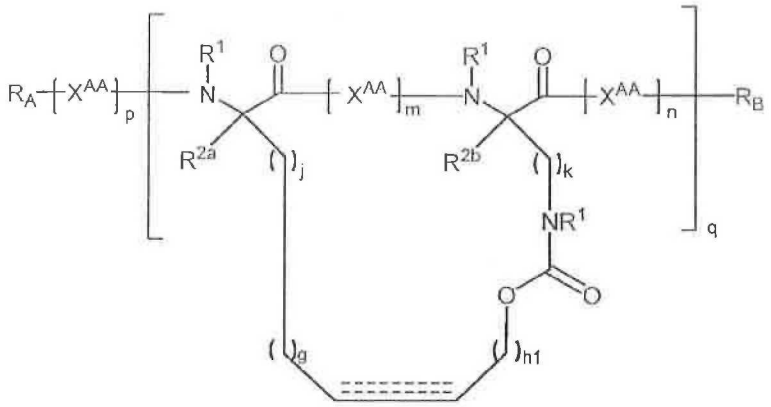
10. The polypeptide of claim 8, wherein the polypeptide is of Formula (**II-b-2**):



(**II-b-2**)

or a pharmaceutically acceptable salt thereof, wherein each of g1 and h is independently zero or an integer between 1 and 10, inclusive.

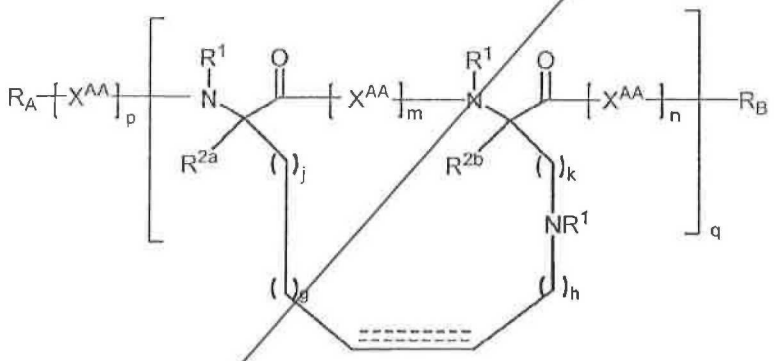
11. The polypeptide of claim 8, wherein the polypeptide is of Formula (**II-c-1**):



(**II-c-1**)

or a pharmaceutically acceptable salt thereof, wherein each of g and h1 is independently zero or an integer between 1 and 10, inclusive.

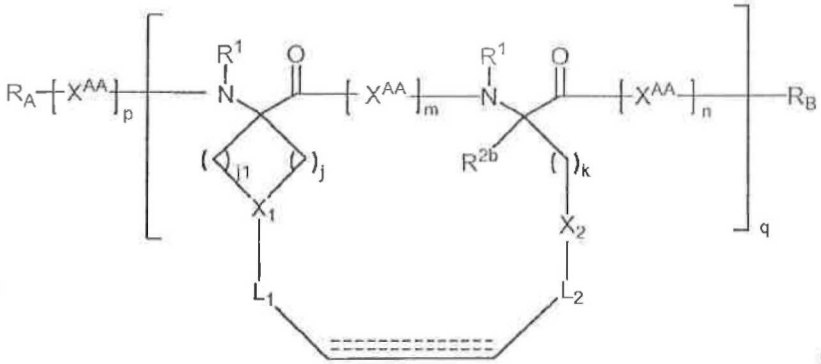
12. The polypeptide of claim 8, wherein the polypeptide is of Formula (**II-c-2**):



(**II-c-2**)

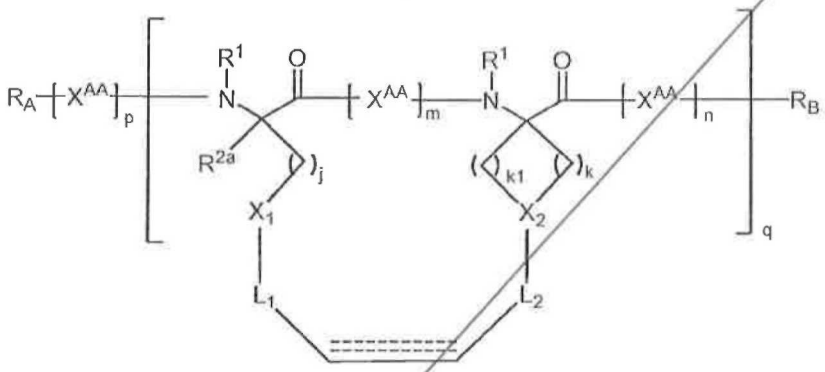
or a pharmaceutically acceptable salt thereof, wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

13. The polypeptide of claim 1, wherein the polypeptide is of Formula (III) or Formula (IV):



(III)

or



(IV)

or a pharmaceutically acceptable salt thereof;

wherein:

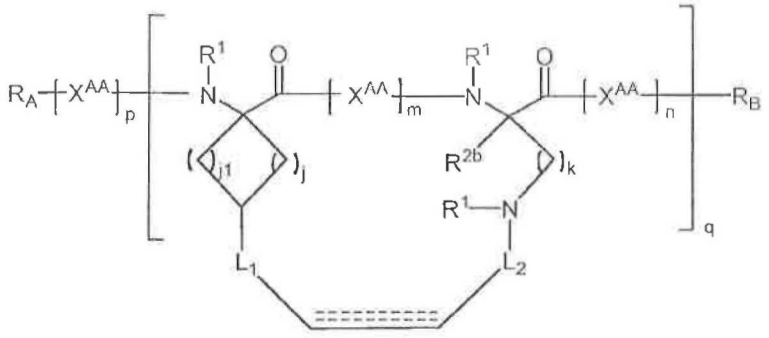
each of X_1 and X_2 is independently a bond, $-CR^5R^6-$ or $-NR^1-$ as valence permits;

R^1 is, independently, hydrogen, acyl, substituted or unsubstituted C_{1-6} alkyl, or an amino protecting group;

each of R^5 and R^6 is independently hydrogen, halogen, $-NO_2$, $-OH$, $-CN$, or C_{1-6} alkyl;

each of j, k, j1, and k1 is independently an integer between 0 and 10, inclusive;

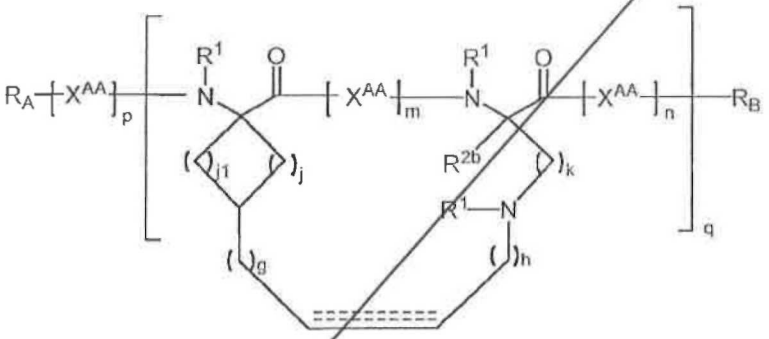
14. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-a**):



(**III-a**)

or a pharmaceutically acceptable salt thereof.

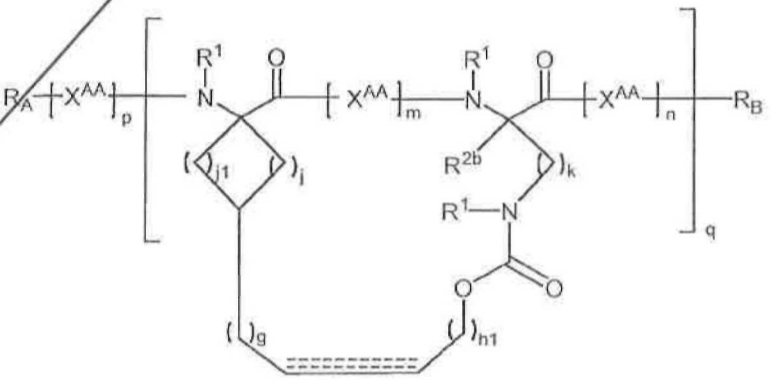
15. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-a-1**):



(**III-a-1**)

or a pharmaceutically acceptable salt thereof; wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

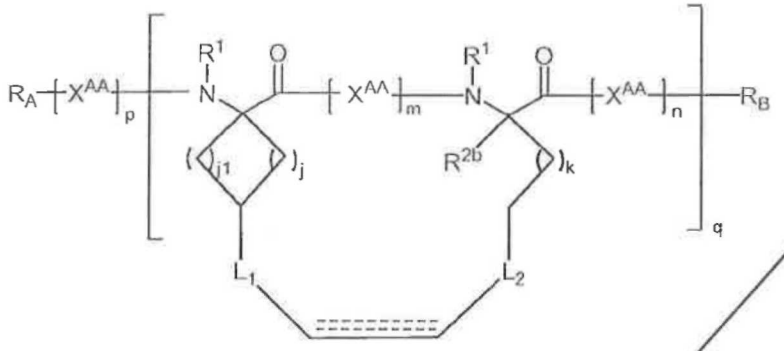
16. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-a-2**):



(**III-a-2**)

or a pharmaceutically acceptable salt thereof; wherein each of g and h1 is independently zero or an integer between 1 and 10, inclusive.

17. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-a-3**):



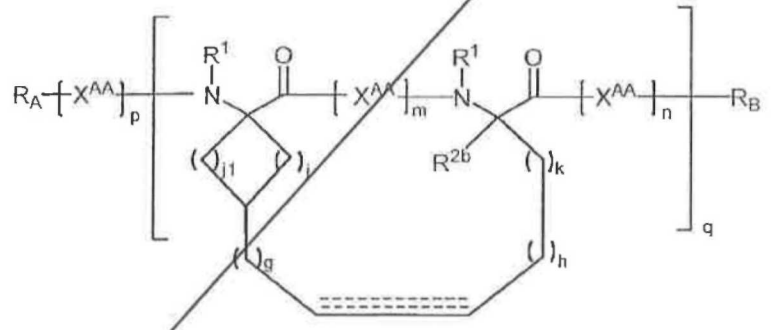
(**III-a-3**)

or a pharmaceutically acceptable salt thereof,

wherein

each of j, k, j1, and k1 is independently an integer between 0 and 10, inclusive.

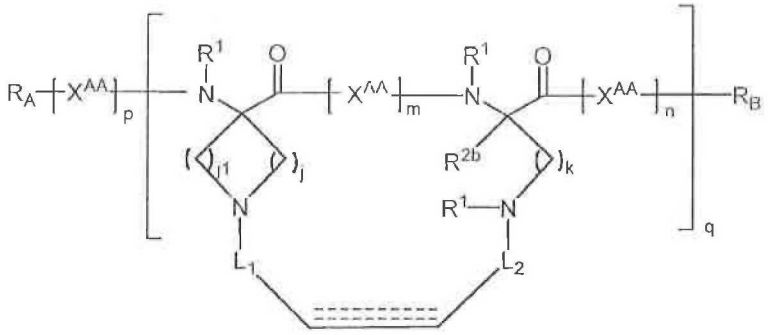
18. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-a-4**):



(**III-a-4**)

or a pharmaceutically acceptable salt thereof; wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

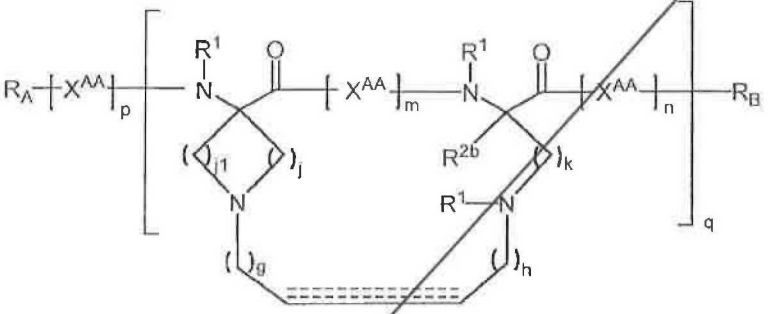
19. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-b**):



(**III-b**)

or a pharmaceutically acceptable salt thereof.

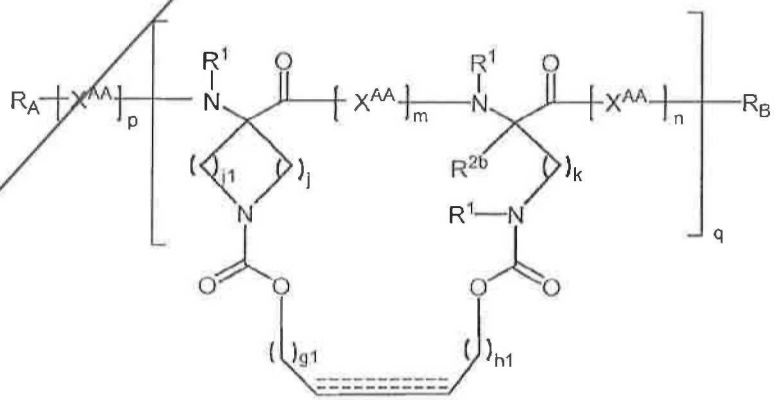
20. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-b-1**):



(**III-b-1**)

or a pharmaceutically acceptable salt thereof; wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

21. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-b-2**):

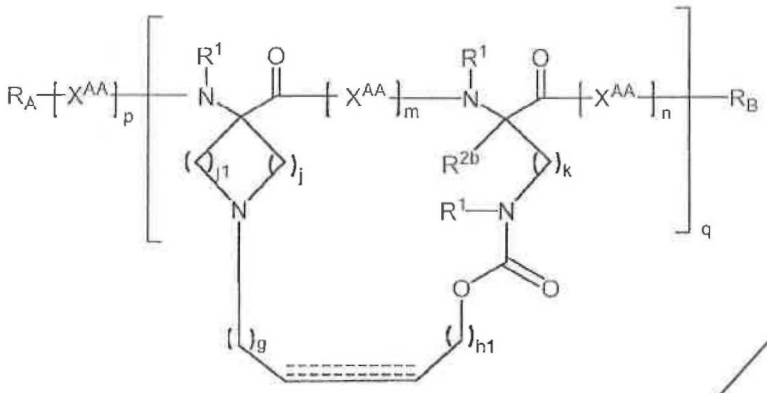


(**III-b-2**)

or a pharmaceutically acceptable salt thereof;

wherein each of g1 and h1 is independently zero or an integer between 1 and 10, inclusive.

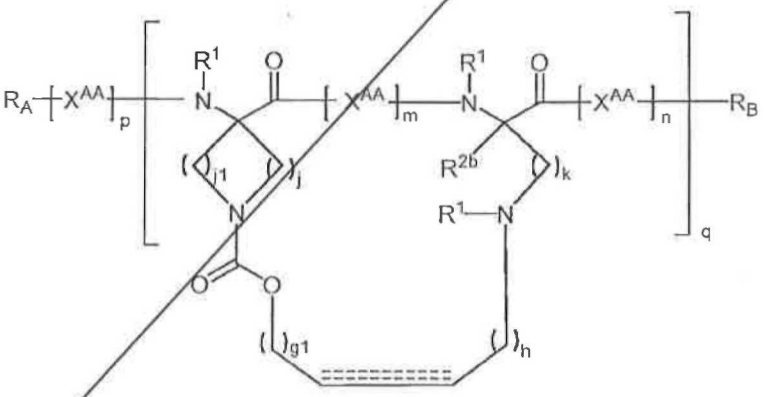
22. The polypeptide of claim 13, wherein the polypeptide is of Formula **(III-b-3)**:



(III-b-3)

or a pharmaceutically acceptable salt thereof; wherein each of g and h1 is independently zero or an integer between 1 and 10, inclusive.

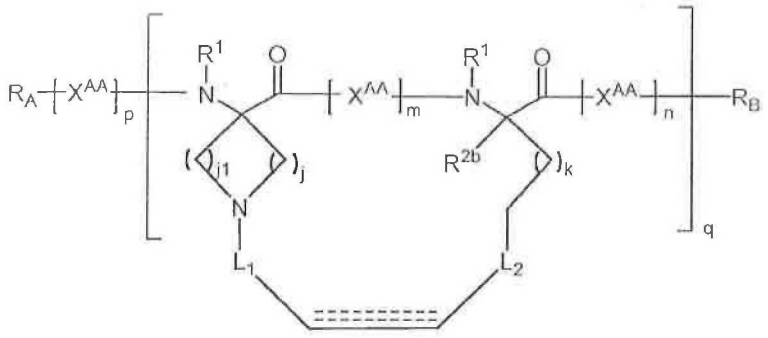
23. The polypeptide of claim 13, wherein the polypeptide is of Formula **(III-b-4)**:



(III-b-4)

or a pharmaceutically acceptable salt thereof; wherein each of g1 and h is independently zero or an integer between 1 and 10, inclusive.

24. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-c**):

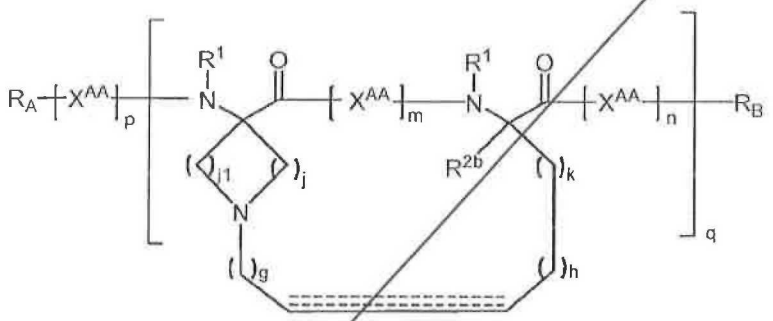


(**III-c**)

or a pharmaceutically acceptable salt thereof;

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

25. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-c-1**):

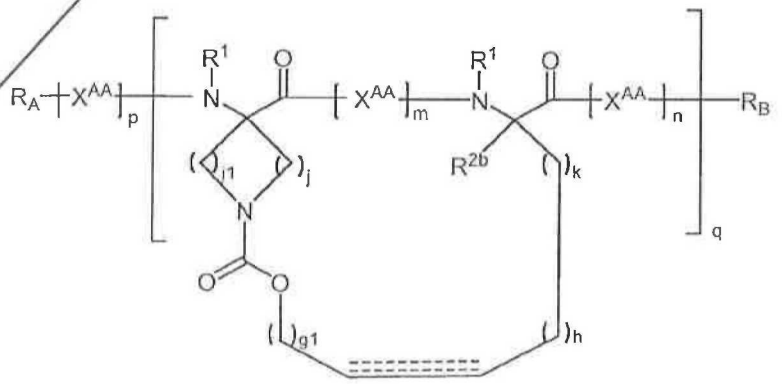


(**III-c-1**)

or a pharmaceutically acceptable salt thereof;

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

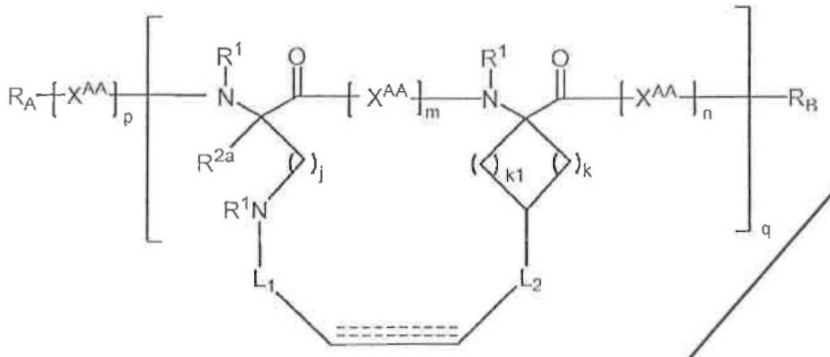
26. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-c-2**):



or a pharmaceutically acceptable salt thereof;

wherein each of g1 and h is independently zero or an integer between 1 and 10, inclusive.

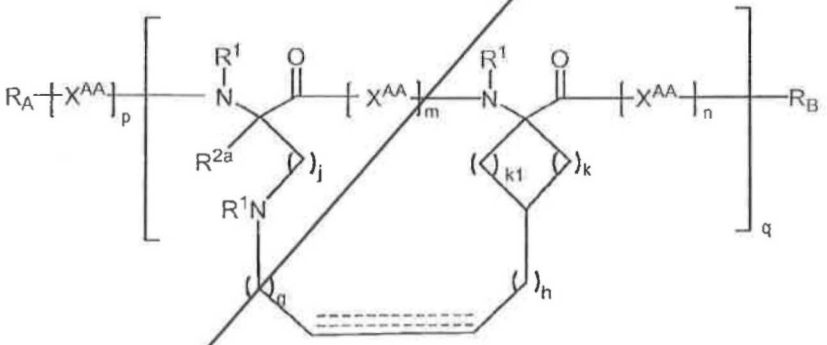
27. The polypeptide of claim 1, wherein the polypeptide is of Formula (**IV-a**):



(**IV-a**)

or a pharmaceutically acceptable salt thereof.

28. The polypeptide of claim 27, wherein the polypeptide is of Formula (**IV-a-1**):

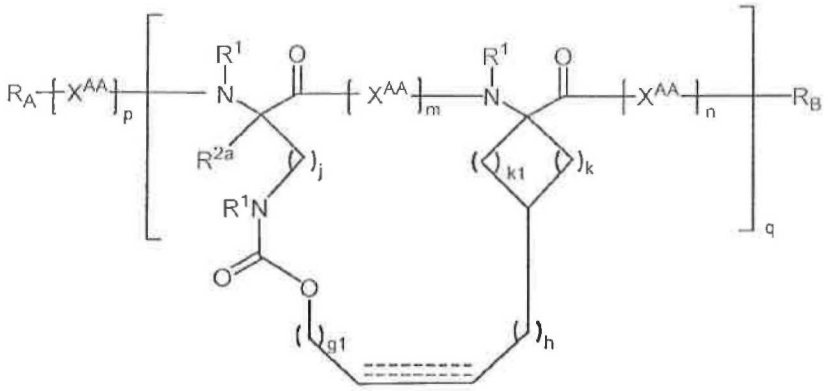


(**IV-a-1**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

29. The polypeptide of claim 27, wherein the polypeptide is of Formula (**IV-a-2**):

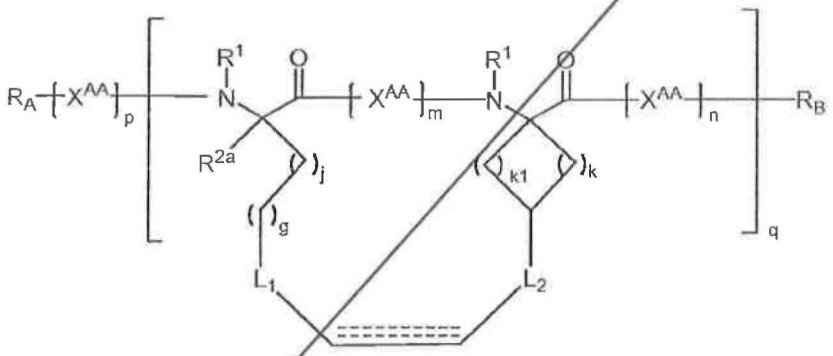


(**IV-a-2**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

30. The polypeptide of claim 27, wherein the polypeptide is of Formula (**IV-a-3**):

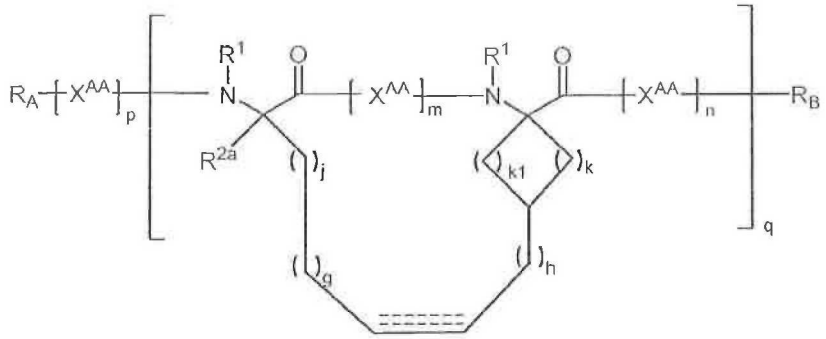


(**IV-a-3**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

31. The polypeptide of claim 27, wherein the polypeptide is of Formula (**IV-a-4**):

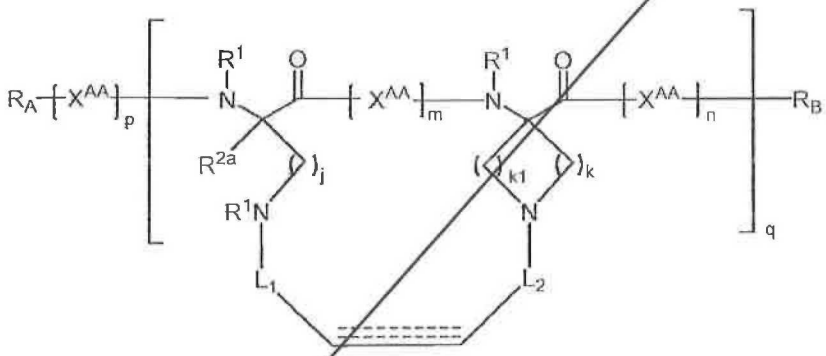


(**IV-a-4**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

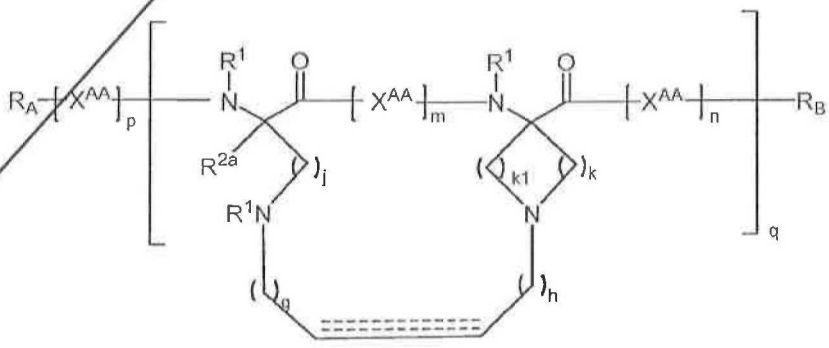
32. The polypeptide of claim 1, wherein the polypeptide is of Formula (**IV-b**):



(**IV-b**)

or a pharmaceutically acceptable salt thereof.

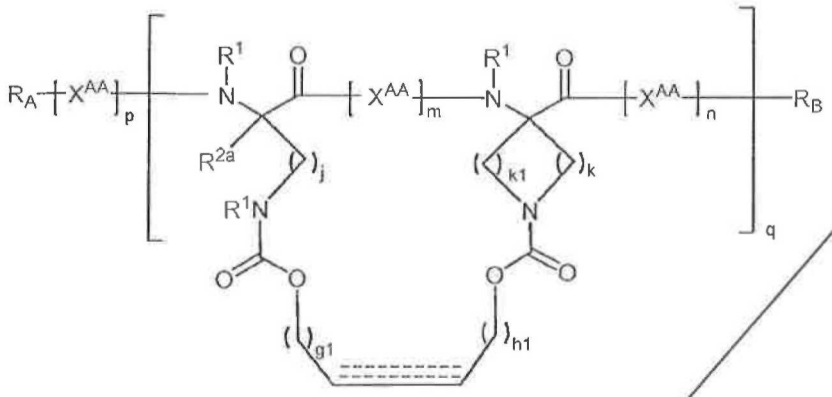
33. The polypeptide of claim 32, wherein the polypeptide is of Formula (**IV-b-1**):



(**IV-b-1**)

~~or a pharmaceutically acceptable salt thereof, wherein each of g and h is independently zero~~ or an integer between 1 and 10, inclusive.

34. The polypeptide of claim 32, wherein the polypeptide is of Formula (**IV-b-2**):

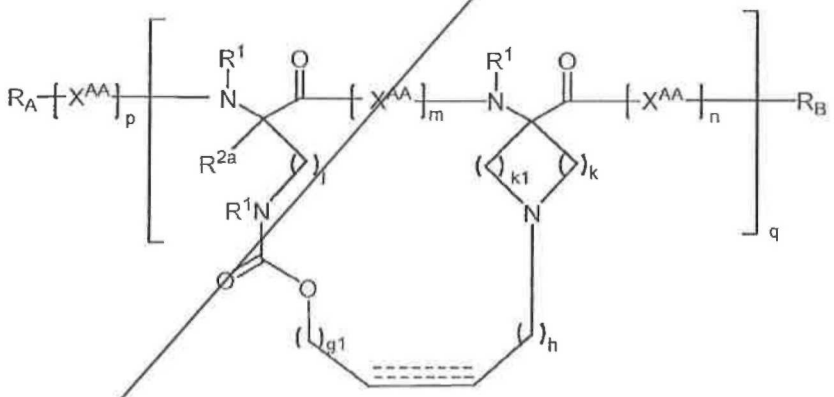


(**IV-b-2**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

35. The polypeptide of claim 32, wherein the polypeptide is of Formula (**IV-b-3**):

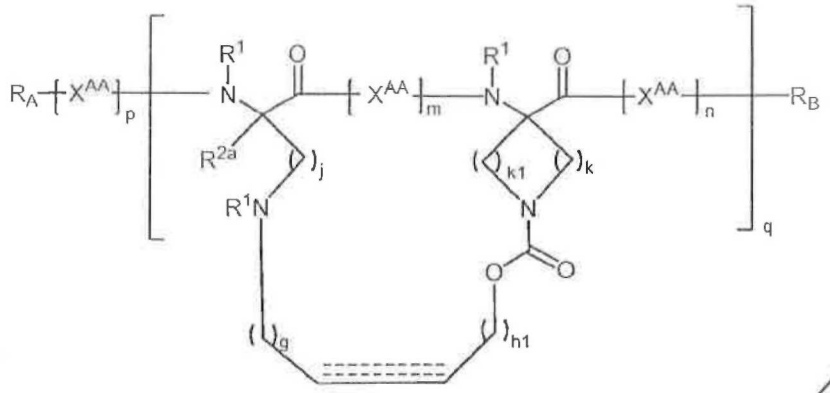


(**IV-b-3**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

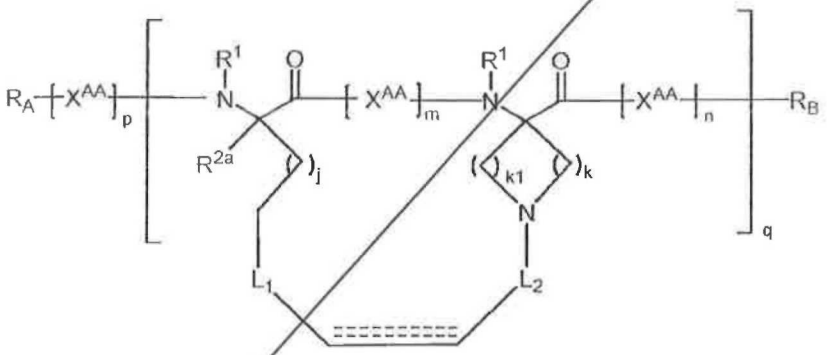
36. The polypeptide of claim 32, wherein the polypeptide is of Formula (**IV-b-4**):



(**IV-b-4**)

or a pharmaceutically acceptable salt thereof, wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

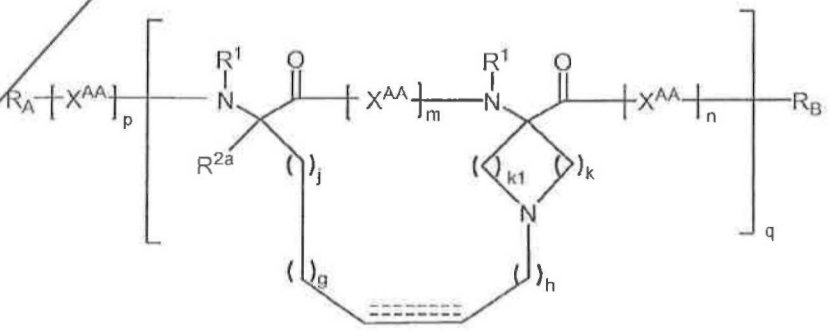
37. The polypeptide of claim 1, wherein the polypeptide is of Formula (**IV-c**):



(**IV-c**)

or a pharmaceutically acceptable salt thereof.

38. The polypeptide of claim 37, wherein the polypeptide is of Formula (**IV-c-1**):

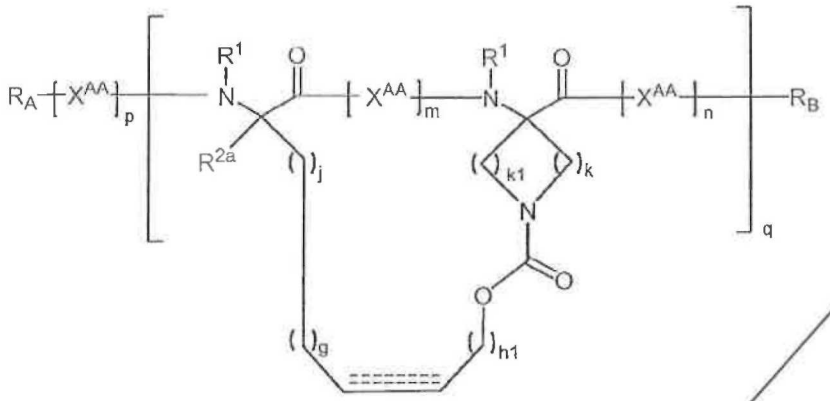


(**IV-c-1**)

or a pharmaceutically acceptable salt thereof,

~~wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.~~

39. The polypeptide of claim 37, wherein the polypeptide is of Formula (**IV-c-2**):

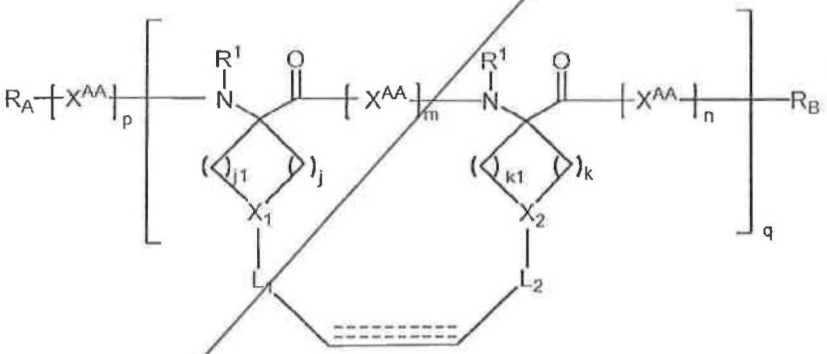


(**IV-c-2**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

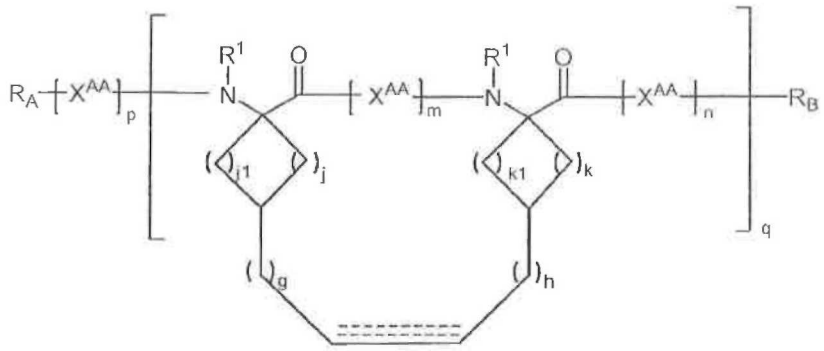
40. The polypeptide of claim 1, wherein the polypeptide is of Formula (**V**):



(**V**)

or a pharmaceutically acceptable salt thereof.

41. The polypeptide of claim 1, wherein the polypeptide is of Formula (V-a):

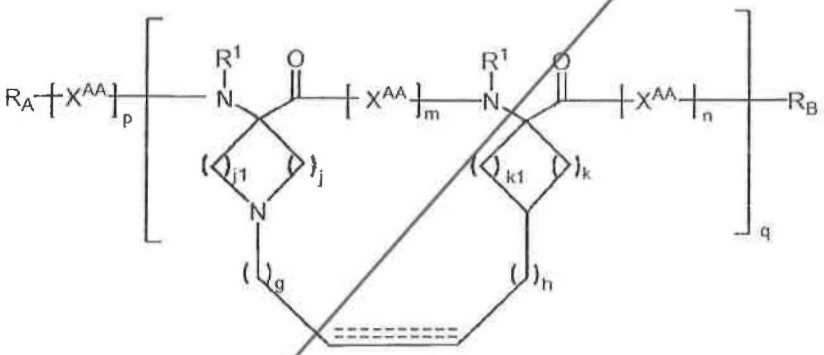


(V-a)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

42. The polypeptide of claim 1, wherein the polypeptide is of Formula (**V-b**):

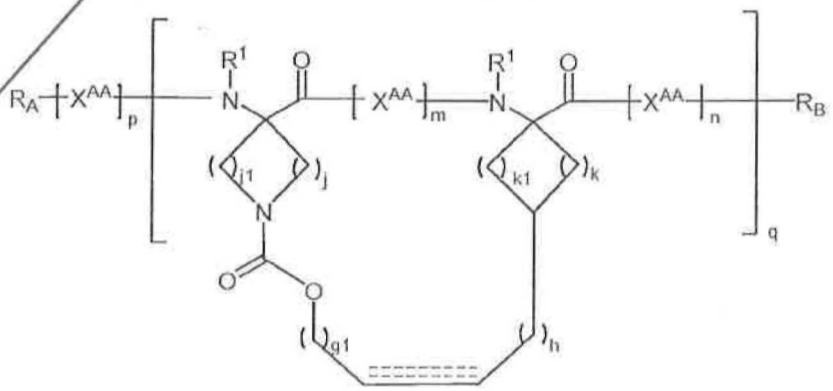


(V-b)

or a pharmaceutically acceptable salt thereof,

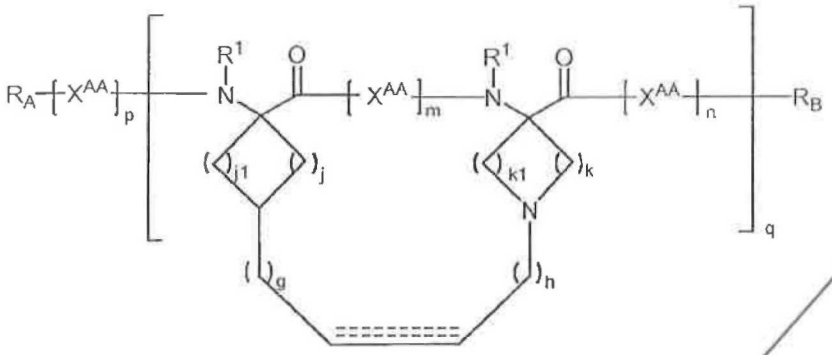
wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

43. The polypeptide of claim 42, wherein the polypeptide is of Formula (**V-b-1**):



or a pharmaceutically acceptable salt thereof.

44. The polypeptide of claim 1, wherein the polypeptide is of Formula (**V-c**):

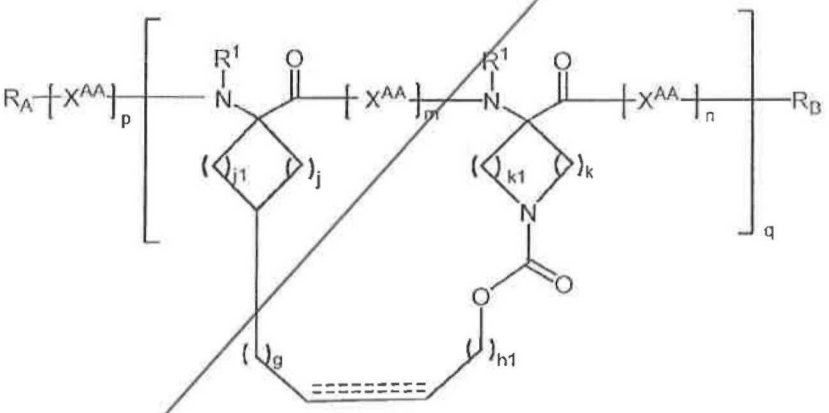


(V-c)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

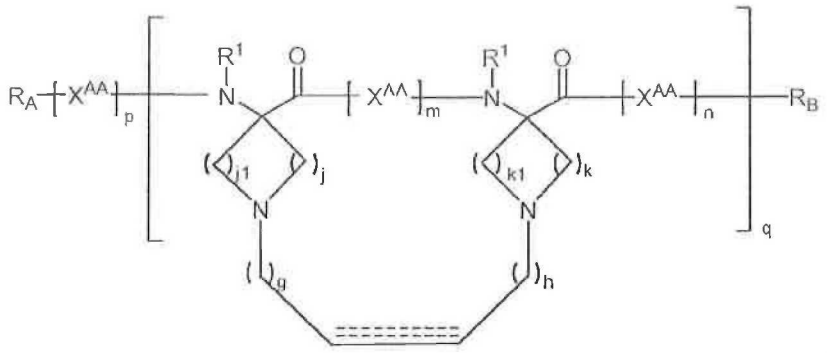
45. The polypeptide of claim 44, wherein the polypeptide is of Formula (**V-c-1**):



(V-c-1)

or a pharmaceutically acceptable salt thereof.

46. The polypeptide of claim 1, wherein the polypeptide is of Formula (**V-d**):

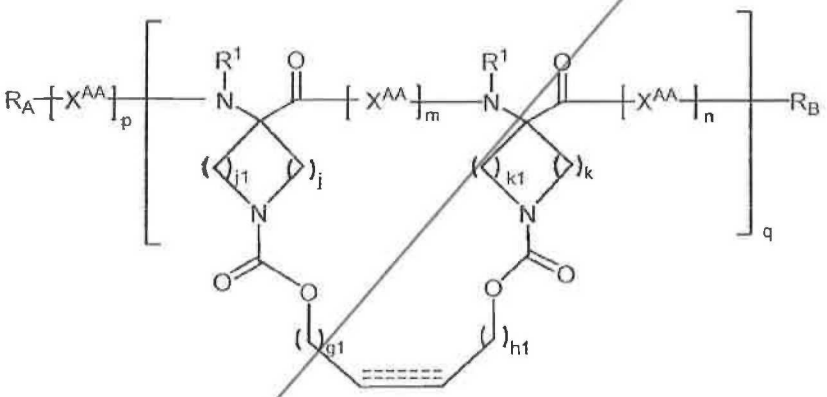


(V-d)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

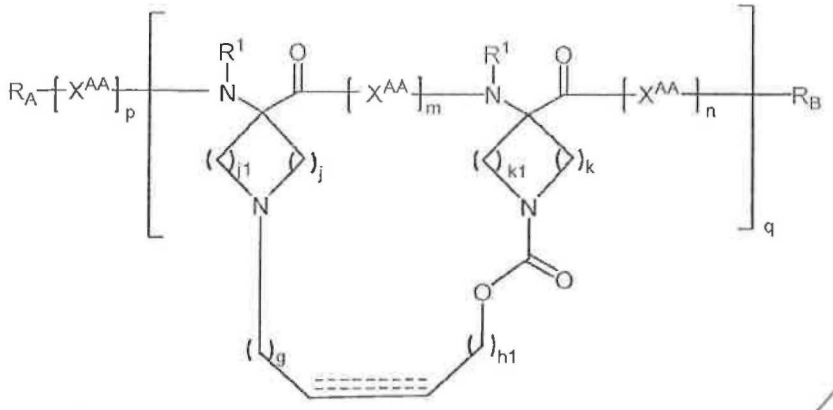
47. The polypeptide of claim 46, wherein the polypeptide is of Formula (**V-d-1**):



(V-d-1)

or a pharmaceutically acceptable salt thereof.

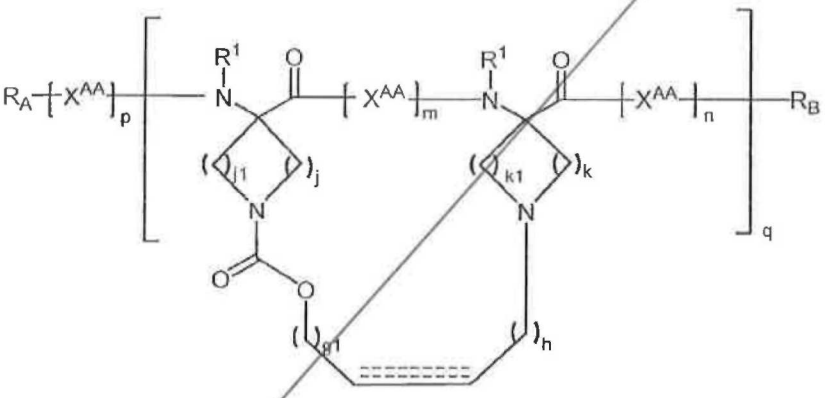
48. The polypeptide of claim 46, wherein the polypeptide is of Formula (**V-d-2**):



(**V-d-2**)

or a pharmaceutically acceptable salt thereof.

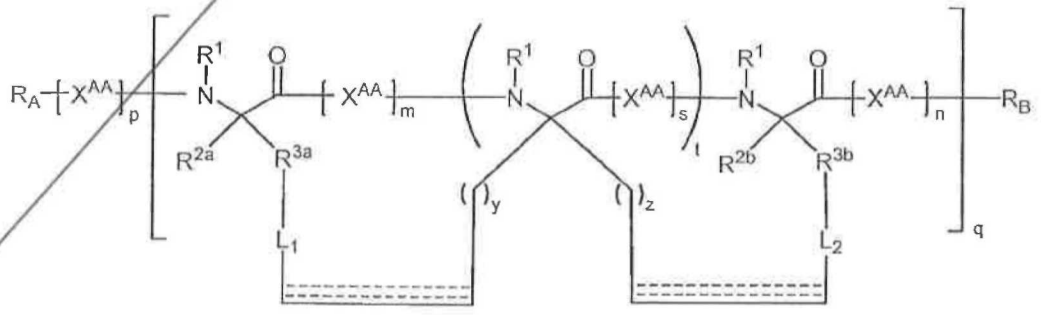
49. The polypeptide of claim 46, wherein the polypeptide is of Formula (**V-d-3**):



(**V-d-3**)

or a pharmaceutically acceptable salt thereof.

50. A polypeptide of the Formula (**VI**):



(**VI**)

or a pharmaceutically acceptable salt thereof;

wherein:

each instance of ========== independently represents a single bond, a double bond, or a triple bond;

each instance of R^1 is, independently, hydrogen; acyl; substituted or unsubstituted C_{1-6} alkyl; or an amino protecting group;

each of R^{2a} and R^{2b} is, independently, substituted or unsubstituted alkyl; substituted or unsubstituted alkenyl; substituted or unsubstituted alkynyl; substituted or unsubstituted heteroalkyl; substituted or unsubstituted carbocyclyl; substituted or unsubstituted heterocyclyl;

each of R^{3a} and R^{3b} is, independently, substituted or unsubstituted alkylene; unsubstituted heteroalkylene; substituted or unsubstituted carbocyclylene; or substituted or unsubstituted heterocyclylene; or optionally R^{2a} and R^{3a} are joined to form a ring; or optionally R^{2b} and R^{3b} are joined to form a ring;

L_1 is independently, a bond, substituted or unsubstituted C_{1-10} alkylene, or $-C(=O)OR^{L1}-$;

L_2 is independently, a bond, substituted or unsubstituted C_{1-10} alkylene, or $-C(=O)OR^{L2}-$; each of R^{L1} and R^{L2} is independently optionally substituted C_{1-10} alkylene;

R_A is, independently, $-R_C$, $-OR_C$, $-N(R_C)_2$, or $-SR_C$, wherein each instance of R_C is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; a hydroxyl, amino, or thiol protecting group; or two R_C groups together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

R_B is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; an amino protecting group; a label optionally joined by a linker, wherein the linker is selected from cyclic or acyclic, branched or unbranched alkylene; cyclic or acyclic, branched or unbranched alkenylene; cyclic or acyclic, branched or unbranched alkynylene; cyclic or acyclic, branched or unbranched heteroalkylene; cyclic or acyclic, branched or unbranched heteroalkenylene; cyclic or acyclic, branched or unbranched heteroalkynylene; arylene; heteroarylene; or acylene; or R_A and R_B together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

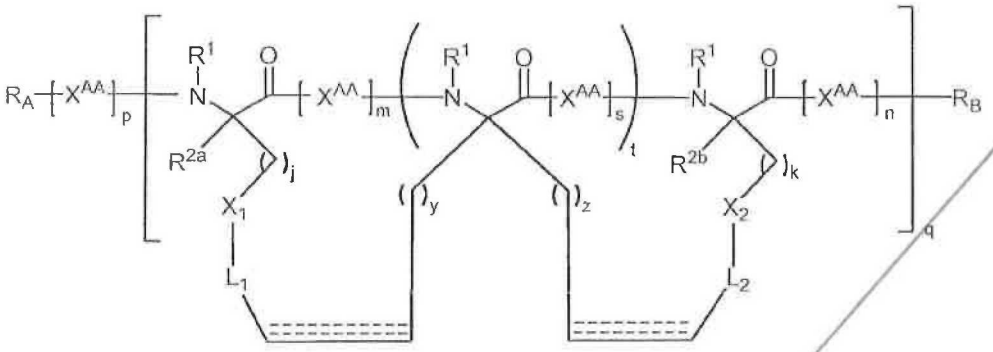
each instance of X_{AA} is, independently, an amino acid;

each instance of p and n is, independently, 0 or an integer between 1 and 100, inclusive;

~~each of m and s is independently an integer between 2 and 6, inclusive;~~

each of q, t, y, and z is independently an integer between 1 and 10, inclusive.

51. The polypeptide of claim 50, wherein the polypeptide is of Formula (**VII**):

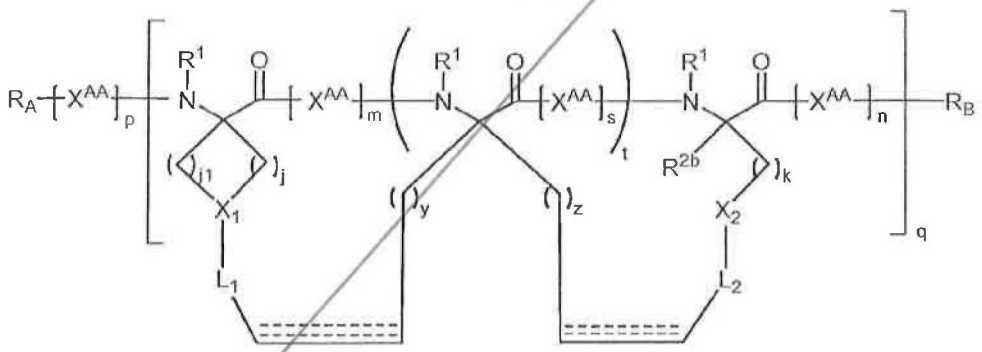


(VII)

or a pharmaceutically acceptable salt thereof,

wherein each of j and k is independently an integer between 0 and 10, inclusive.

52. The polypeptide of claim 50, wherein the polypeptide is of Formula (**VIII**):

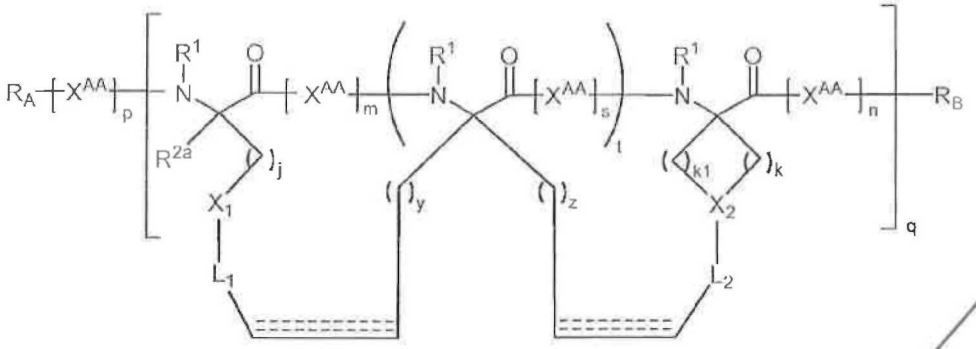


(VIII)

or a pharmaceutically acceptable salt thereof,

wherein each of j1 and k1 is independently an integer between 0 and 10, inclusive.

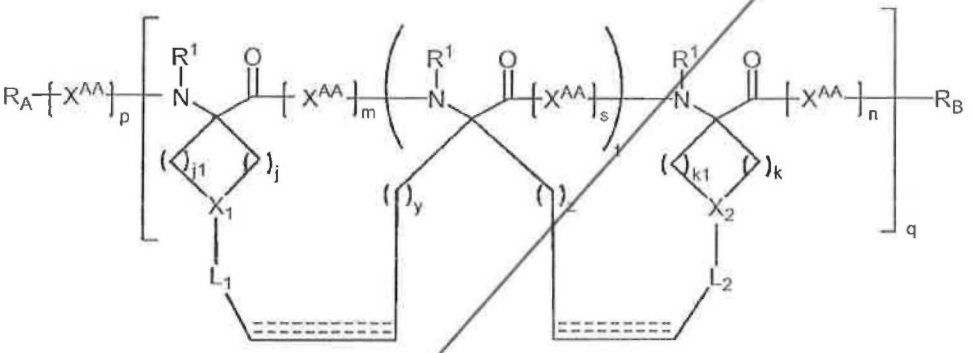
53. The polypeptide of claim 50, wherein the polypeptide is of Formula (IX):



(IX)

or a pharmaceutically acceptable salt thereof.

54. The polypeptide of claim 50, wherein the polypeptide is of Formula (X):



(X)

or a pharmaceutically acceptable salt thereof.

55. A composition comprising a polypeptide of any one of claims 1-6 and a pharmaceutically acceptable excipient.

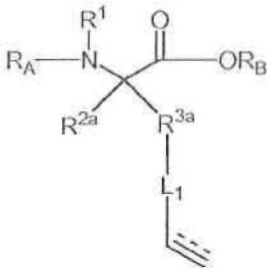
56. A method of treating a disorder in a subject, said method comprising administering an effective amount of a polypeptide of any one of claims 1-54 to a subject in need thereof.

57. A method of treating a disorder in a subject, said method comprising instructing the subject to take an effective amount of a polypeptide of any one of claims 1-54.

58. A polypeptide of any one of claims 1-54 for use in treating a disorder.

59. A method of making a polypeptide of claim 1, said method comprising the steps of:

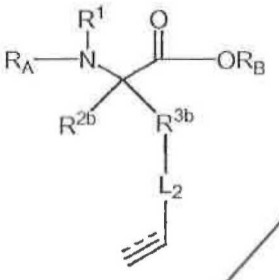
(i) providing an amino acid of Formula (**A**):



(**A**)

or a salt thereof;

(ii) providing an amino acid of Formula (**B**):



(**B**)

or a salt thereof;

(iii) providing at least one amino acid is independently selected from the group consisting of natural amino acids and unnatural amino acids; and

(iv) coupling the amino acids of Formulae (**A**) and (**B**) and optionally (iii).

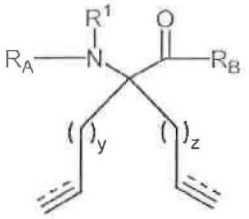
60. The method of claim 59 further comprising a step of treating the polypeptide of step (iii) with a catalyst.

61. The method of claim 60 wherein the catalyst is a ruthenium catalyst.

62. The method of claim 61 further comprising a step of treating the polypeptide of a palladium catalyst.

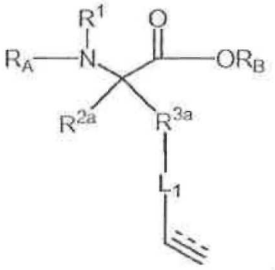
63. A method of making a polypeptide of claim 50, said method comprising the steps of:

(i) providing a bis-amino acid of Formula (C):



(C)

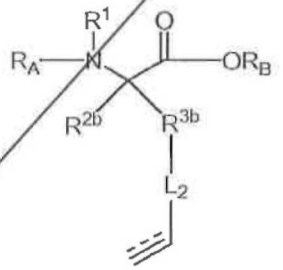
(ii) providing an amino acid of Formula (**A**):



(**A**)

or salt thereof;

(iii) providing an amino acid of Formula (**B**):



(**B**)

or salt thereof;

(iv) providing at least one amino acid; and

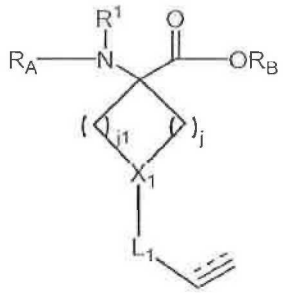
(v) coupling the amino acids of (**A**), (**B**), and (**C**), and optionally (iv).

64. The method of claim 63 further comprising a step of treating the polypeptide of step (v) with a catalyst.

65. The method of claim 64 wherein the catalyst is a ruthenium catalyst.

66. The method of claim 65 further comprising a step (vi) treating the polypeptide of (v) with a palladium catalyst.

67. An amino acid of Formula (**D**):



(**D**)

or a pharmaceutically acceptable salt thereof,

wherein:

R^1 is hydrogen; acyl; substituted or unsubstituted C_{1-6} alkyl; or an amino protecting group;

L_1 is independently, a bond, substituted or unsubstituted C_{1-10} alkylene, or $-C(=O)OR^6-$;

R_A is, independently, $-R_C$, $-OR_C$, $-N(R_C)_2$, or $-SR_C$, wherein each instance of R_C is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; a hydroxyl, amino, or thiol protecting group; or two R_C groups together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

R_B is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; an amino protecting group; a label optionally joined by a linker, wherein the linker is selected from cyclic or acyclic, branched or unbranched alkylene; cyclic or acyclic, branched or unbranched alkenylene; cyclic or acyclic, branched or unbranched, alkynylene; cyclic or acyclic, branched or unbranched heteroalkylene; cyclic or acyclic, branched or unbranched heteroalkenylene; cyclic or acyclic, branched or unbranched heteroalkynylene; arylene; heteroarylene; or acylene; or R_A and R_B together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

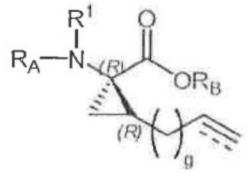
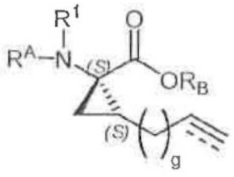
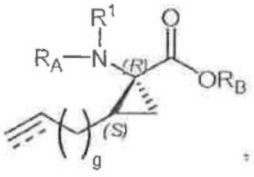
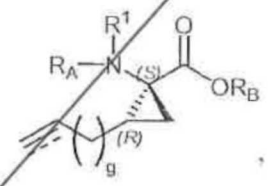
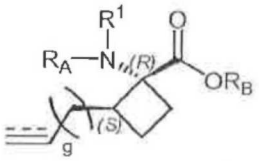
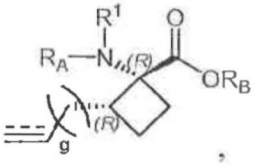
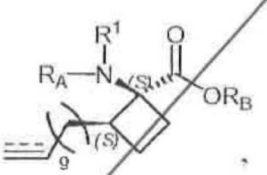
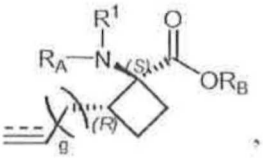
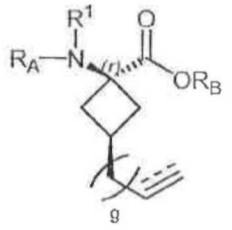
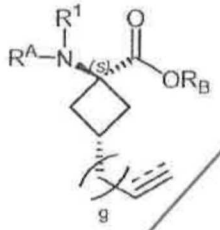
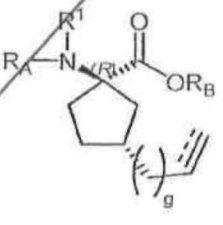
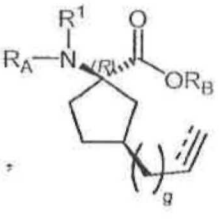
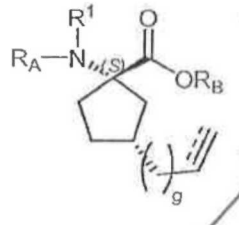
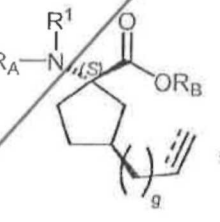
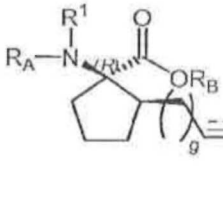
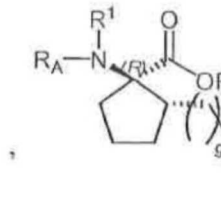
X_1 is independently a bond, $-CR^5R^6-$ or $-NR^1-$;

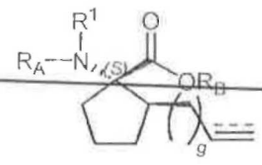
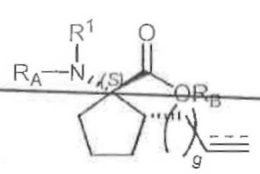
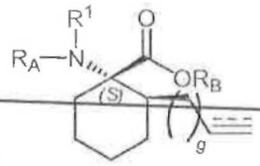
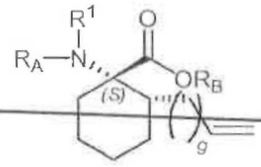
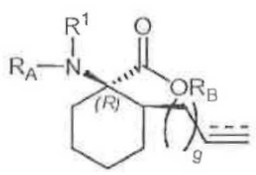
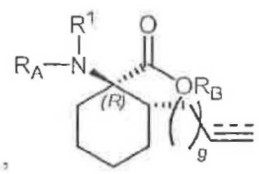
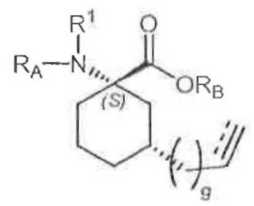
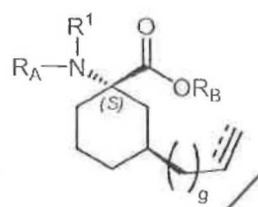
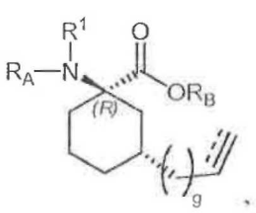
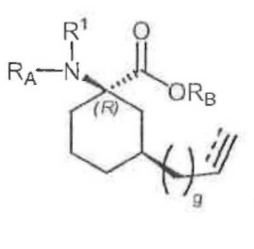
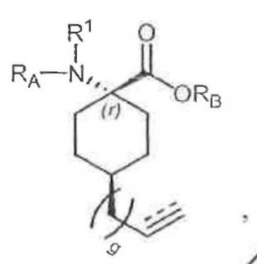
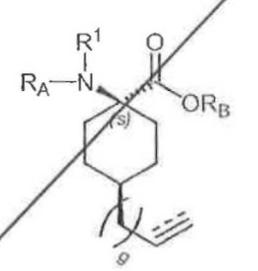
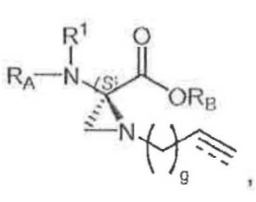
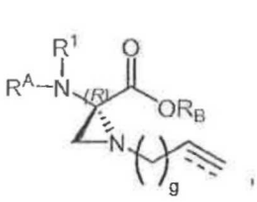
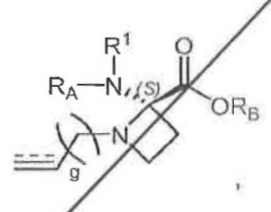
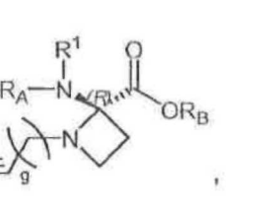
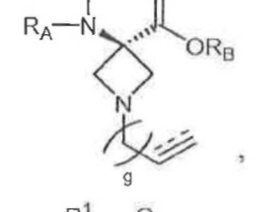
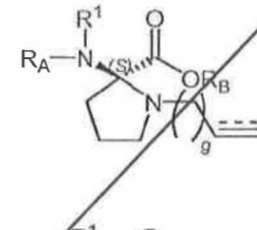
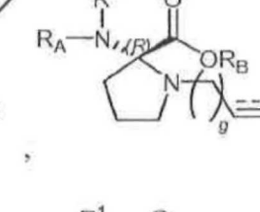
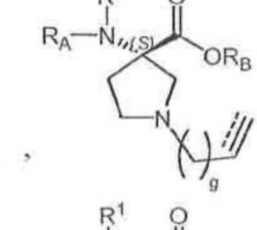
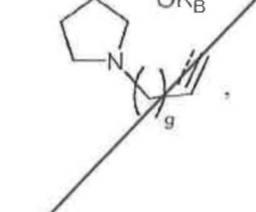
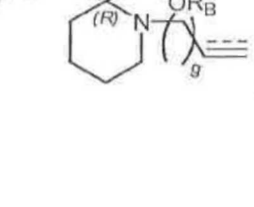
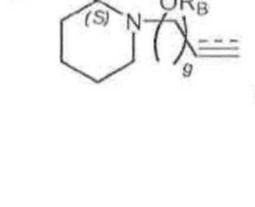
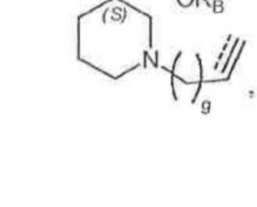
R^1 is, independently, hydrogen; acyl; substituted or unsubstituted C_{1-6} alkyl; or an amino protecting group;

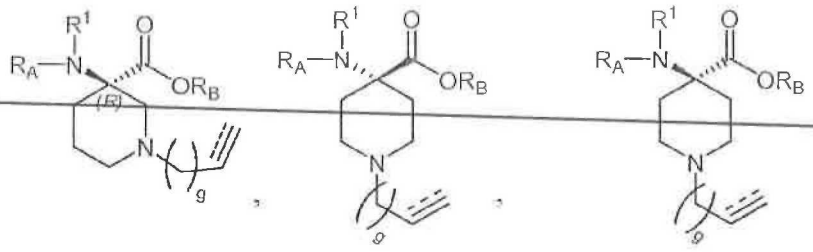
each of R^5 and R^6 is independently hydrogen, halogen, $-NO_2$, –OH, –CN, or C_{1-6} alkyl; and

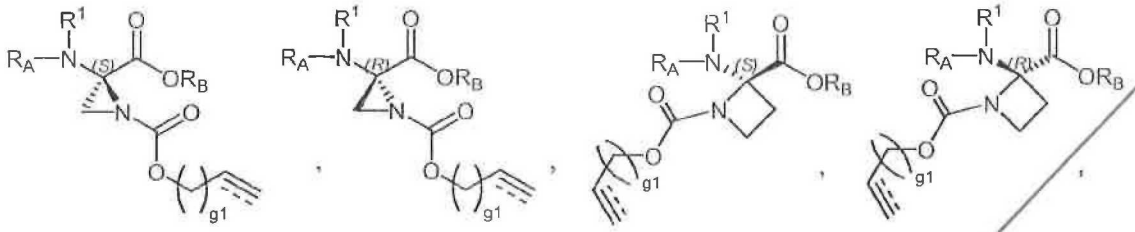
each of j and j1 is independently an integer between 1 and 10, inclusive.

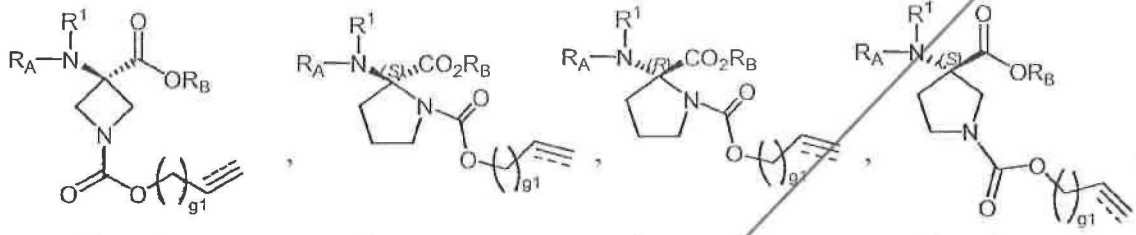
64. The amino acid of claim 63, wherein the amino acid is selected from the group consisting of:

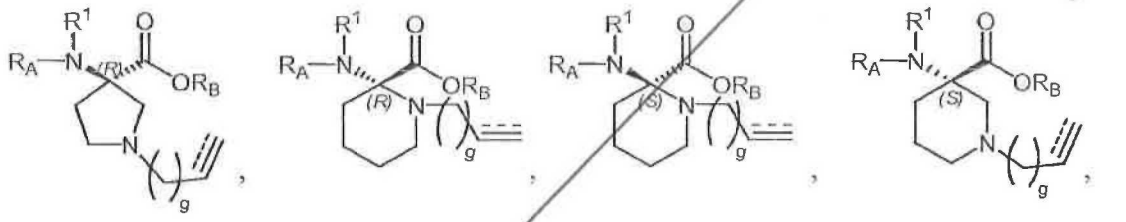

















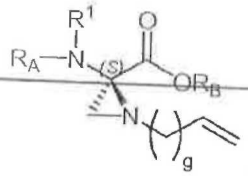
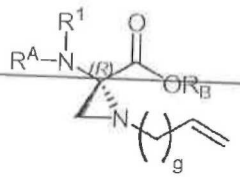
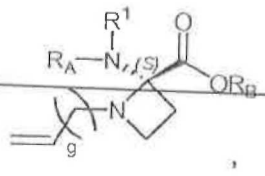
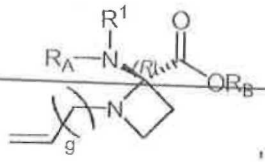
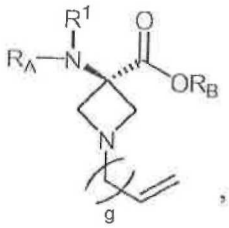
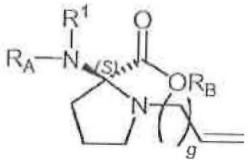
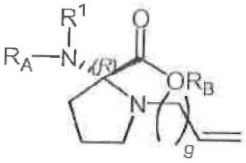
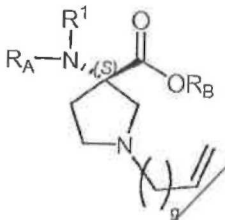
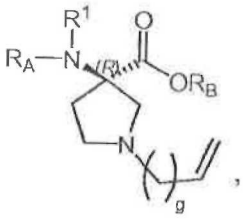
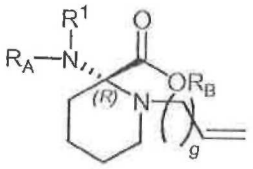
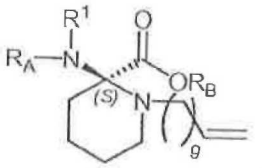
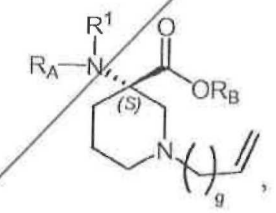
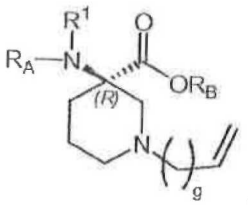
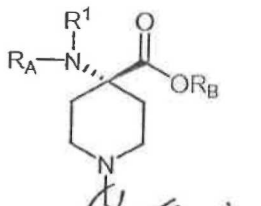
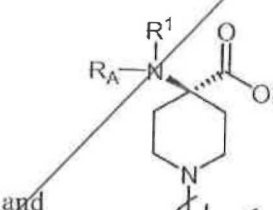

























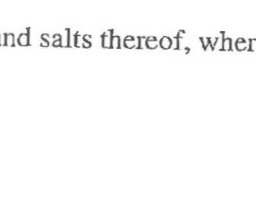
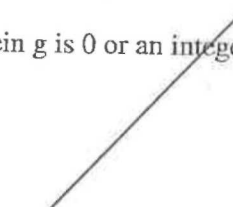
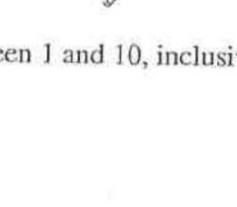






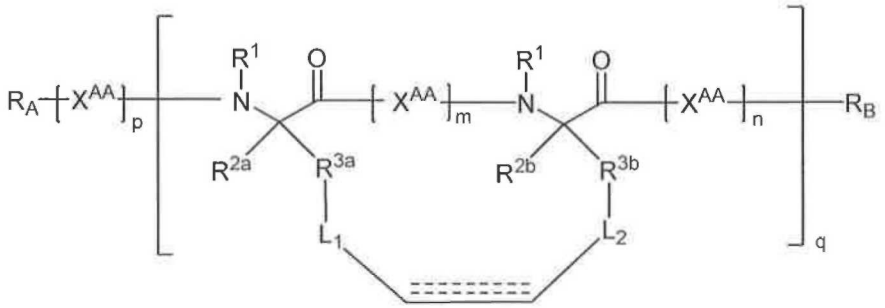



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and salts thereof, wherein g is 0 or an integer of between 1 and 10, inclusive.

Claims

1. A polypeptide of Formula (I):



(I)

or a pharmaceutically acceptable salt thereof; wherein:

each instance of ========== independently represents a single bond or a double bond;

each instance of R^1 is, independently, hydrogen; acyl; substituted or unsubstituted C_{1-6} alkyl; or an amino protecting group;

each of R^{2a} and R^{2b} is, independently, substituted or unsubstituted alkyl; substituted or unsubstituted alkenyl; substituted or unsubstituted alkynyl; substituted or unsubstituted heteroalkyl; substituted or unsubstituted carbocyclyl; substituted or unsubstituted heterocyclyl;

each of R^{3a} and R^{3b} is, independently, substituted or unsubstituted alkylene; unsubstituted heteroalkylene; substituted or unsubstituted carbocyclylene; or substituted or unsubstituted heterocyclylene; or optionally R^{2a} and R^{3a} are joined to form a ring; or optionally R^{2b} and R^{3b} are joined to form a ring;

L_1 is independently, a bond, substituted or unsubstituted C_{1-10} alkylene, or $-C(=O)OR^{L1}-$;

L_2 is independently, a bond, substituted or unsubstituted C_{1-10} alkylene, or $-C(=O)OR^{L2}-$;

provided that when neither R^{2a} and R^{3a} nor R^{2b} and R^{3b} forms a ring, L_1 is $-C(=O)OR^{L1}-$ or L_2 is $-C(=O)OR^{L1}-$;

each of R^{L1} and R^{L2} is independently optionally substituted C_{1-10} alkylene;

R_A is, independently, $-R_C$, $-OR_C$, $-N(R_C)_2$, or $-SR_C$, wherein each instance of R_C is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; a hydroxyl, amino, or thiol protecting group; or two R_C groups together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

R_B is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; an amino protecting group; a label optionally joined by a linker, wherein the linker is selected from cyclic or acyclic, branched or unbranched alkylene; cyclic or acyclic, branched or unbranched alkenylene; cyclic or acyclic, branched or unbranched alkynylene; cyclic or acyclic, branched or unbranched heteroalkylene; cyclic or acyclic, branched or unbranched heteroalkenylene; cyclic or acyclic, branched or unbranched heteroalkynylene;

arylene; heteroarylene; or acylene; or R_A and R_B together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

each instance of X_{AA} is, independently, an amino acid;

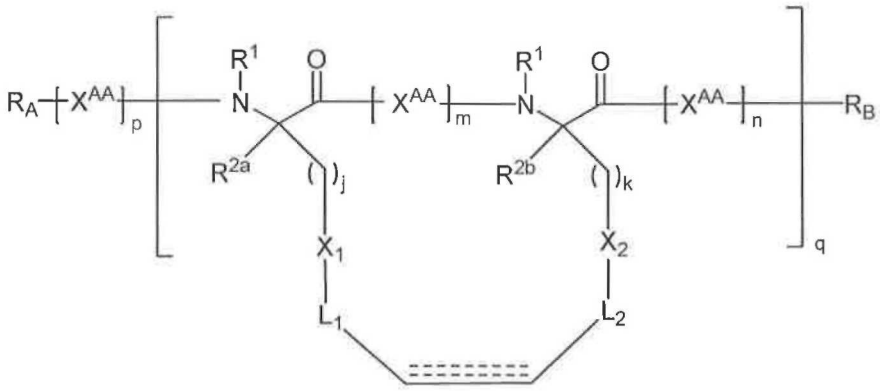
m is independently, an integer between 2 and 6, inclusive;

each instance of p and n is, independently, 0 or an integer between 1 and 100, inclusive; and

q is independently an integer between 1 and 10, inclusive, and

wherein at least one of R^{3a}-L_1 or R^{3b}-L_2 comprises at least one heteroatom.

2. The polypeptide of claim 1, wherein the polypeptide is of Formula (**II**):



(**II**)

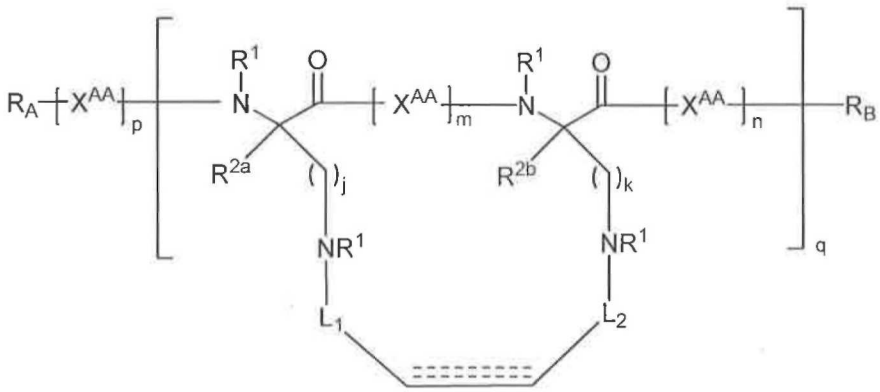
or a pharmaceutically acceptable salt thereof; wherein:

each of X_1 and X_2 is independently a bond, $-CR^5R^6-$ or $-NR^1-$, provided that at least one of X_1 and X_2 is $-NR^1-$;

each of R^5 and R^6 is independently hydrogen, halogen, $-NO_2$, –OH, –CN, or C_{1-6} alkyl; and

each of j and k is independently an integer between 0 and 10, inclusive.

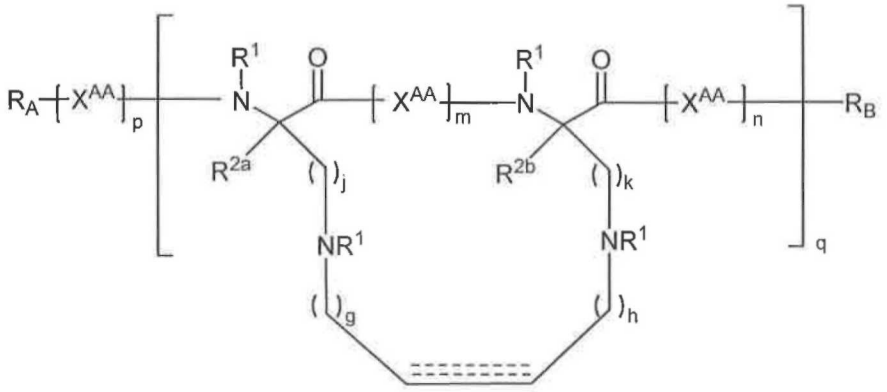
3. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-a**):



(**II-a**)

or a pharmaceutically acceptable salt thereof.

4. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-a-1**):



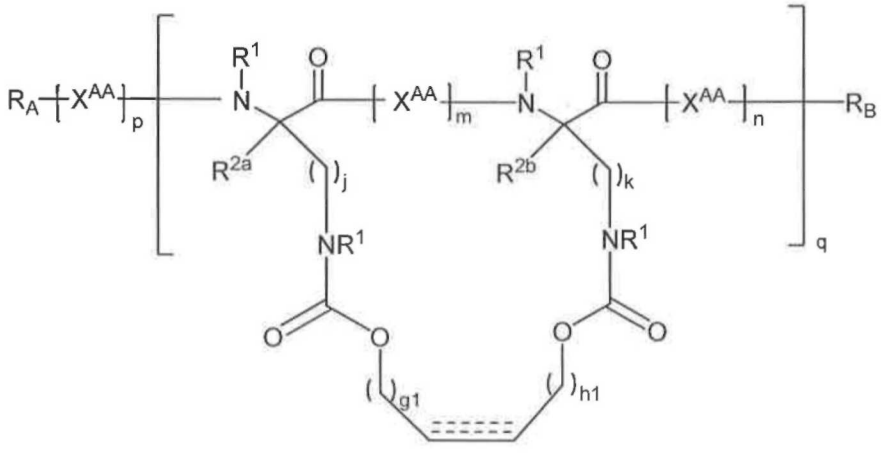
(**II-a-1**)

or a pharmaceutically acceptable salt thereof;

wherein

each of g and h is independently zero or an integer between 1 and 10, inclusive.

5. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-a-2**):



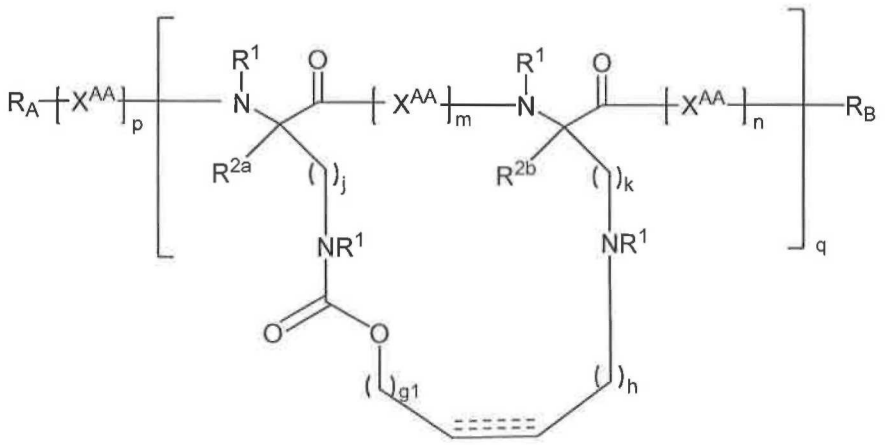
(**II-a-2**)

or a pharmaceutically acceptable salt thereof;

wherein

each of g1 and h1 is independently zero or an integer between 1 and 10, inclusive.

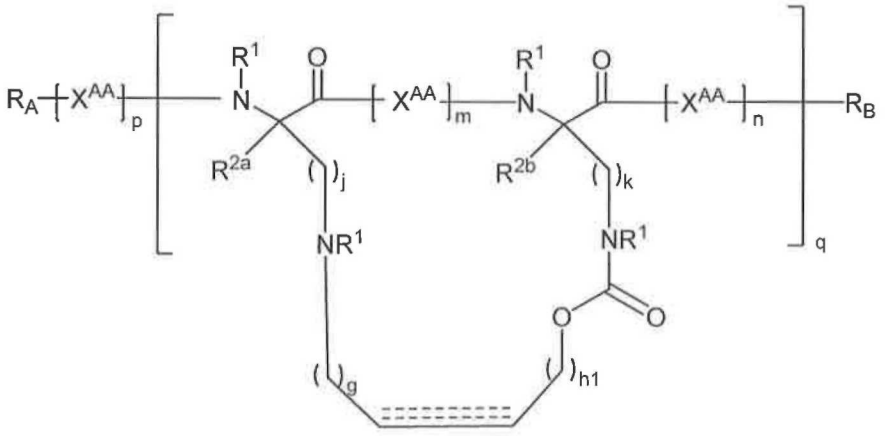
6. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-a-3**):



(**II-a-3**)

or a pharmaceutically acceptable salt thereof; wherein each of g1 and h is independently zero or an integer between 1 and 10, inclusive.

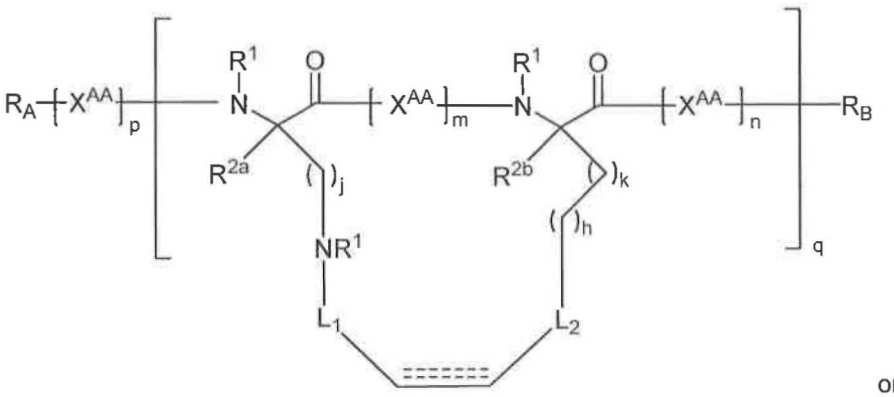
7. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-a-4**):



(**II-a-4**)

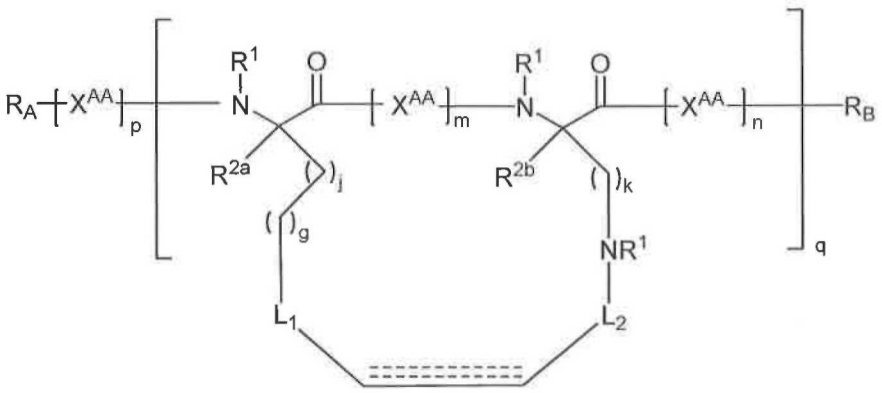
or a pharmaceutically acceptable salt thereof; wherein each of g and h1 is independently zero or an integer between 1 and 10, inclusive.

8. The polypeptide of claim 2, wherein the polypeptide is of Formula (**II-b**) or (**II-c**):



or

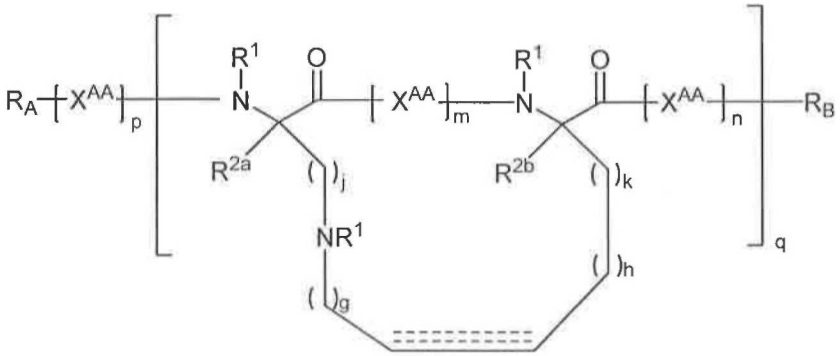
(**II-b**)



(**II-c**)

or a pharmaceutically acceptable salt thereof; wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

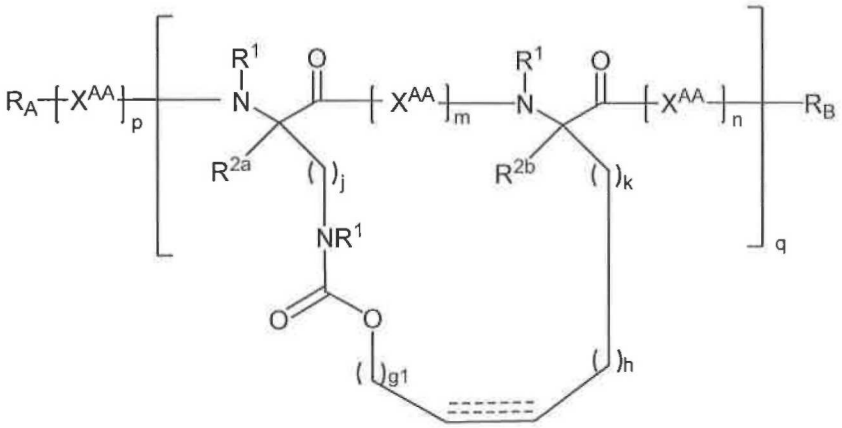
9. The polypeptide of claim 8, wherein the polypeptide is of Formula (**II-b-1**):



(**II-b-1**)

or a pharmaceutically acceptable salt thereof, wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

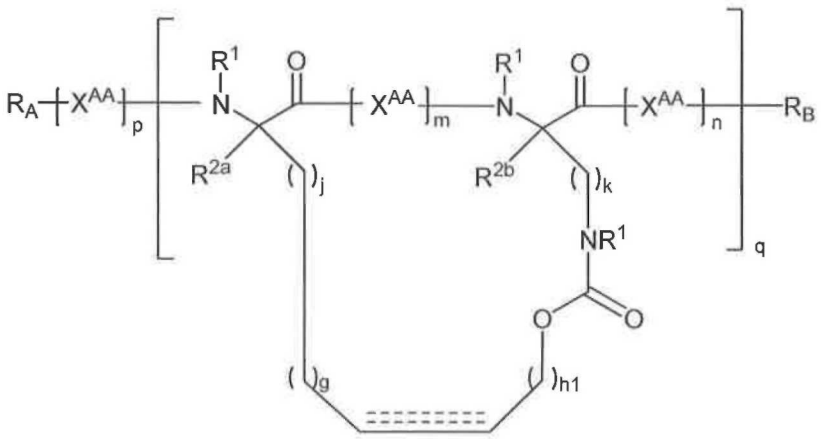
10. The polypeptide of claim 8, wherein the polypeptide is of Formula (**II-b-2**):



(**II-b-2**)

or a pharmaceutically acceptable salt thereof, wherein each of g1 and h is independently zero or an integer between 1 and 10, inclusive.

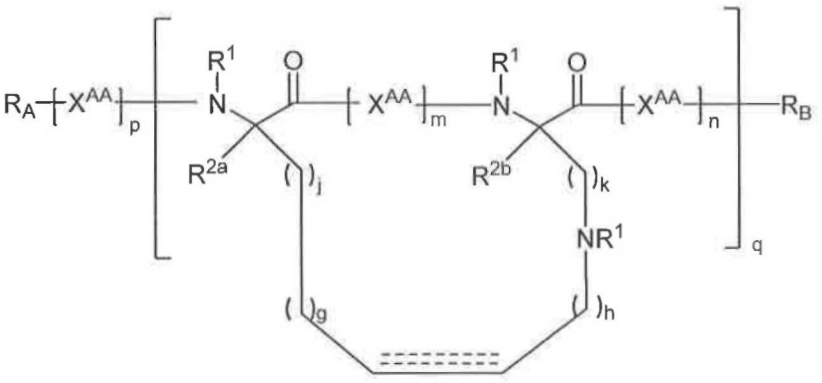
11. The polypeptide of claim 8, wherein the polypeptide is of Formula (**II-c-1**):



(**II-c-1**)

or a pharmaceutically acceptable salt thereof, wherein each of g and h1 is independently zero or an integer between 1 and 10, inclusive.

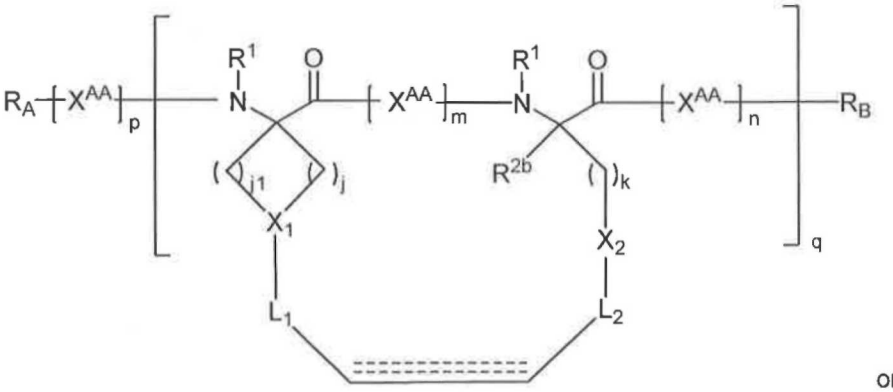
12. The polypeptide of claim 8, wherein the polypeptide is of Formula (**II-c-2**):



(**II-c-2**)

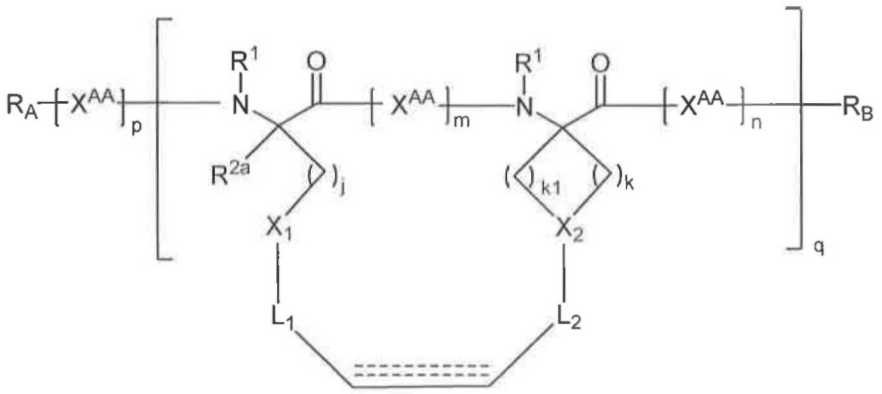
or a pharmaceutically acceptable salt thereof, wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

13. The polypeptide of claim 1, wherein the polypeptide is of Formula (**III**) or Formula (**IV**):



or

(**III**)



(**IV**)

or a pharmaceutically acceptable salt thereof;

wherein:

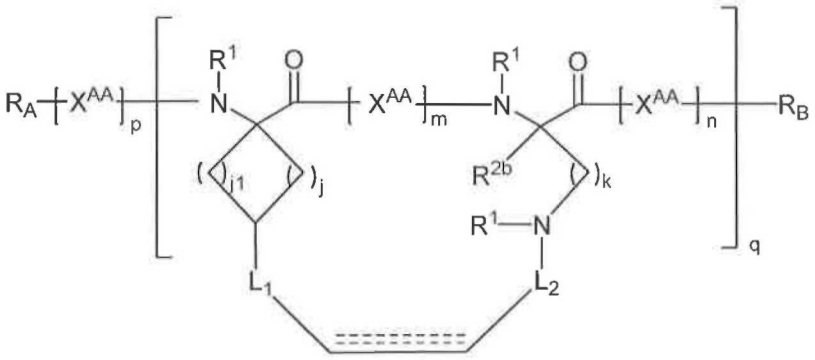
each of X_1 and X_2 is independently a bond, $-CR^5R^6-$ or $-NR^1-$ as valence permits;

R^1 is, independently, hydrogen, acyl, substituted or unsubstituted C_{1-6} alkyl, or an amino protecting group;

each of R^5 and R^6 is independently hydrogen, halogen, $-NO_2$, $-OH$, $-CN$, or C_{1-6} alkyl;

each of j, k, j1, and k1 is independently an integer between 0 and 10, inclusive;

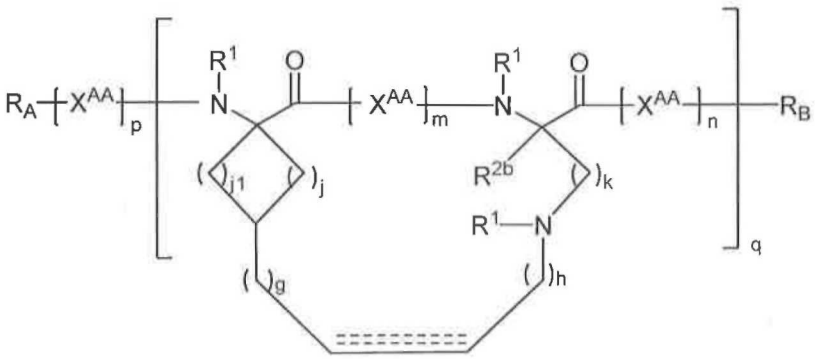
14. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-a**):



(**III-a**)

or a pharmaceutically acceptable salt thereof.

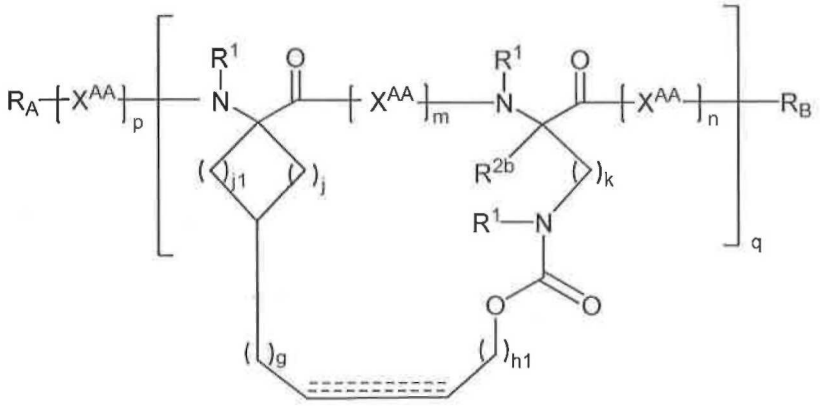
15. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-a-1**):



(**III-a-1**)

or a pharmaceutically acceptable salt thereof; wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

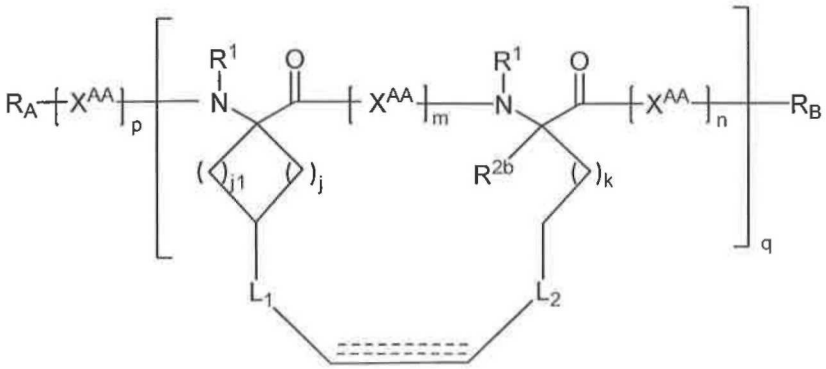
16. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-a-2**):



(**III-a-2**)

or a pharmaceutically acceptable salt thereof; wherein each of g and h1 is independently zero or an integer between 1 and 10, inclusive.

17. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-a-3**):



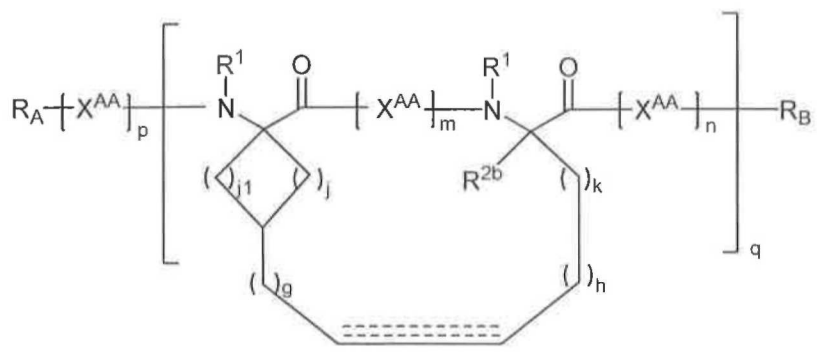
(**III-a-3**)

or a pharmaceutically acceptable salt thereof,

wherein

each of j, k, j1, and k1 is independently an integer between 0 and 10, inclusive.

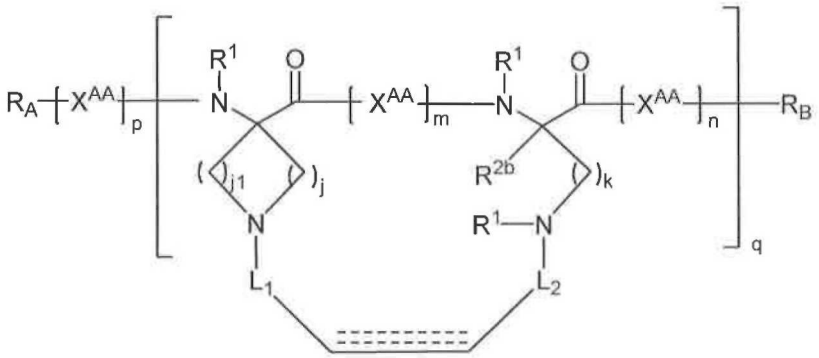
18. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-a-4**):



(**III-a-4**)

or a pharmaceutically acceptable salt thereof; wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

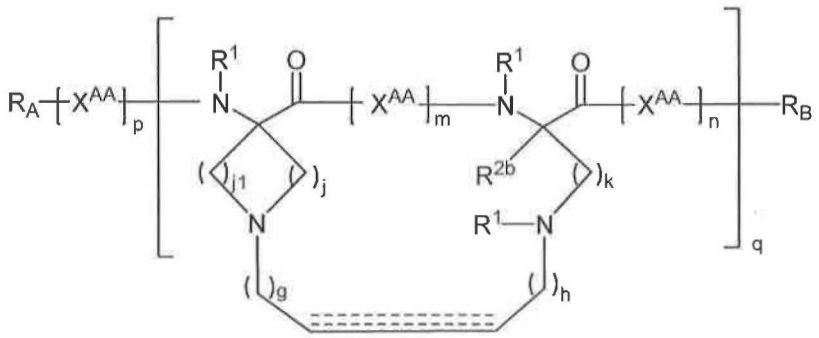
19. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-b**):



(**III-b**)

or a pharmaceutically acceptable salt thereof.

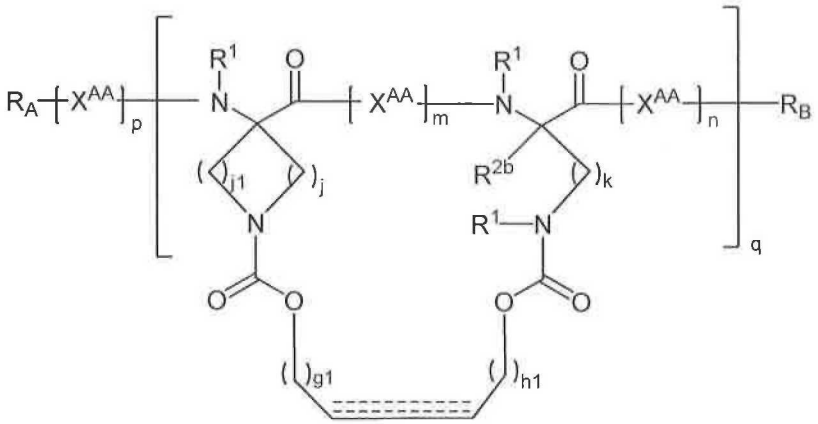
20. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-b-1**):



(**III-b-1**)

or a pharmaceutically acceptable salt thereof; wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

21. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-b-2**):

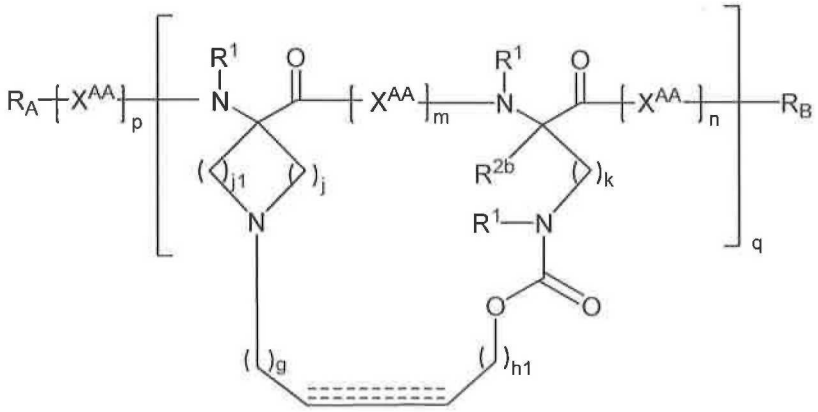


(**III-b-2**)

or a pharmaceutically acceptable salt thereof;

wherein each of g1 and h1 is independently zero or an integer between 1 and 10, inclusive.

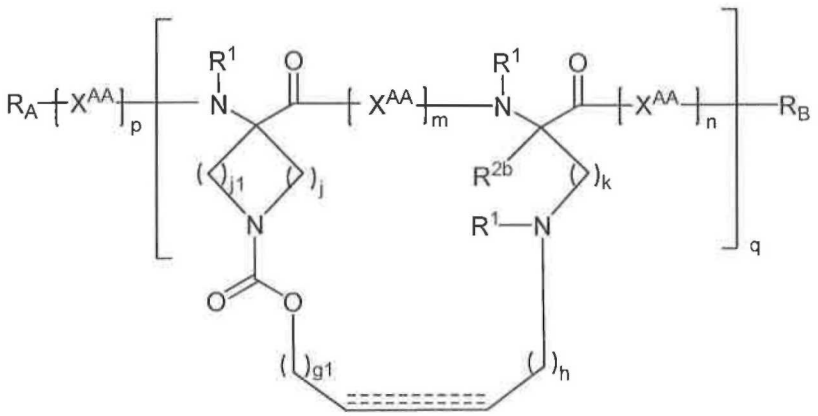
22. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-b-3**):



(**III-b-3**)

or a pharmaceutically acceptable salt thereof; wherein each of g and h1 is independently zero or an integer between 1 and 10, inclusive.

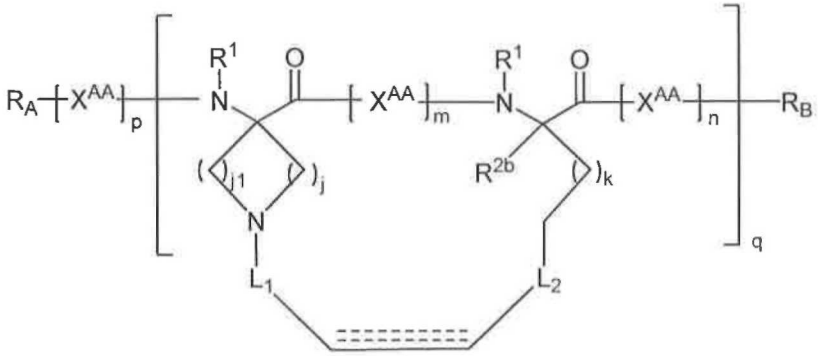
23. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-b-4**):



(**III-b-4**)

or a pharmaceutically acceptable salt thereof; wherein each of g1 and h is independently zero or an integer between 1 and 10, inclusive.

24. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-c**):

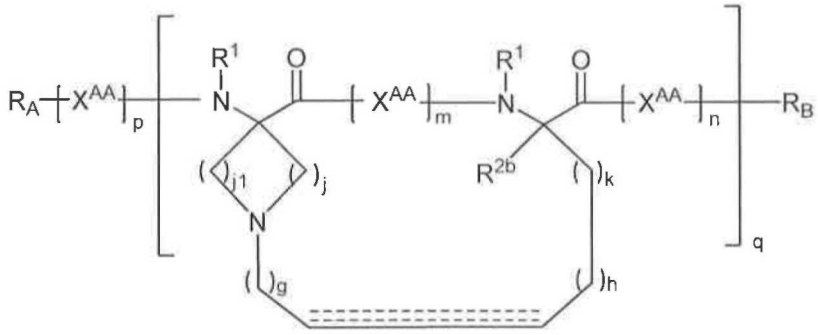


(**III-c**)

or a pharmaceutically acceptable salt thereof;

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

25. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-c-1**):

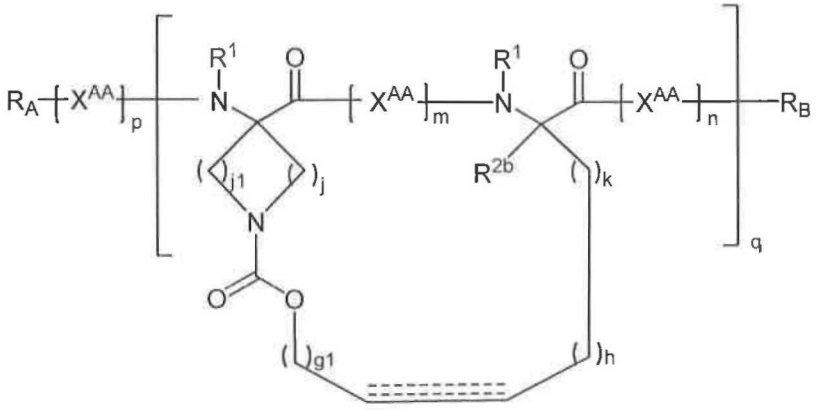


(**III-c-1**)

or a pharmaceutically acceptable salt thereof;

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

26. The polypeptide of claim 13, wherein the polypeptide is of Formula (**III-c-2**):

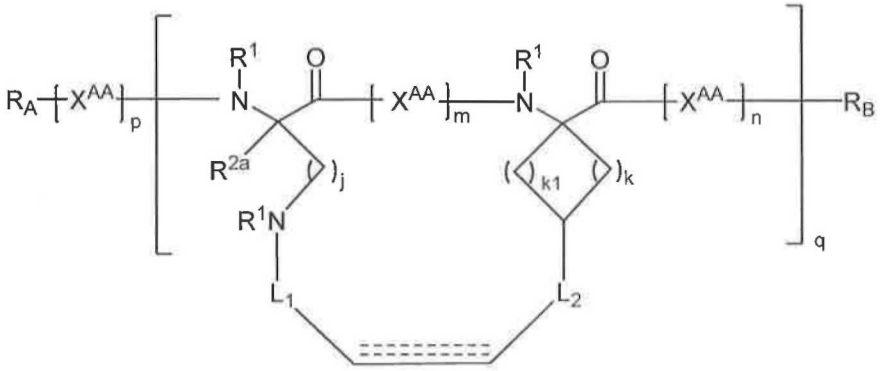


(**III-c-2**)

or a pharmaceutically acceptable salt thereof;

wherein each of g1 and h is independently zero or an integer between 1 and 10, inclusive.

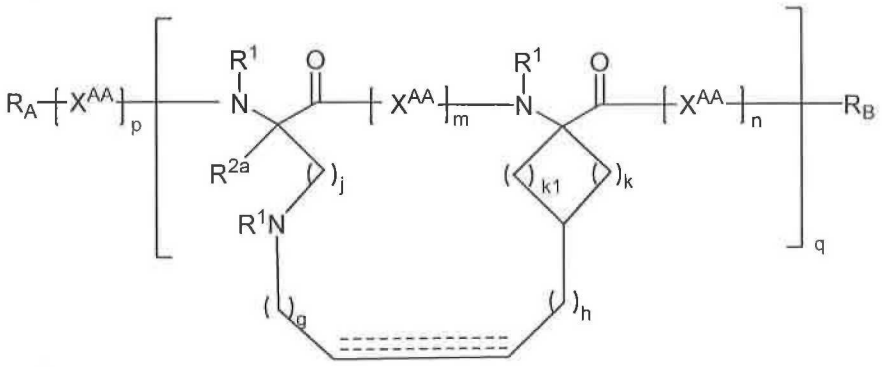
27. The polypeptide of claim 1, wherein the polypeptide is of Formula (**IV-a**):



(**IV-a**)

or a pharmaceutically acceptable salt thereof.

28. The polypeptide of claim 27, wherein the polypeptide is of Formula (**IV-a-1**):

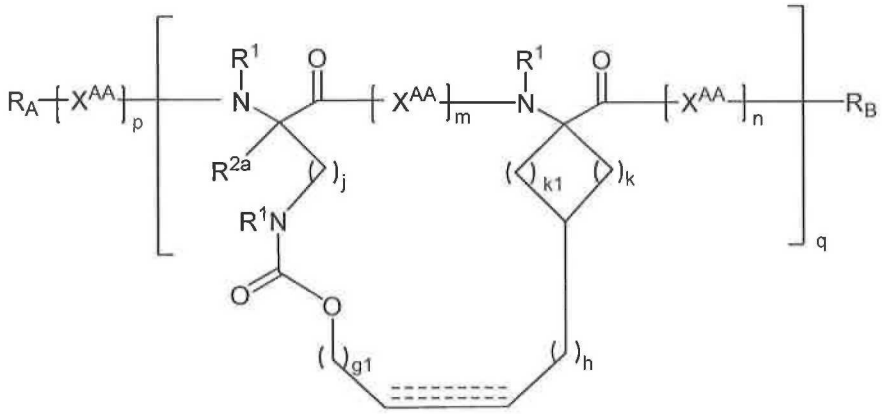


(**IV-a-1**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

29. The polypeptide of claim 27, wherein the polypeptide is of Formula (**IV-a-2**):

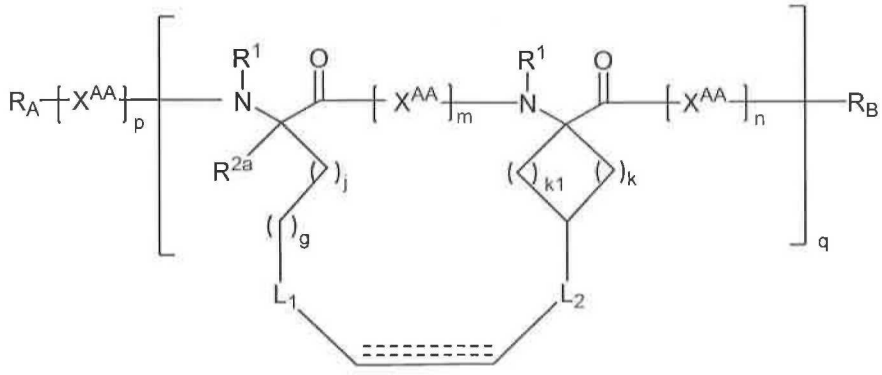


(**IV-a-2**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

30. The polypeptide of claim 27, wherein the polypeptide is of Formula (**IV-a-3**):

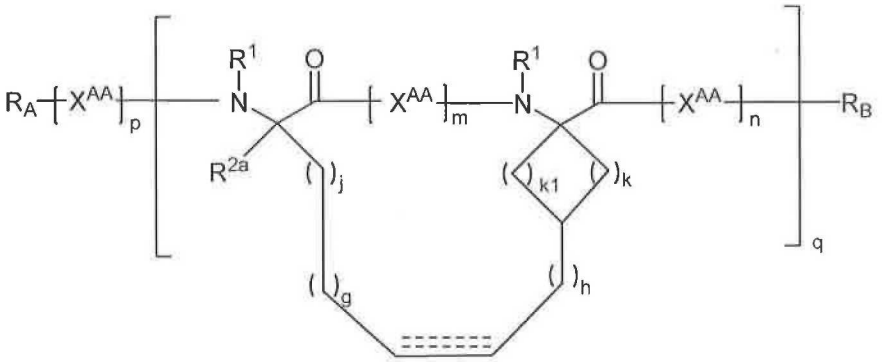


(**IV-a-3**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

31. The polypeptide of claim 27, wherein the polypeptide is of Formula (**IV-a-4**):

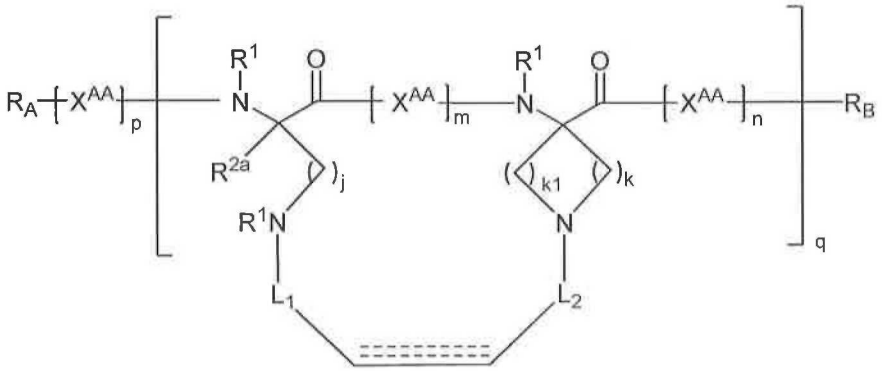


(**IV-a-4**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

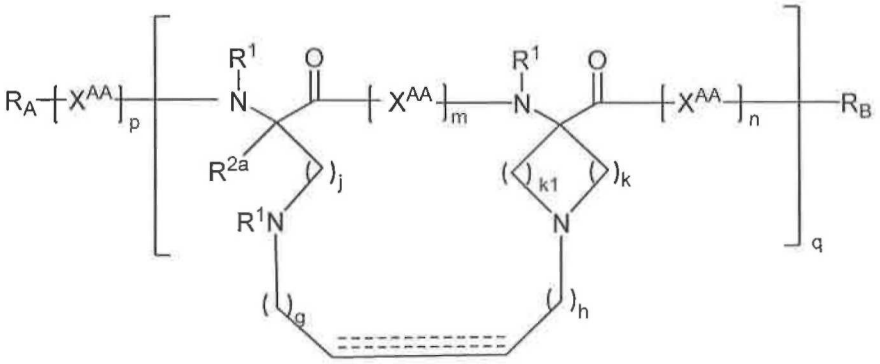
32. The polypeptide of claim 1, wherein the polypeptide is of Formula (**IV-b**):



(**IV-b**)

or a pharmaceutically acceptable salt thereof.

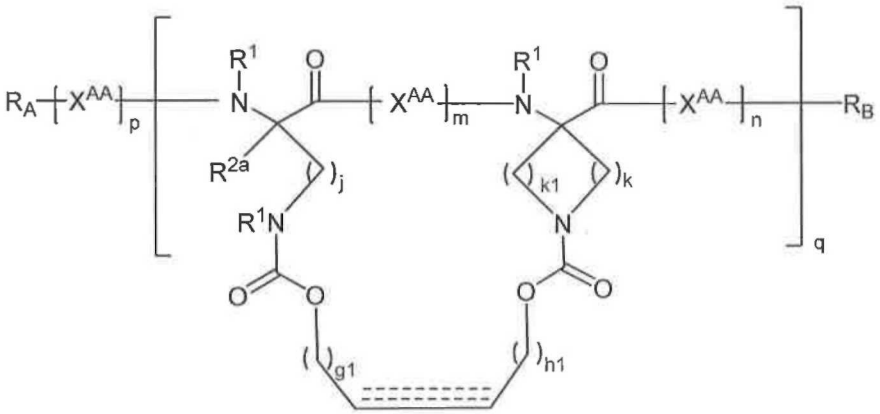
33. The polypeptide of claim 32, wherein the polypeptide is of Formula (**IV-b-1**):



(**IV-b-1**)

or a pharmaceutically acceptable salt thereof, wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

34. The polypeptide of claim 32, wherein the polypeptide is of Formula (**IV-b-2**):

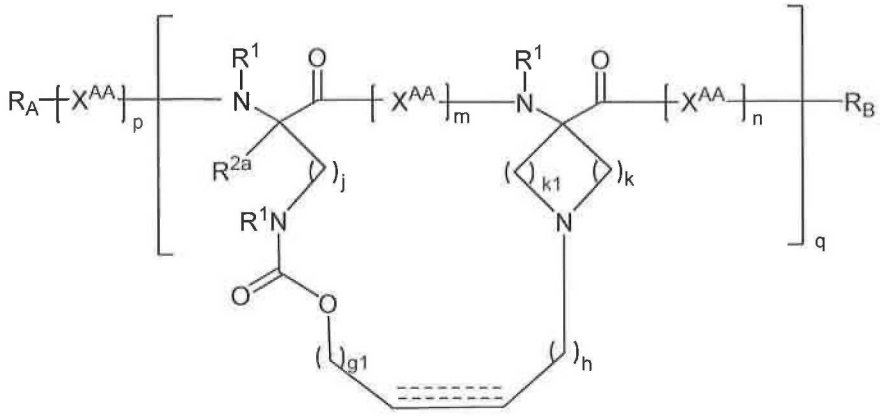


(**IV-b-2**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

35. The polypeptide of claim 32, wherein the polypeptide is of Formula (**IV-b-3**):

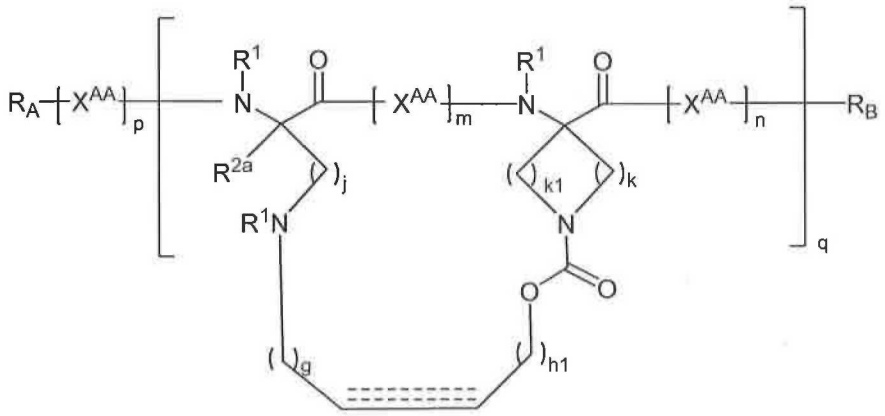


(**IV-b-3**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

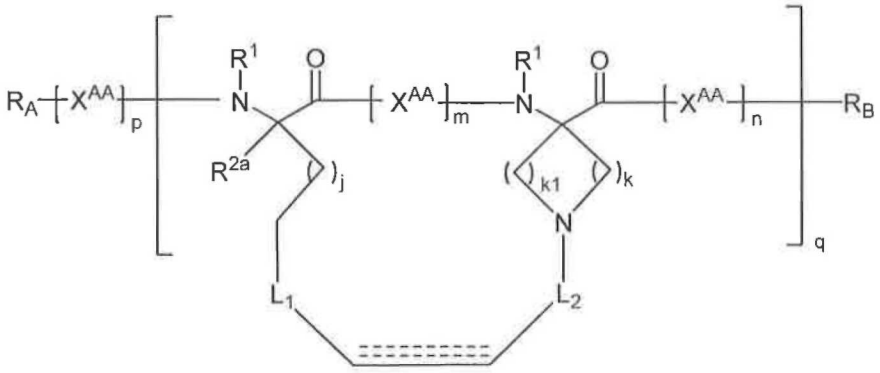
36. The polypeptide of claim 32, wherein the polypeptide is of Formula (**IV-b-4**):



(**IV-b-4**)

or a pharmaceutically acceptable salt thereof, wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

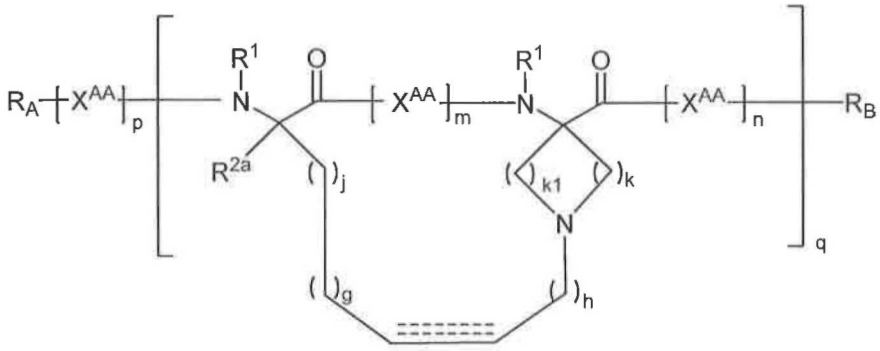
37. The polypeptide of claim 1, wherein the polypeptide is of Formula (**IV-c**):



(**IV-c**)

or a pharmaceutically acceptable salt thereof.

38. The polypeptide of claim 37, wherein the polypeptide is of Formula (**IV-c-1**):

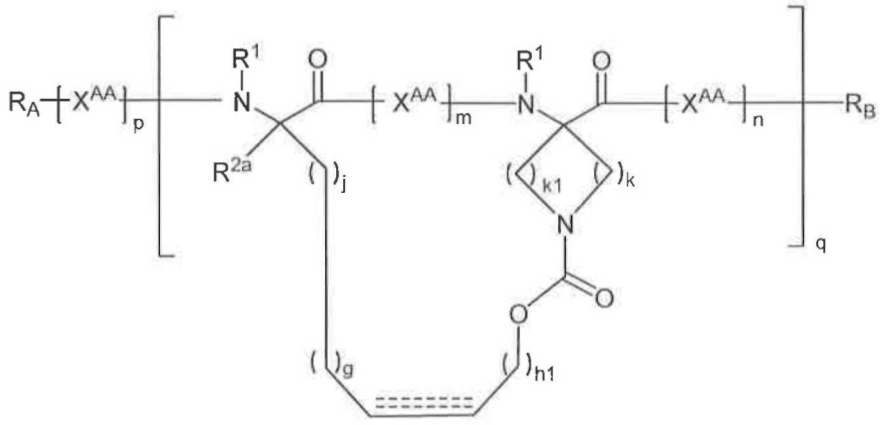


(**IV-c-1**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

39. The polypeptide of claim 37, wherein the polypeptide is of Formula (**IV-c-2**):

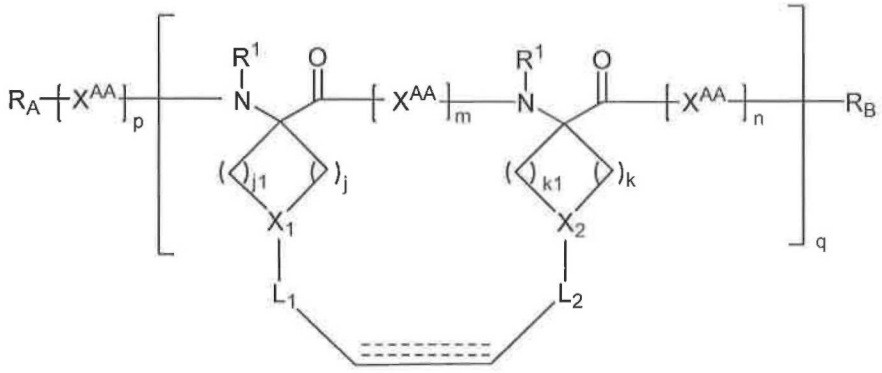


(**IV-c-2**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

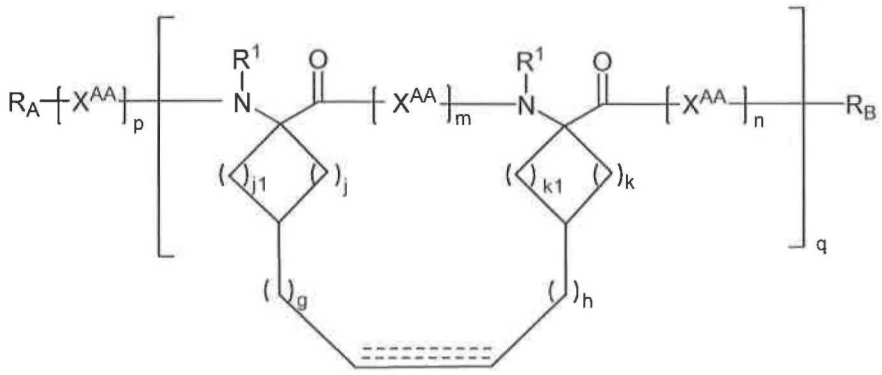
40. The polypeptide of claim 1, wherein the polypeptide is of Formula (**V**):



(**V**)

or a pharmaceutically acceptable salt thereof.

41. The polypeptide of claim 1, wherein the polypeptide is of Formula (**V-a**):

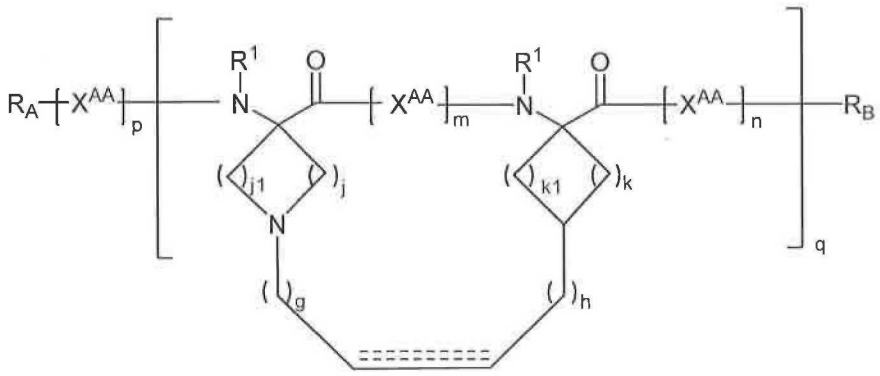


(**V-a**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

42. The polypeptide of claim 1, wherein the polypeptide is of Formula (**V-b**):

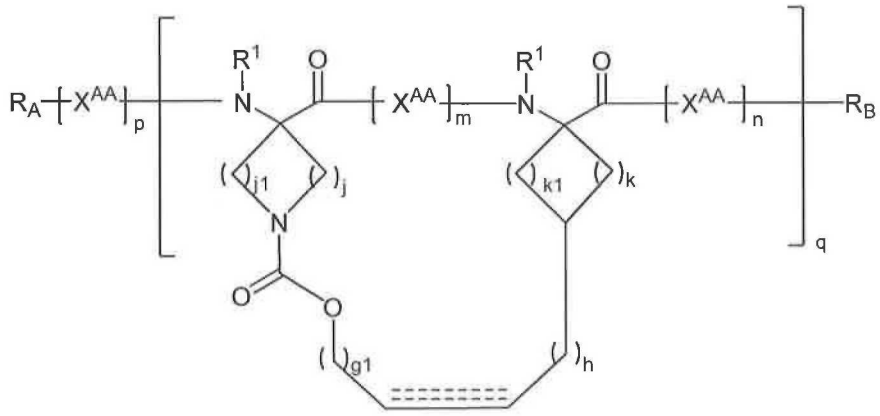


(**V-b**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

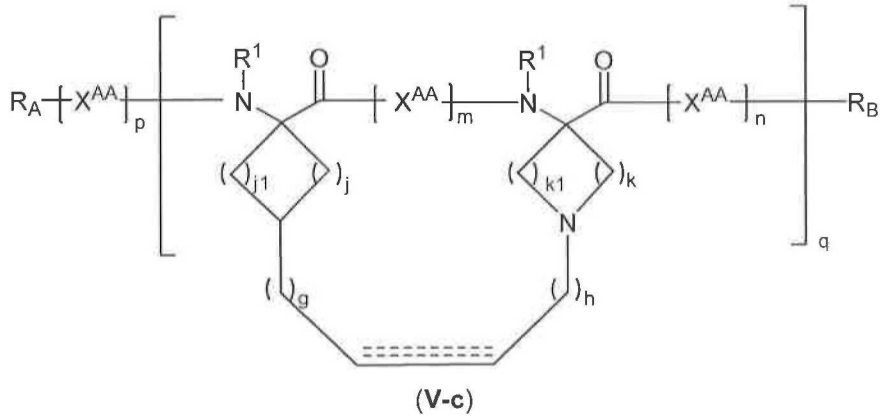
43. The polypeptide of claim 42, wherein the polypeptide is of Formula (**V-b-1**):



(**V-b-1**)

or a pharmaceutically acceptable salt thereof.

44. The polypeptide of claim 1, wherein the polypeptide is of Formula (**V-c**):

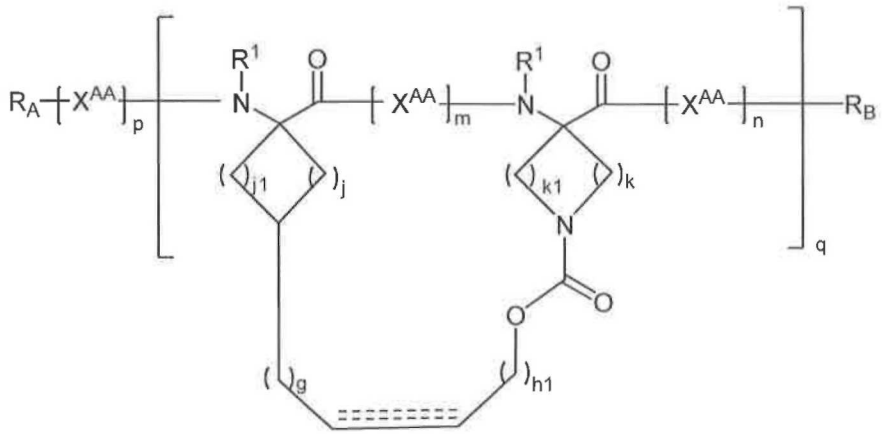


(**V-c**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

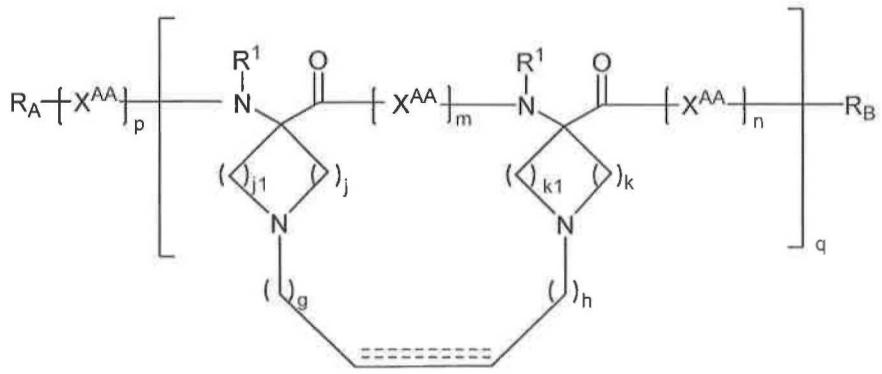
45. The polypeptide of claim 44, wherein the polypeptide is of Formula (**V-c-1**):



(**V-c-1**)

or a pharmaceutically acceptable salt thereof.

46. The polypeptide of claim 1, wherein the polypeptide is of Formula (**V-d**):

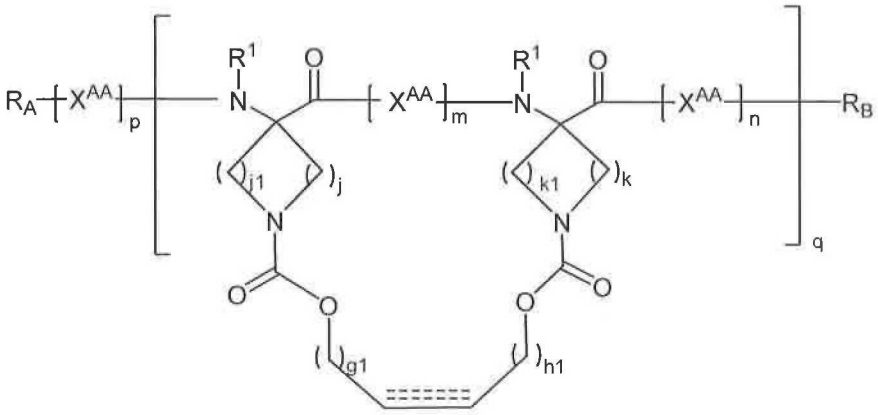


(**V-d**)

or a pharmaceutically acceptable salt thereof,

wherein each of g and h is independently zero or an integer between 1 and 10, inclusive.

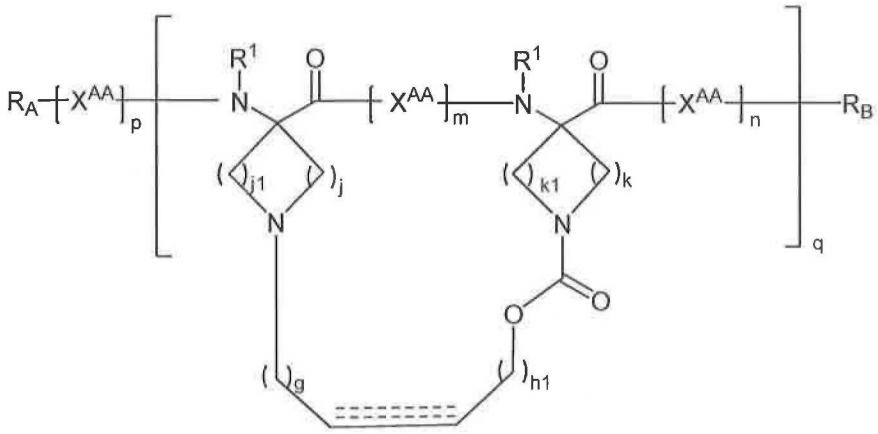
47. The polypeptide of claim 46, wherein the polypeptide is of Formula (**V-d-1**):



(**V-d-1**)

or a pharmaceutically acceptable salt thereof.

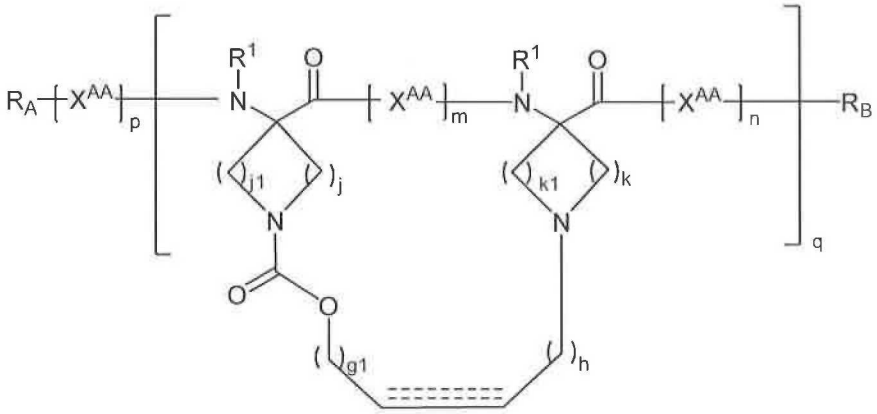
48. The polypeptide of claim 46, wherein the polypeptide is of Formula (**V-d-2**):



(**V-d-2**)

or a pharmaceutically acceptable salt thereof.

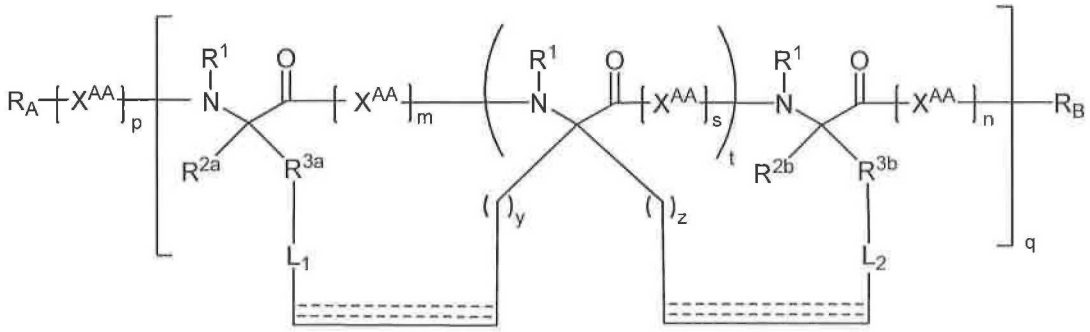
49. The polypeptide of claim 46, wherein the polypeptide is of Formula (**V-d-3**):



(**V-d-3**)

or a pharmaceutically acceptable salt thereof.

50. A polypeptide of the Formula (**VI**):



(**VI**)

or a pharmaceutically acceptable salt thereof;

wherein:

each instance of ========== independently represents a single bond, a double bond, or a triple bond;

each instance of R^1 is, independently, hydrogen; acyl; substituted or unsubstituted C_{1-6} alkyl; or an amino protecting group;

each of R^{2a} and R^{2b} is, independently, substituted or unsubstituted alkyl; substituted or unsubstituted alkenyl; substituted or unsubstituted alkynyl; substituted or unsubstituted heteroalkyl; substituted or unsubstituted carbocyclyl; substituted or unsubstituted heterocyclyl;

each of R^{3a} and R^{3b} is, independently, substituted or unsubstituted alkylene; unsubstituted heteroalkylene; substituted or unsubstituted carbocyclylene; or substituted or unsubstituted heterocyclylene; or optionally R^{2a} and R^{3a} are joined to form a ring; or optionally R^{2b} and R^{3b} are joined to form a ring;

L_1 is independently, a bond, substituted or unsubstituted C_{1-10} alkylene, or $-C(=O)OR^{L1}-$;

L_2 is independently, a bond, substituted or unsubstituted C_{1-10} alkylene, or $-C(=O)OR^{L2}-$; each of R^{L1} and R^{L2} is independently optionally substituted C_{1-10} alkylene;

R_A is, independently, $-R_C$, $-OR_C$, $-N(R_C)_2$, or $-SR_C$, wherein each instance of R_C is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; a hydroxyl, amino, or thiol protecting group; or two R_C groups together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

R_B is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; an amino protecting group; a label optionally joined by a linker, wherein the linker is selected from cyclic or acyclic, branched or unbranched alkylene; cyclic or acyclic, branched or unbranched alkenylene; cyclic or acyclic, branched or unbranched alkynylene; cyclic or acyclic, branched or unbranched heteroalkylene; cyclic or acyclic, branched or unbranched heteroalkenylene; cyclic or acyclic, branched or unbranched heteroalkynylene; arylene; heteroarylene; or acylene; or R_A and R_B together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

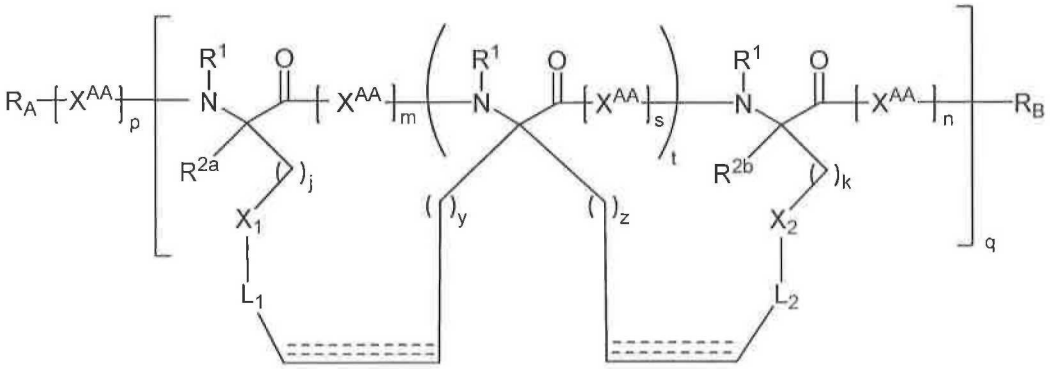
each instance of X_{AA} is, independently, an amino acid;

each instance of p and n is, independently, 0 or an integer between 1 and 100, inclusive;

each of m and s is independently an integer between 2 and 6, inclusive;

each of q, t, y, and z is independently an integer between 1 and 10, inclusive.

51. The polypeptide of claim 50, wherein the polypeptide is of Formula (**VII**):

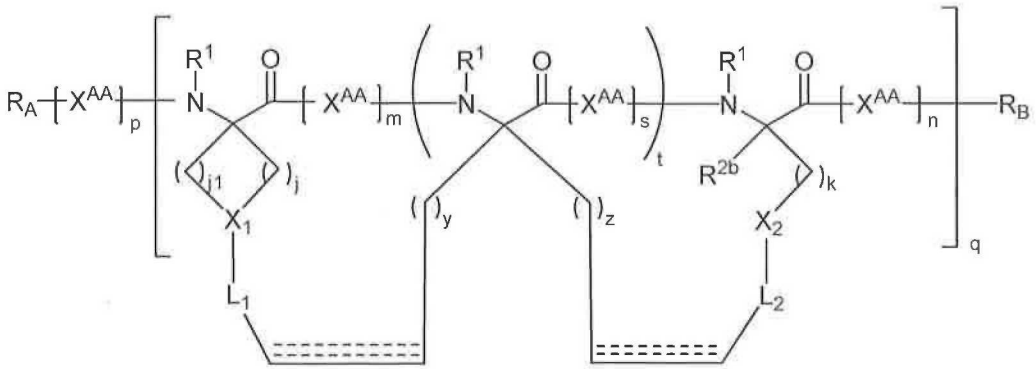


(**VII**)

or a pharmaceutically acceptable salt thereof,

wherein each of j and k is independently an integer between 0 and 10, inclusive.

52. The polypeptide of claim 50, wherein the polypeptide is of Formula (**VIII**):

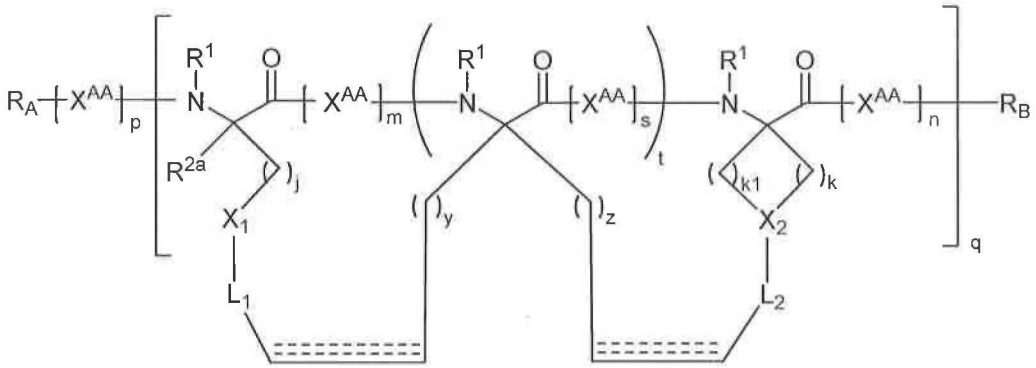


(**VIII**)

or a pharmaceutically acceptable salt thereof,

wherein each of j1 and k1 is independently an integer between 0 and 10, inclusive.

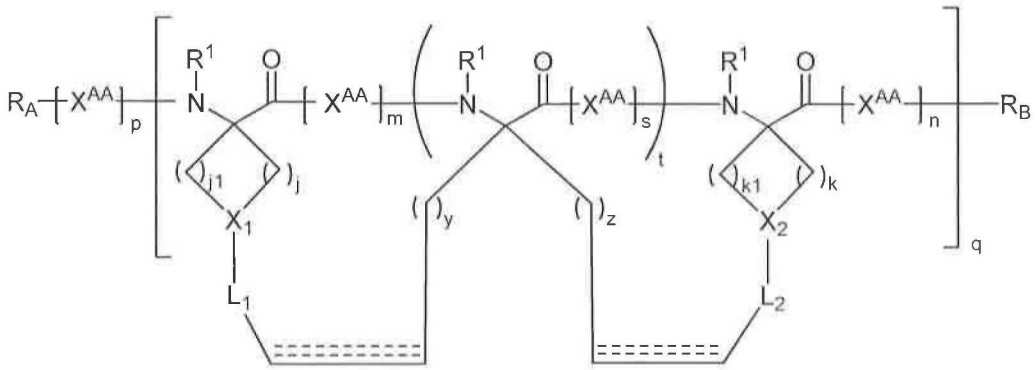
53. The polypeptide of claim 50, wherein the polypeptide is of Formula (**IX**):



(**IX**)

or a pharmaceutically acceptable salt thereof.

54. The polypeptide of claim 50, wherein the polypeptide is of Formula (**X**):



(**X**)

or a pharmaceutically acceptable salt thereof.

55. A composition comprising a polypeptide of any one of claims 1-6 and a pharmaceutically acceptable excipient.

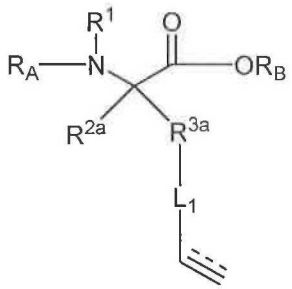
56. A method of treating a disorder in a subject, said method comprising administering an effective amount of a polypeptide of any one of claims 1-54 to a subject in need thereof.

57. A method of treating a disorder in a subject, said method comprising instructing the subject to take an effective amount of a polypeptide of any one of claims 1-54.

58. A polypeptide of any one of claims 1-54 for use in treating a disorder.

59. A method of making a polypeptide of claim 1, said method comprising the steps of:

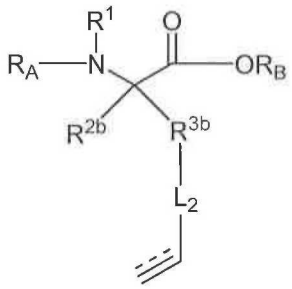
(i) providing an amino acid of Formula (**A**):



(**A**)

or a salt thereof;

(ii) providing an amino acid of Formula (**B**):



(**B**)

or a salt thereof;

(iii) providing at least one amino acid is independently selected from the group consisting of natural amino acids and unnatural amino acids; and

(iv) coupling the amino acids of Formulae (**A**) and (**B**) and optionally (iii).

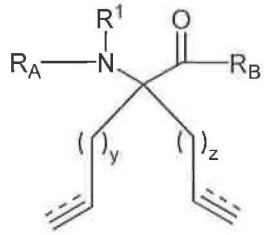
60. The method of claim 59 further comprising a step of treating the polypeptide of step (iii) with a catalyst.

61. The method of claim 60 wherein the catalyst is a ruthenium catalyst.

62. The method of claim 61 further comprising a step of treating the polypeptide of a palladium catalyst.

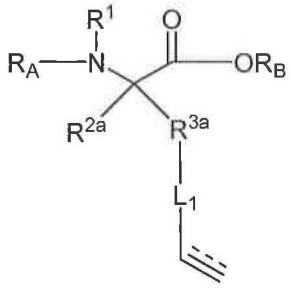
63. A method of making a polypeptide of claim 50, said method comprising the steps of:

(i) providing a bis-amino acid of Formula (**C**):



(**C**)

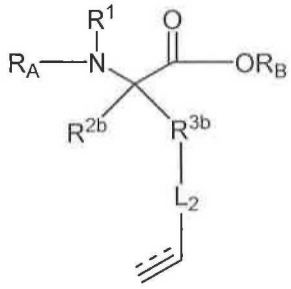
(ii) providing an amino acid of Formula (**A**):



(**A**)

or salt thereof;

(iii) providing an amino acid of Formula (**B**):



(**B**)

or salt thereof;

(iv) providing at least one amino acid; and

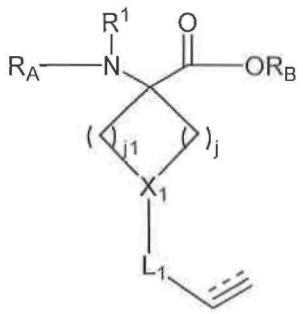
(v) coupling the amino acids of (**A**), (**B**), and (**C**), and optionally (iv).

64. The method of claim 63 further comprising a step of treating the polypeptide of step (v) with a catalyst.

65. The method of claim 64 wherein the catalyst is a ruthenium catalyst.

66. The method of claim 65 further comprising a step (vi) treating the polypeptide of (v) with a palladium catalyst.

67. An amino acid of Formula (**D**):



(**D**)

or a pharmaceutically acceptable salt thereof,

wherein:

R^1 is hydrogen; acyl; substituted or unsubstituted C_{1-6} alkyl; or an amino protecting group;

L_1 is independently, a bond, substituted or unsubstituted C_{1-10} alkylene, or $-C(=O)OR^6-$;

R_A is, independently, $-R_C$, $-OR_C$, $-N(R_C)_2$, or $-SR_C$, wherein each instance of R_C is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; a hydroxyl, amino, or thiol protecting group; or two R_C groups together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

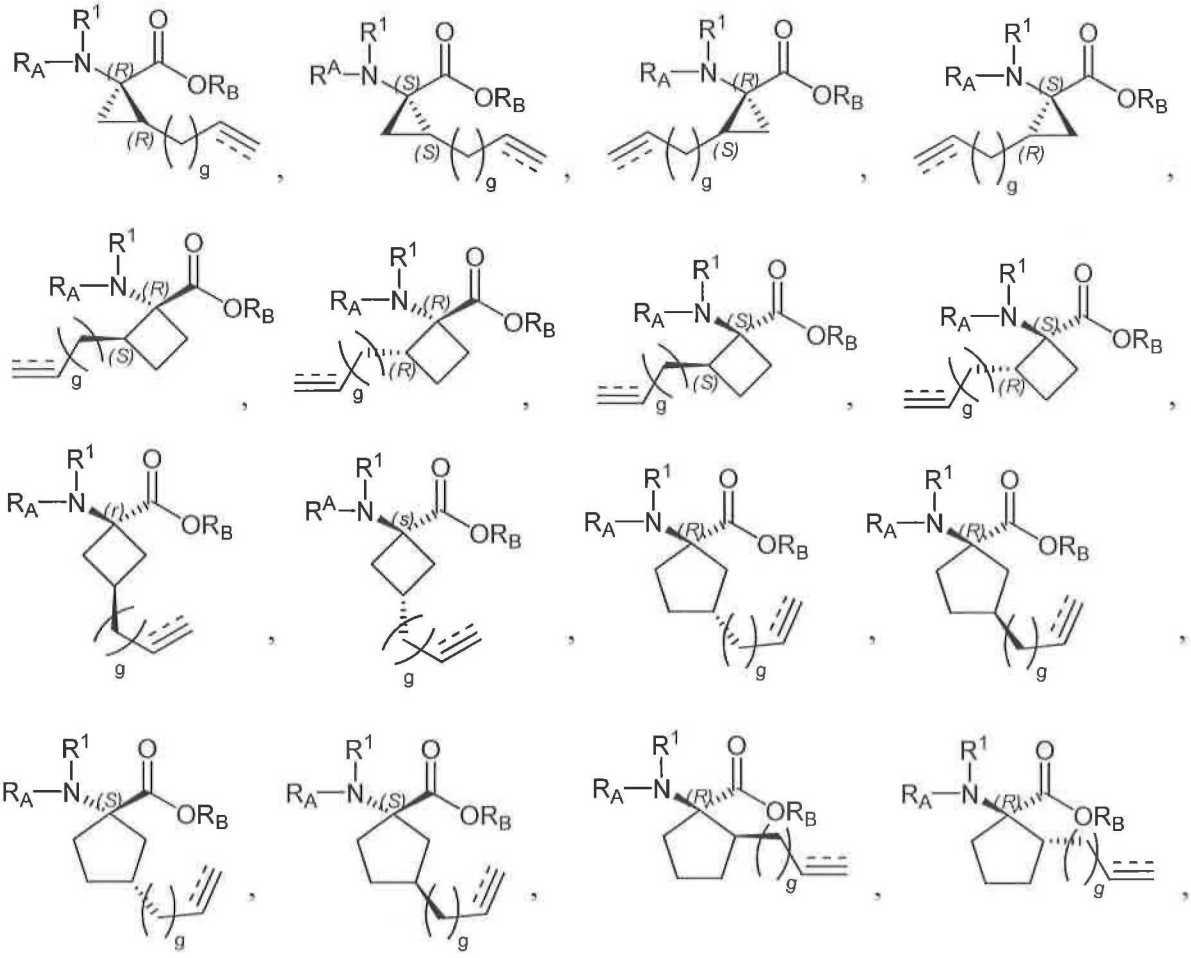
R_B is, independently, hydrogen; cyclic or acyclic, branched or unbranched aliphatic; cyclic or acyclic, branched or unbranched heteroaliphatic; aryl; heteroaryl; acyl; a resin; an amino protecting group; a label optionally joined by a linker, wherein the linker is selected from cyclic or acyclic, branched or unbranched alkylene; cyclic or acyclic, branched or unbranched alkenylene; cyclic or acyclic, branched or unbranched, alkynylene; cyclic or acyclic, branched or unbranched heteroalkylene; cyclic or acyclic, branched or unbranched heteroalkenylene; cyclic or acyclic, branched or unbranched heteroalkynylene; arylene; heteroarylene; or acylene; or R_A and R_B together form a 5– to 6–membered heterocyclic or heteroaromatic ring;

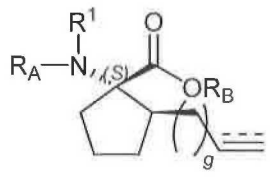
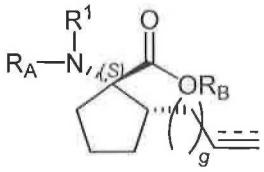
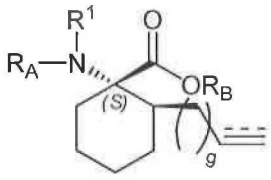
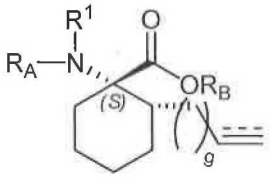
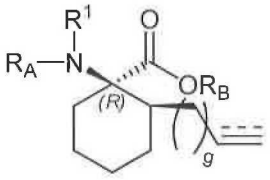
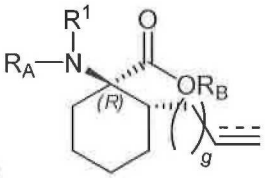
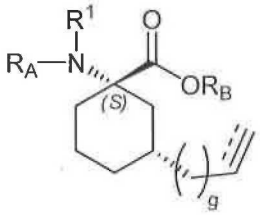
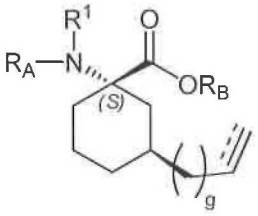
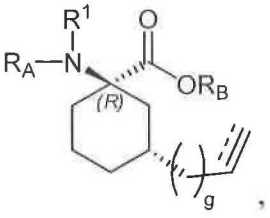
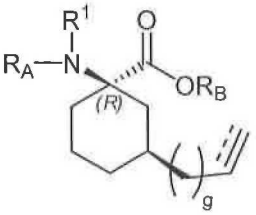
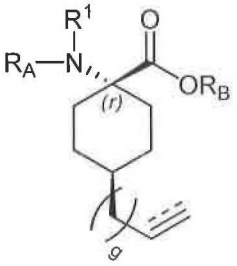
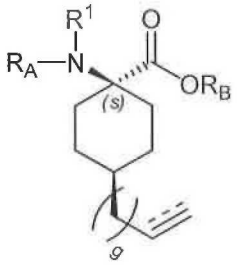
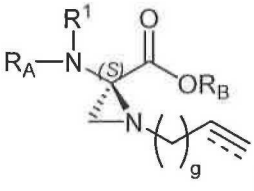
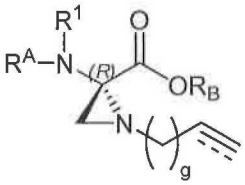
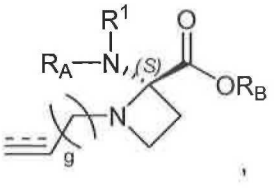
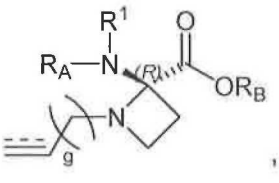
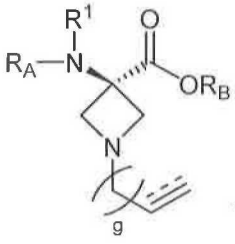
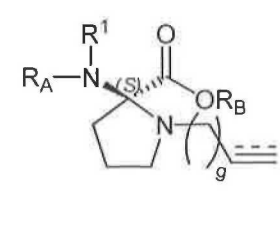
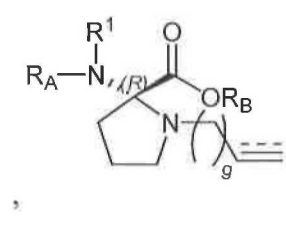
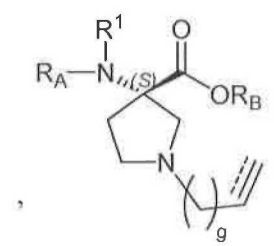
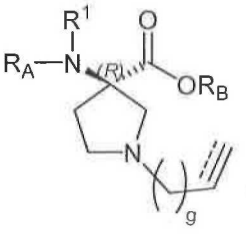
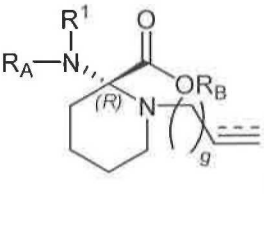
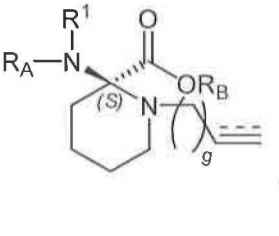
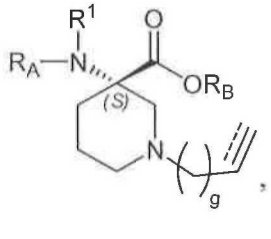
X_1 is independently a bond, $-CR^5R^6-$ or $-NR^1-$;

R^1 is, independently, hydrogen; acyl; substituted or unsubstituted C_{1-6} alkyl; or an amino protecting group;

each of R^5 and R^6 is independently hydrogen, halogen, $-NO_2$, –OH, –CN, or C_{1-6} alkyl; and each of j and j1 is independently an integer between 1 and 10, inclusive.

68. The amino acid of claim 67, wherein the amino acid is selected from the group consisting of:




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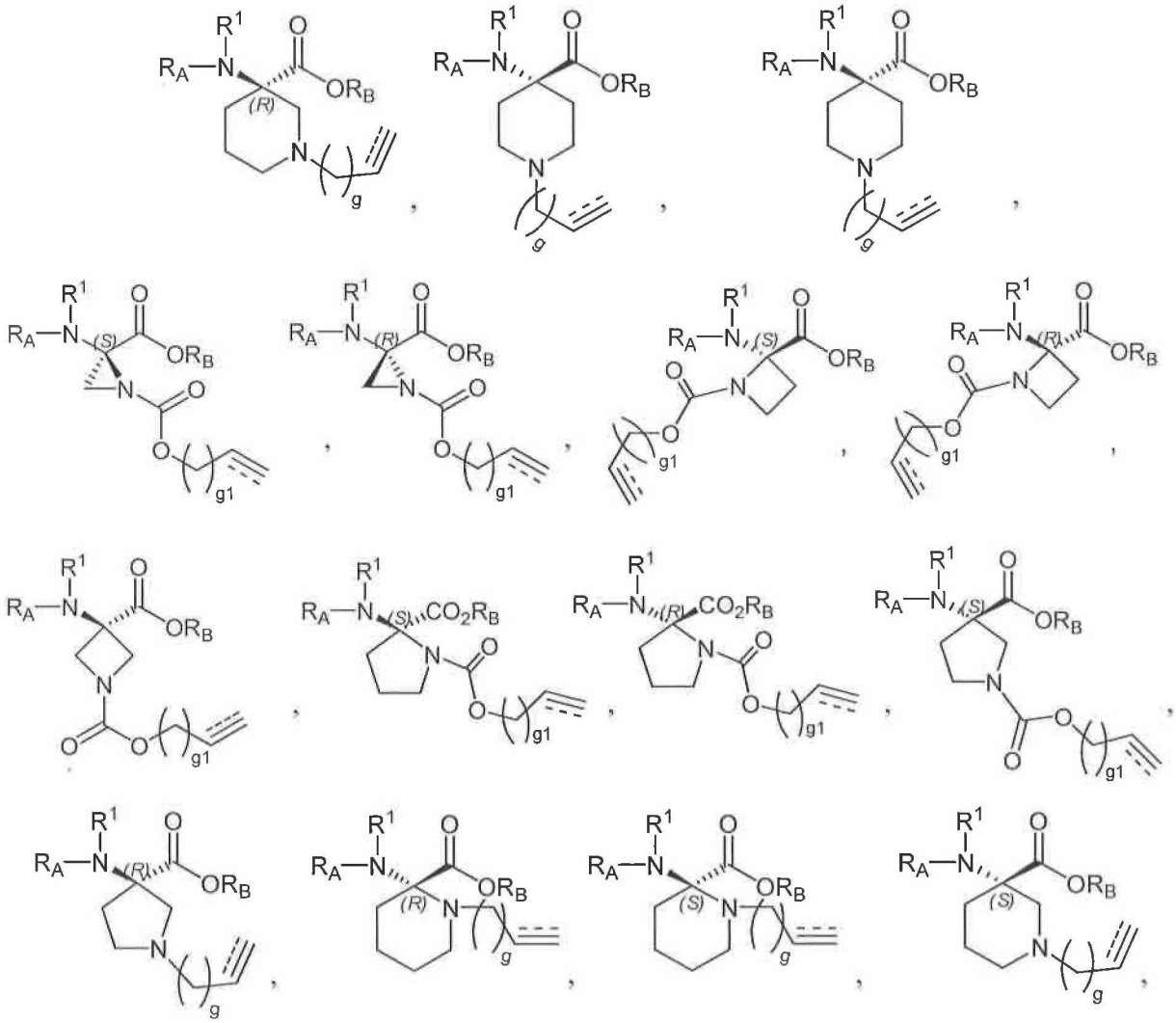
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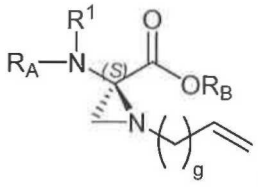
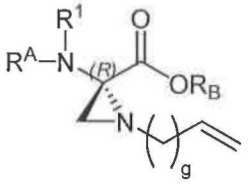
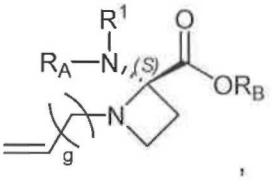
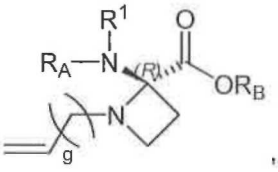
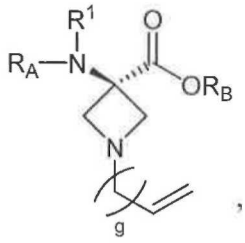
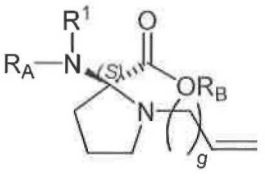
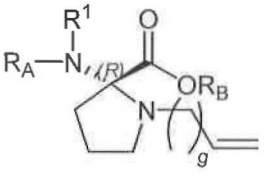
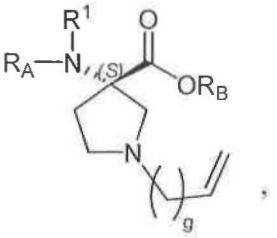
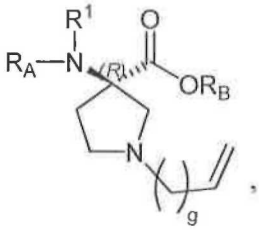
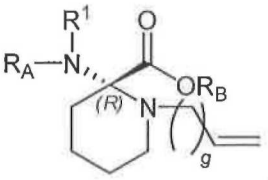
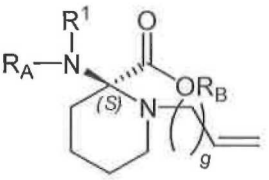
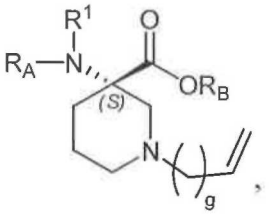
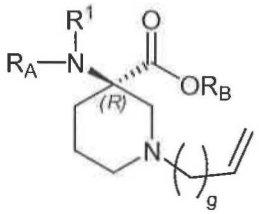
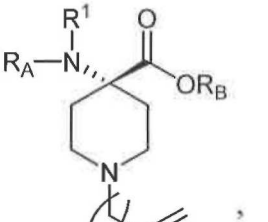
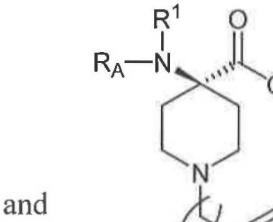
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and salts thereof, wherein g is 0 or an integer of between 1 and 10, inclusive.