

- $$\left[\text{ABT} \right]_a - \text{L} - \left[\begin{array}{c} (\text{Xaa})_y \\ \text{L}^T \end{array} \right]_b - (\text{R}^c)_t$$

$$(R^c)_t - \text{---} \left(\begin{array}{c} (Xaa)_y \\ | \\ L_T \end{array} \right) \text{---} \zeta$$

each -Cy- is independently an optionally substituted bivalent monocyclic, bicyclic or polycyclic

group wherein each monocyclic ring is independently selected from a C₃₋₂₀ cycloaliphatic ring, a C₆₋₂₀ aryl ring, a 5-20 membered heteroaryl ring having 1-10 heteroatoms, and a 3-20 membered heterocyclyl ring having 1-10 heteroatoms;

each R' is independently -R, -C(O)R, -CO₂R, or -SO₂R;

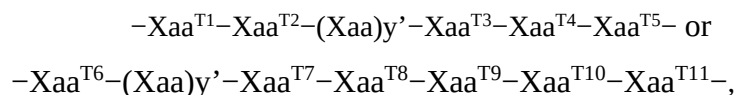
each R is independently -H, or an optionally substituted group selected from C₁₋₃₀ aliphatic, C₁₋₃₀ heteroaliphatic having 1-10 heteroatoms, C₆₋₃₀ aryl, C₆₋₃₀ arylaliphatic, C₆₋₃₀ arylheteroaliphatic having 1-10 heteroatoms, 5-30 membered heteroaryl having 1-10 heteroatoms, and 3-30 membered heterocyclyl having 1-10 heteroatoms, or

two R groups are optionally and independently taken together to form a covalent bond, or:

two or more R groups on the same atom are optionally and independently taken together with the atom to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the atom, 0-10 heteroatoms; or

two or more R groups on two or more atoms are optionally and independently taken together with their intervening atoms to form an optionally substituted, 3-30 membered, monocyclic, bicyclic or polycyclic ring having, in addition to the intervening atoms, 0-10 heteroatoms; and

-(Xaa)_y- comprises:



wherein:

y' is 0-8;

Xaa^{T1} is a residue of Ahp, Y, W, S, K or K(MePEG4c);

Xaa^{T2} is a residue of Y, W, Ahp, Bph, L or A;

Xaa^{T3} is a residue of L, Ahp, V, T, Hse or MetO2;

Xaa^{T4} is a residue of Bph, V or Ahp;

Xaa^{T5} is a residue of Ahp, Bph, Ado, Ano, PhNle or PhNva;

Xaa^{T6} is a residue of MeF, L, or S;

Xaa^{T7} is a residue of L or MeF;

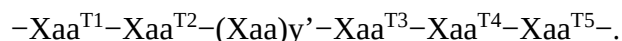
Xaa^{T8} is a residue of P;

Xaa^{T9} is a residue of Bph, D or S;

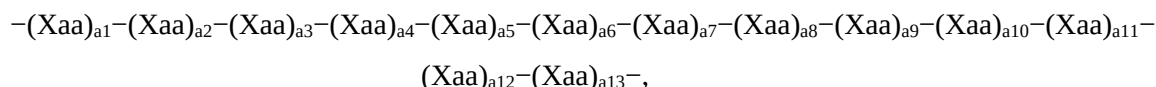
Xaa^{T10} is a residue of V or L; and

Xaa^{T11} is a residue of W or R.

2. The agent of claim 1, wherein $-(Xaa)y-$ comprises



3. The agent of claim 1, wherein $-(Xaa)y-$ is or comprises:



wherein:

each of $a1, a2, a5, a6, a7, a8, a12$ and $a13$ is independently 0-5;

each of $a3, a4, a9, a10$, and $a11$ is independently 1-5;

$(Xaa)_{a3}$ is or comprises Xaa^{T1} ;

$(Xaa)_{a4}$ is or comprises Xaa^{T2} ;

$(Xaa)_{a9}$ is or comprises Xaa^{T3} ;

$(Xaa)_{a10}$ is or comprises Xaa^{T4} ; and

$(Xaa)_{a11}$ is or comprises Xaa^{T5} .

4. The agent of claim 3, wherein

$(Xaa)_{a1}$ is or comprises A, K or K(MePEG4c);

$(Xaa)_{a2}$ is or comprises R, S, D, Y, A, W, K, 4Py2NH₂, Cit, F3G, hCit, K(MePEG4c),
RNdMe, RNMe, or RNNdMe;

$(Xaa)_{a5}$ is or comprises H, Y, S, L, A, W or W6N;

$(Xaa)_{a6}$ is or comprises D, G, R, Y, H, W, A, or Y;

$(Xaa)_{a7}$ is or comprises G, D, E, Q, N, R, MetO₂, S, Har or A;

$(Xaa)_{a8}$ is or comprises V, A, D, G, W, S or T;

$(Xaa)_{a12}$ is or comprises of D, A, S, G, or Ahp;

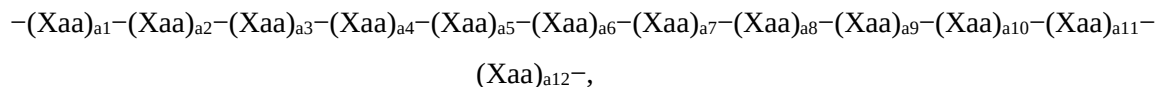
$(Xaa)_{a13}$ is or comprises C; or

a combination thereof.

5. The agent of claim 1, wherein $-(Xaa)y-$ comprises



6. The agent of claim 1, wherein $-(Xaa)y-$ is or comprises:



wherein:

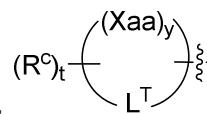
each of $a1, a2, a3, a5, a11$, and $a12$ is independently 0-5;

each of $a4, a6, a7, a8, a9$, and $a10$ is independently 1-5;

(Xaa)_{a4} is or comprises Xaa^{T6};
 (Xaa)_{a6} is or comprises Xaa^{T7};
 (Xaa)_{a7} is or comprises Xaa^{T8};
 (Xaa)_{a8} is or comprises Xaa^{T9};
 (Xaa)_{a9} is or comprises Xaa^{T10}; and
 (Xaa)_{a10} is or comprises Xaa^{T11}.

7. The agent of claim 6, wherein

(Xaa)_{a1} is or comprises A;
 (Xaa)_{a2} is or comprises L, A or P;
 (Xaa)_{a3} is or comprises H, R, or A;
 (Xaa)_{a5} is or comprises V, A or MeG;
 (Xaa)_{a11} is or comprises V, A, D or MeG;
 (Xaa)_{a12} is or comprises C; or
 a combination thereof.



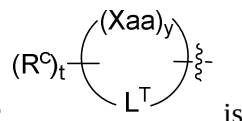
8. The agent of claim 1 or 3, wherein target binding moiety or comprises

- (i) a peptide whose sequence is or comprises a sequence selected from SEQ ID NO: 1-34; or
 (ii) each of a1, a2, a3, a4, a5, a6, a7, a8, a9, a10, a11, a12 and a13 is defined as follows:

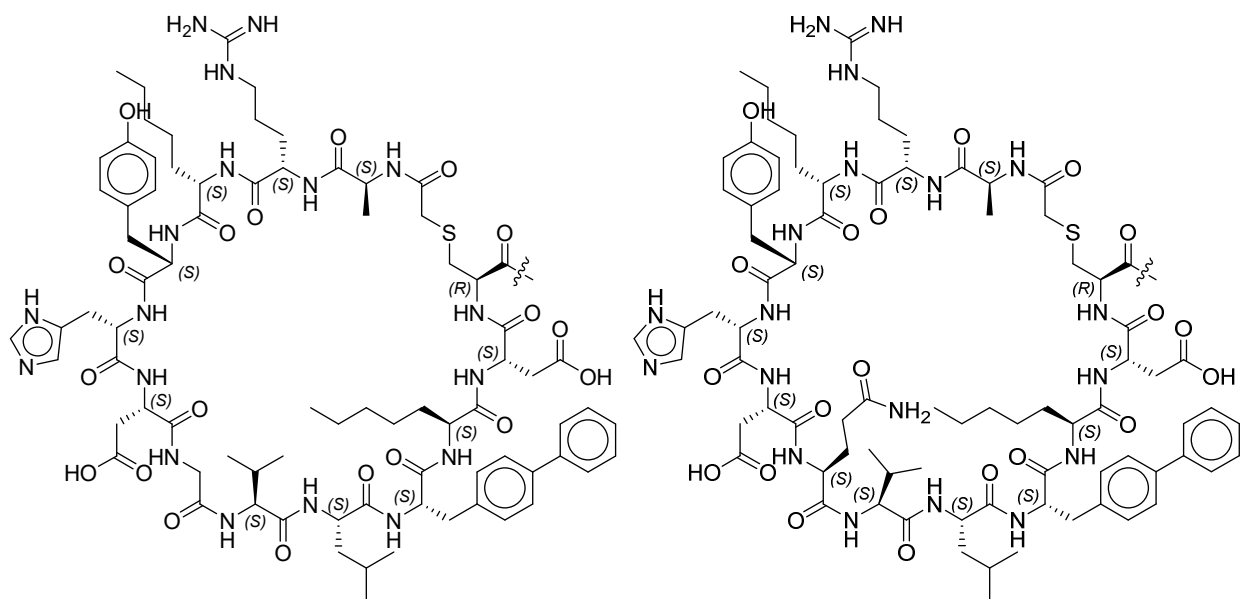
a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13
A	R	Ahp	Y	H	D	G	V	L	Bph	Ahp	D	C
A	S	Y	Y	Y	G	D	V	L	Bph	Ahp	S	C
A	D	Y	Y	Y	R	D	V	Ahp	Bph	Ahp	S	C
A	R	Ahp	Y	H	G	D	V	L	Bph	Ahp	S	C
A	D	Y	Y	S	G	D	V	L	Bph	Ahp	S	C
A	R	Y	Y	L	D	G	D	L	Bph	Ahp	D	C
A	R	Ahp	Y	H	D	G	V	L	Bph	Ahp	G	C
A	Y	S	W	Y	Y	D	G	V	V	Bph	Ahp	T
A	D	Y	Y	Y	D	G	W	L	Bph	Ahp	S	C
A	W	Y	Ahp	Y	D	G	S	V	Bph	Ahp	D	C
A	R	Ahp	Bph	H	D	D	V	Ahp	Bph	Ahp	G	C
A	S	W	Y	H	D	D	V	V	Bph	Ahp	S	C
A	S	Y	Y	W	D	G	V	V	Bph	Ahp	S	C
A	R	Ahp	Y	H	D	G	V	L	Bph	Ahp	S	C
A	S	Y	Bph	H	D	G	V	T	Bph	Ahp	S	C
A	R	Y	Y	H	R	D	S	L	Bph	Ahp	S	C
A	R	Ahp	Ahp	Y	D	G	T	V	Bph	Ahp	D	C
A	R	Ahp	Y	H	D	R	T	L	Bph	Ahp	G	C
A	S	Ahp	Y	H	G	D	V	L	Bph	Ahp	S	C

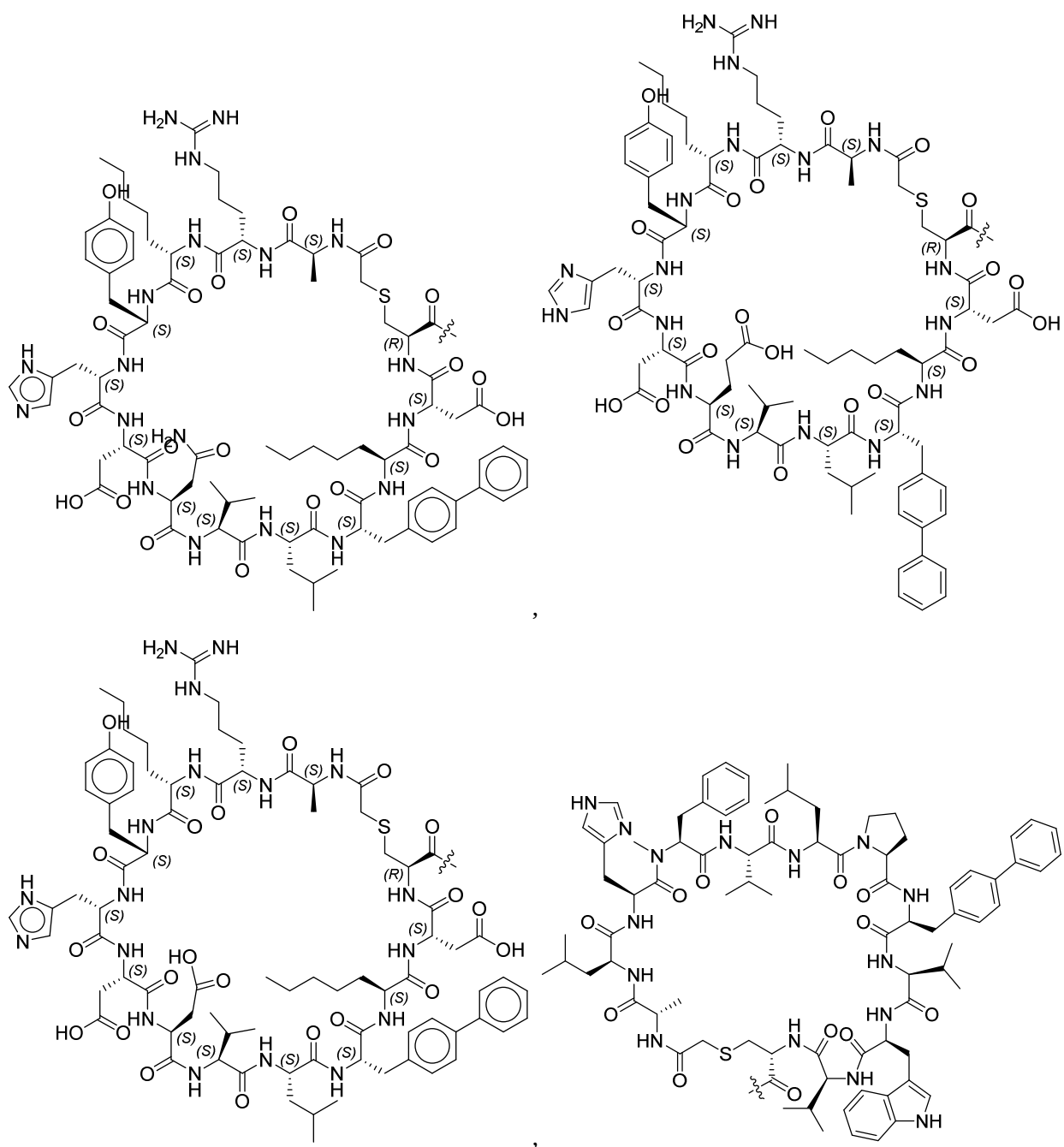
A	S	W	Y	Y	D	S	V	R	Bph	Ahp	S	C
A	R	Ahp	Y	W	R	G	T	L	Bph	Ahp	D	C
A	R	Y	Ahp	Y	D	S	V	V	Bph	Ahp	S	C
A	R	Ahp	Y	H	D	G	V	L	Bph	Ahp	D	C
A	A	Ahp	Y	H	D	G	V	L	Bph	Ahp	D	C
A	R	A	Y	H	D	G	V	L	Bph	Ahp	D	C
A	R	Ahp	A	H	D	G	V	L	Bph	Ahp	D	C
A	R	Ahp	Y	A	D	G	V	L	Bph	Ahp	D	C
A	R	Ahp	Y	H	A	G	V	L	Bph	Ahp	D	C
A	R	Ahp	Y	H	D	A	V	L	Bph	Ahp	D	C
A	R	Ahp	Y	H	D	G	A	L	Bph	Ahp	D	C
A	R	Ahp	Y	H	D	G	V	A	Bph	Ahp	D	C
A	R	Ahp	Y	H	D	G	V	L	A	Ahp	D	C
A	R	Ahp	Y	H	D	G	V	L	Bph	Ahp	D	C
A	R	Ahp	Y	H	D	G	V	L	Bph	Ahp	A	C

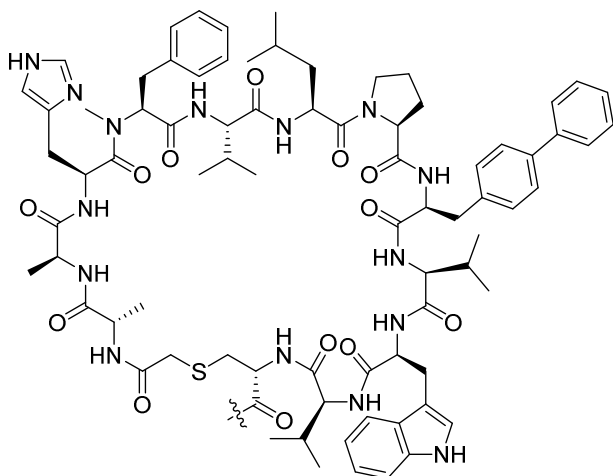
9. The agent of any one of claims 1-8, wherein two Xaa are linked together.
10. The agent of claim 9, wherein the two Xaa are linked together through a linker having the structure of $-\text{C}(\text{O})-\text{CH}_2-$.
11. The agent of claim 10, wherein $-\text{C}(\text{O})-$ is bonded to an amino group of a Xaa.
12. The agent of claim 11, wherein $-\text{CH}_2-$ is bonded to $-\text{S}-$ in the side chain of a Xaa.



13. The agent of claim 1, wherein target binding moiety or





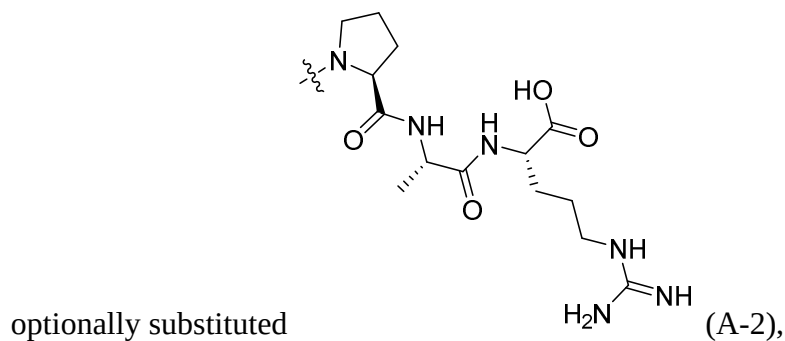
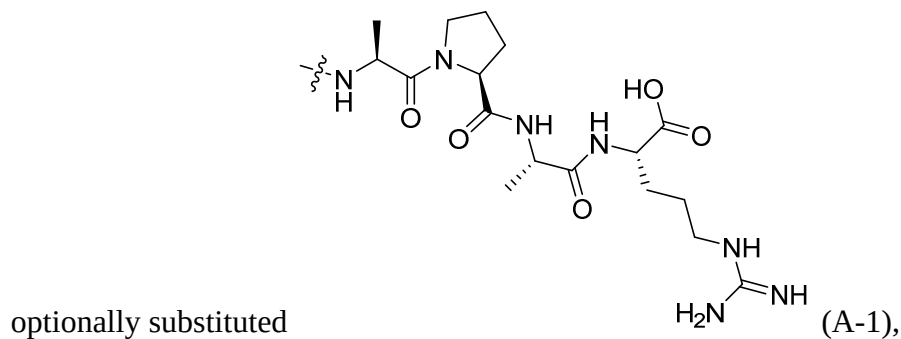


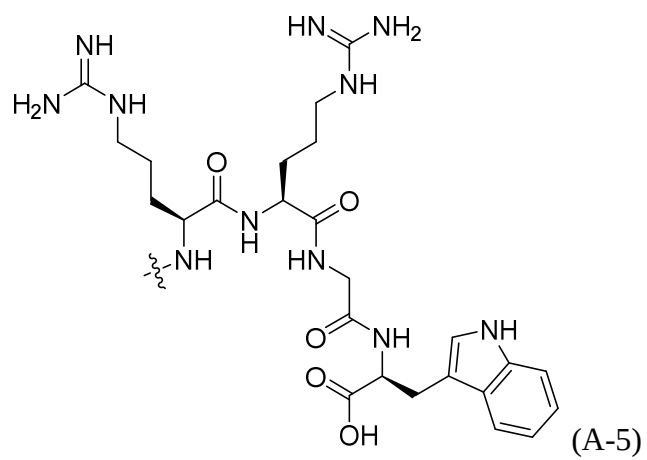
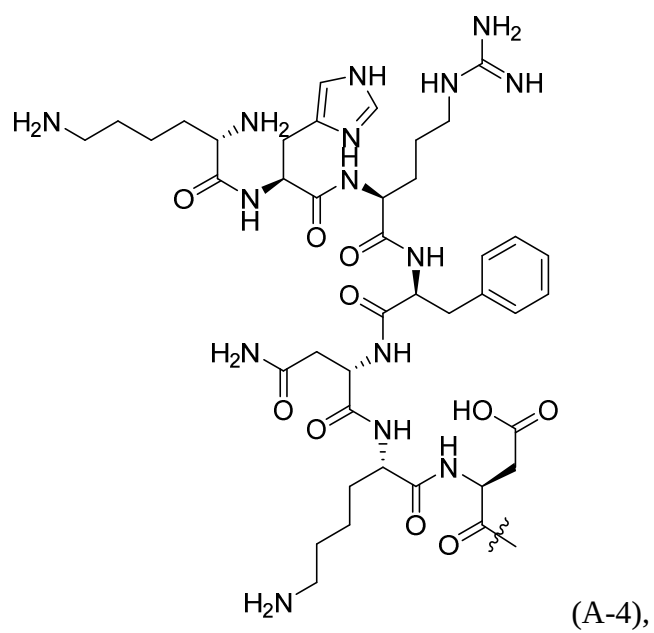
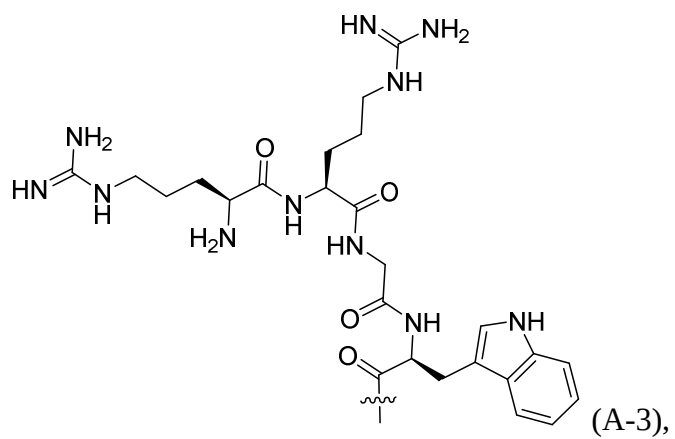
or , or a salt form thereof.

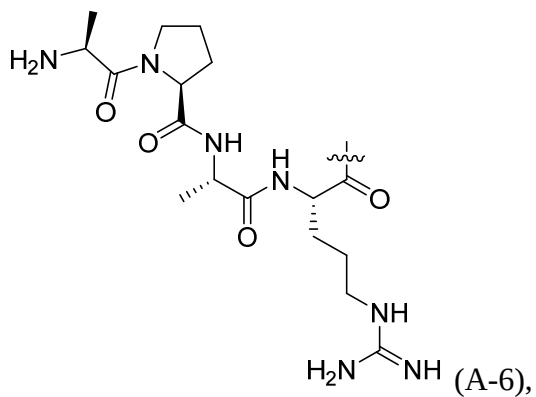
14. The agent of any one of claims 1-13, wherein the antibody binding moiety is a universal antibody binding moiety that binds to an Fc region of an antibody.

15. The agent of any one of claims 1-8, wherein the antibody binding moiety has the structure of DCAWHLGELVWCT or a salt form thereof, wherein the two C residues are linked by a -S-S-.

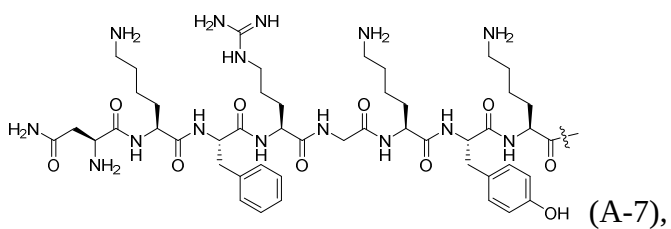
16. The agent of any one of claims 1-8, wherein the antibody binding moiety (ABT) is:



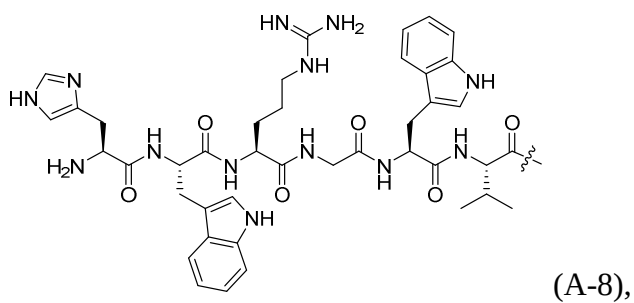




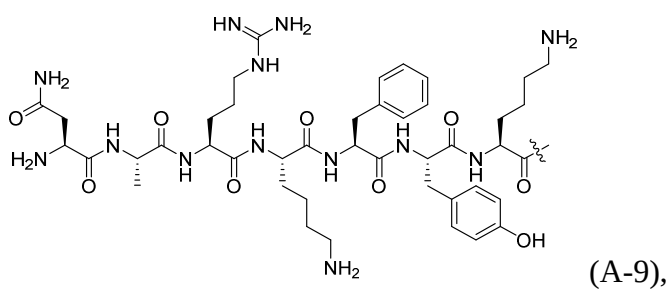
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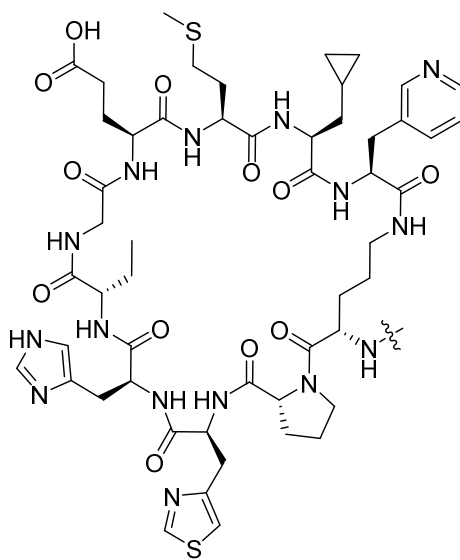
optionally substituted



optionally substituted

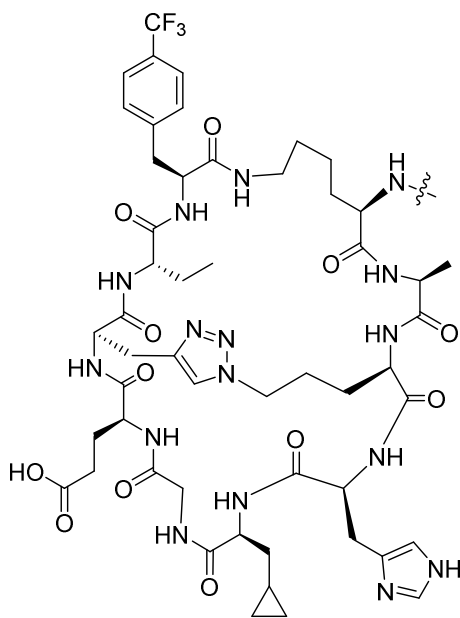


optionally substituted



optionally substituted

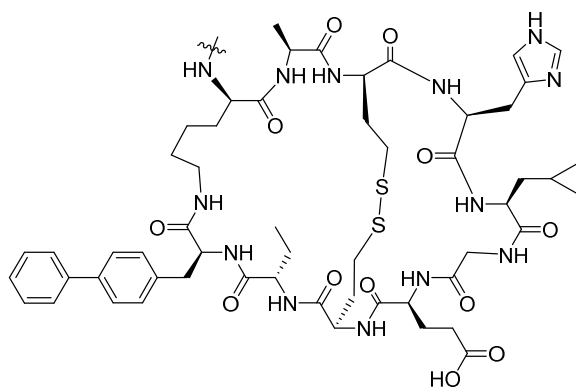
(A-10),



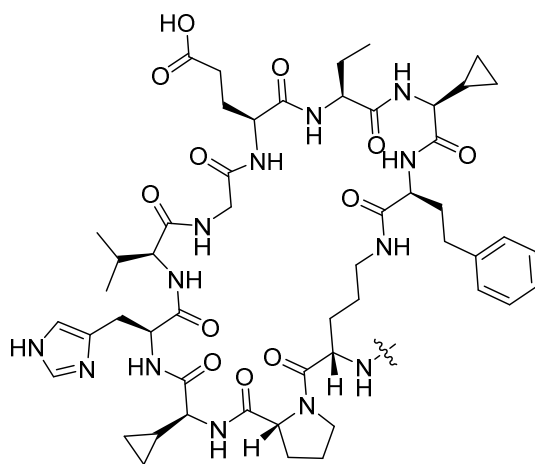
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(A-11),

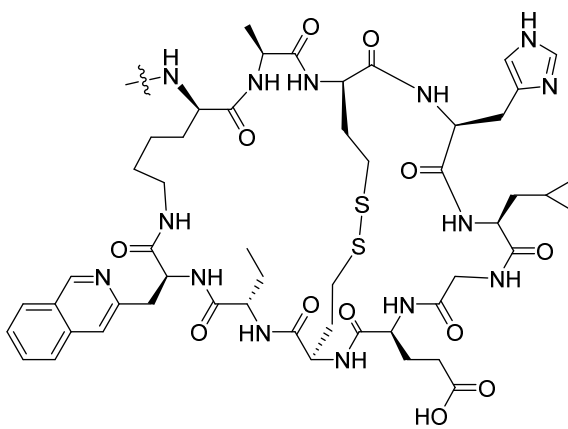
(A-12),



(A-13),

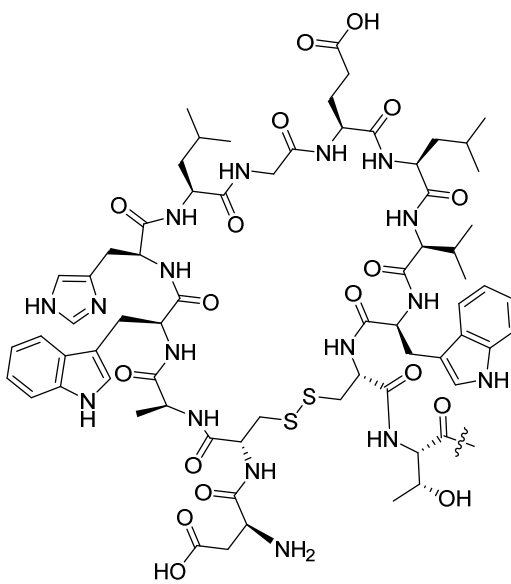


(A-14),



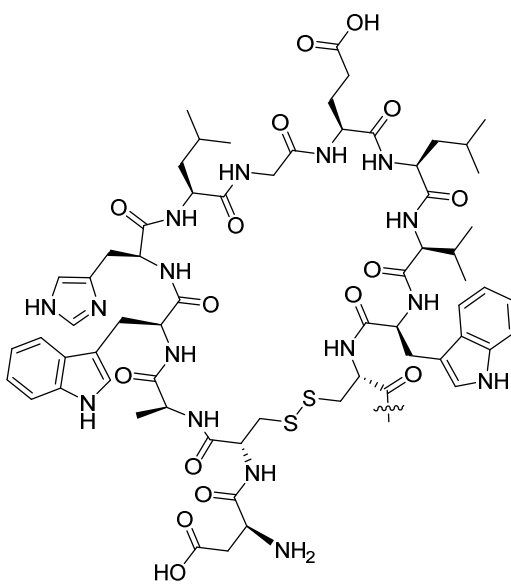
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(A-15),



optionally substituted

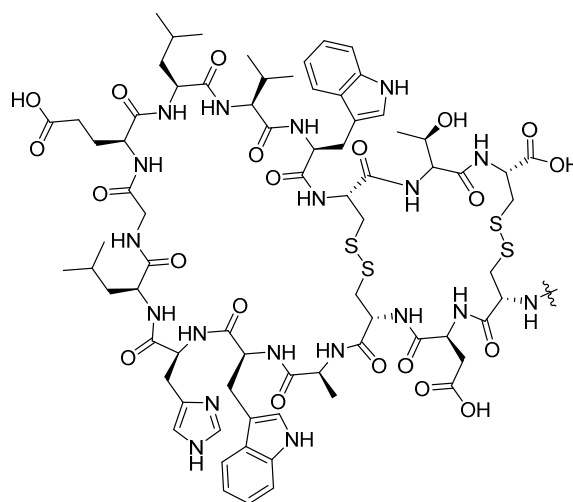
(A-16),



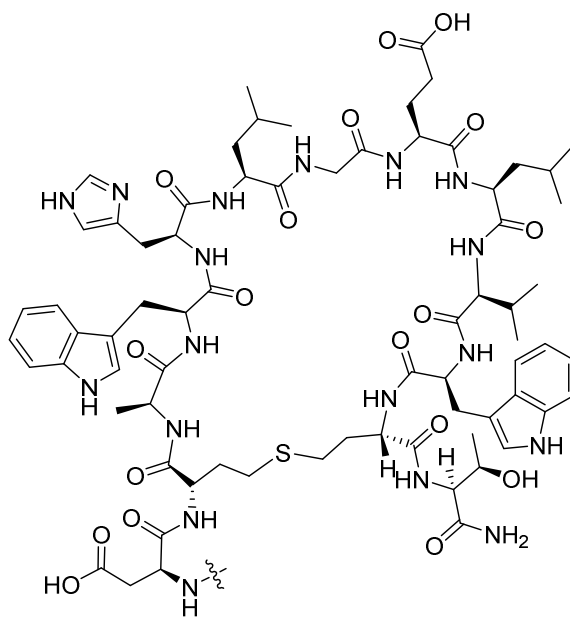
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(A-17),

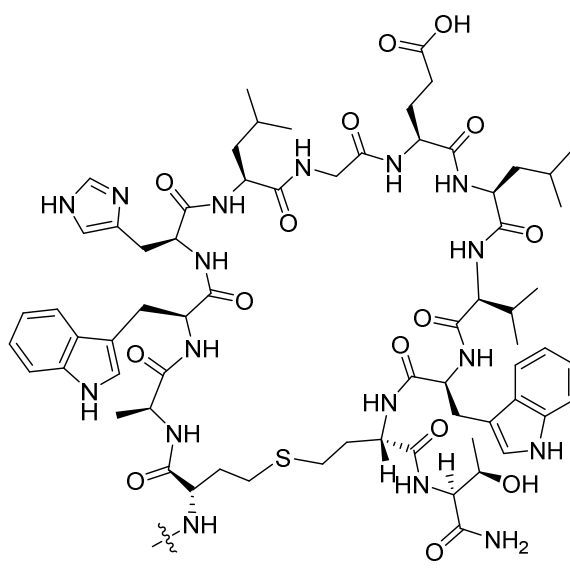
(A-18),



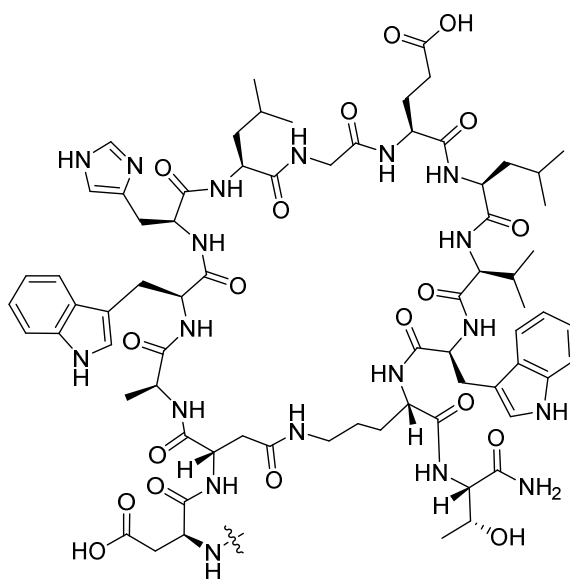
(A-19),



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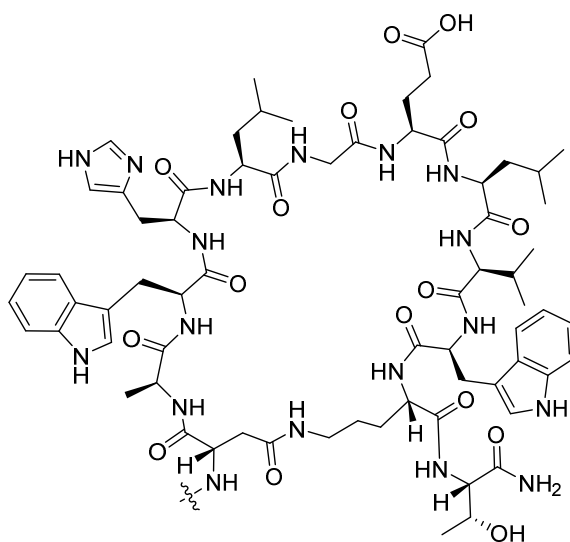


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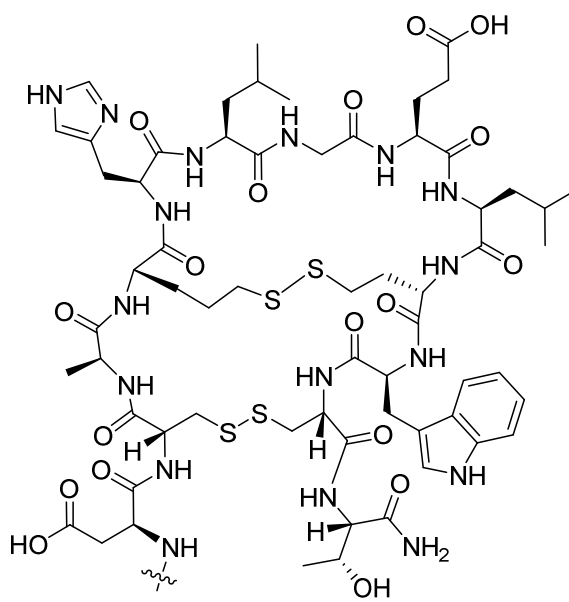
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(A-22),



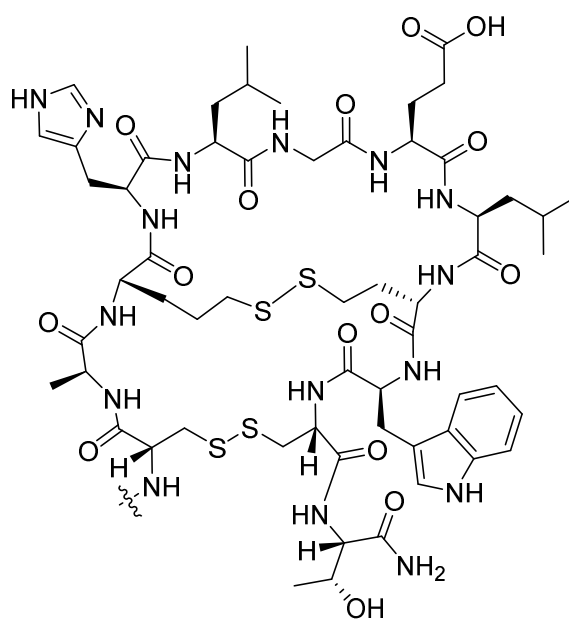
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(A-23),



optionally substituted

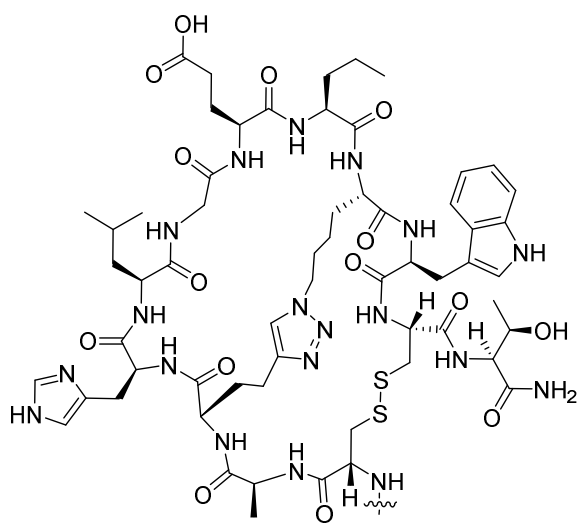
(A-24),



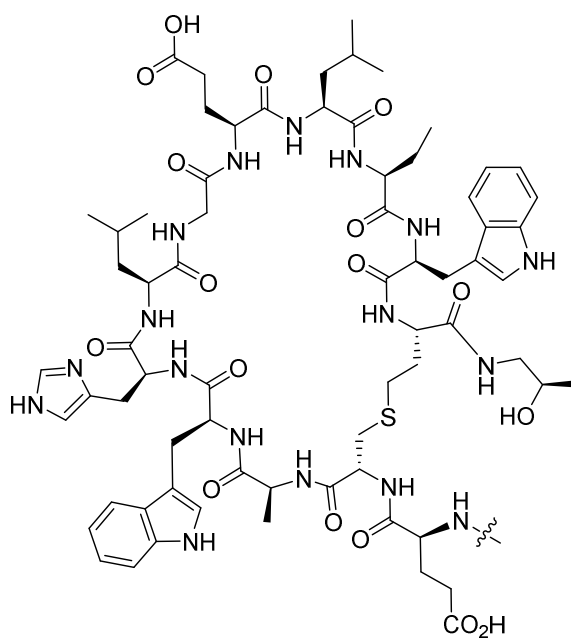
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(A-25),

(A-26),

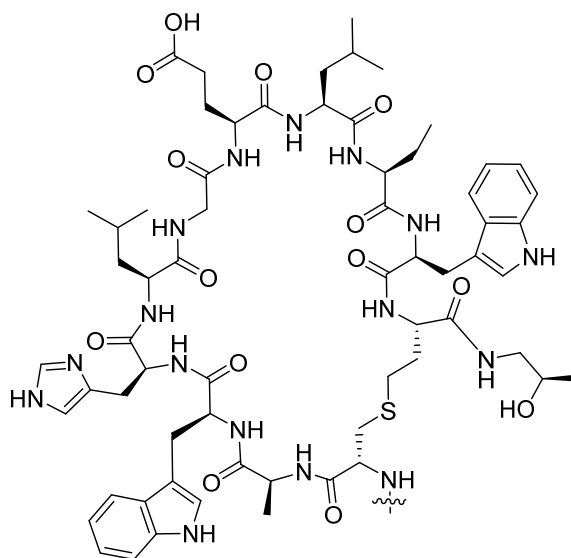


(A-27),



optionally substituted

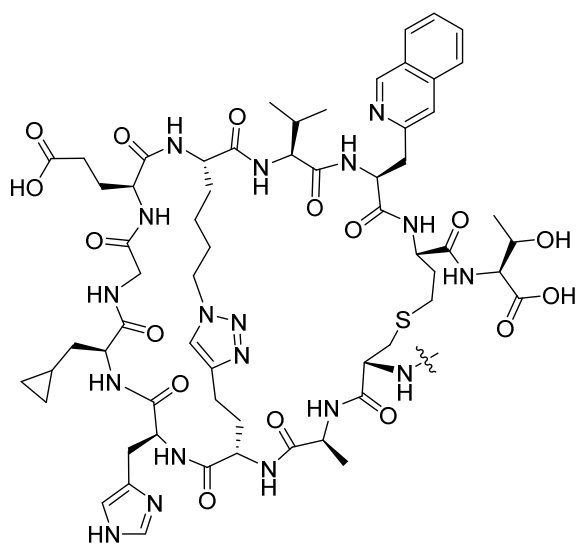
(A-28),



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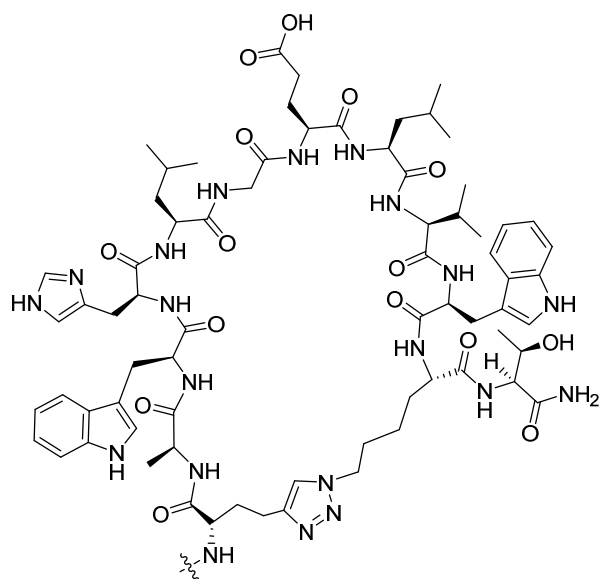
(A-29),

(A-30),

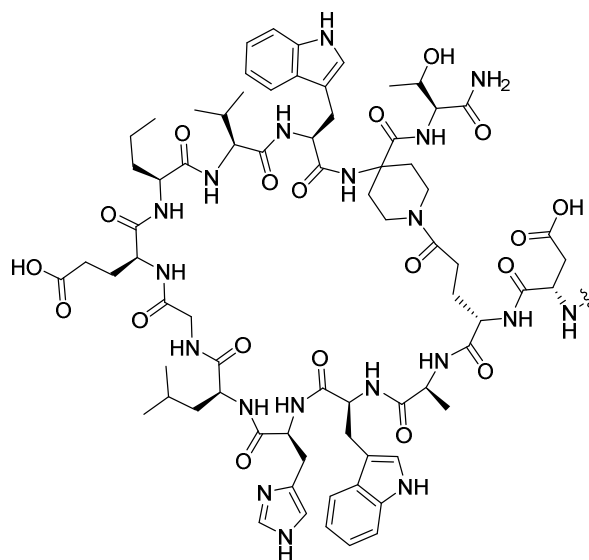


(A-31),

(A-32),

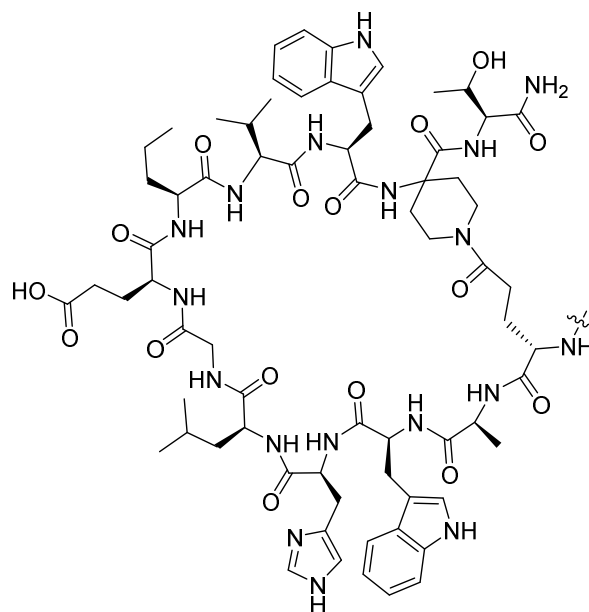


(A-33),



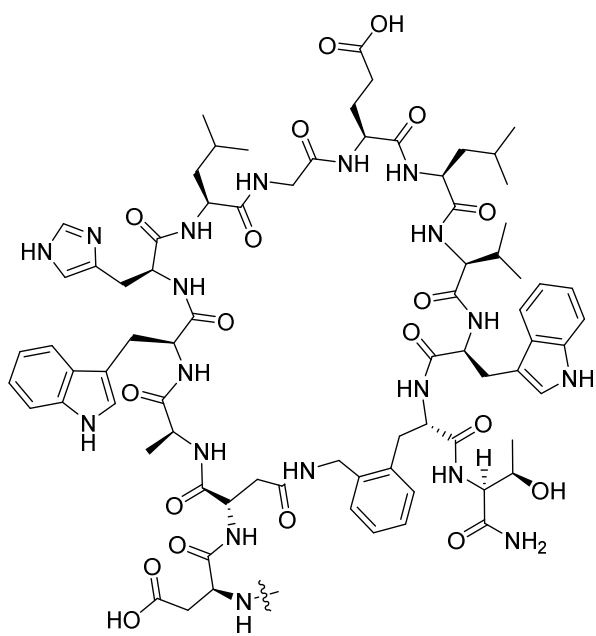
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(A-34),



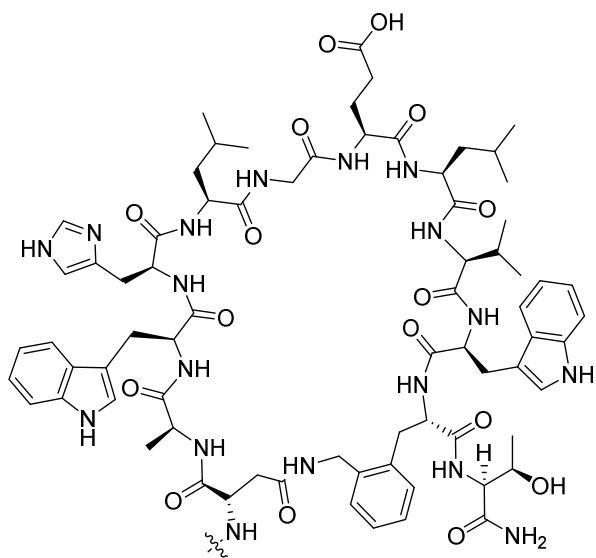
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(A-35),



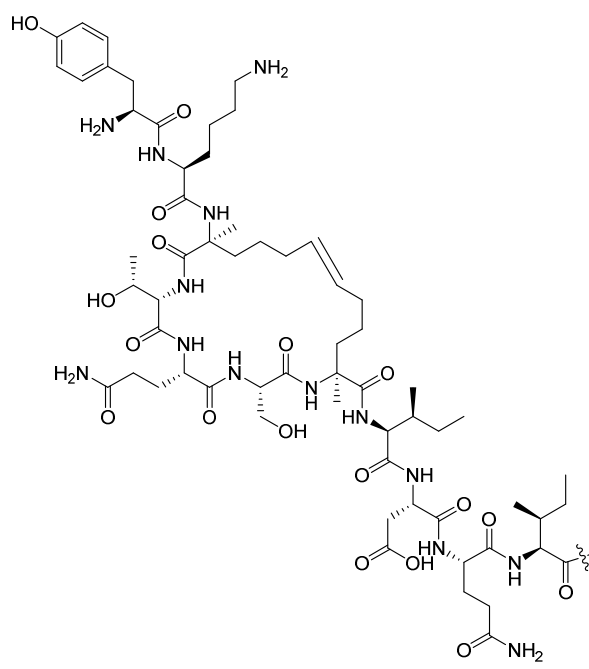
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(A-36),



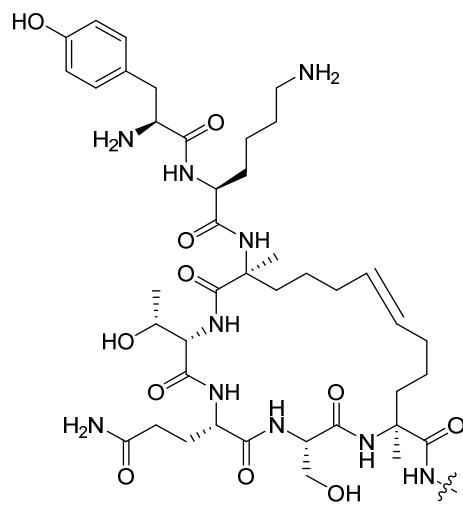
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(A-37),



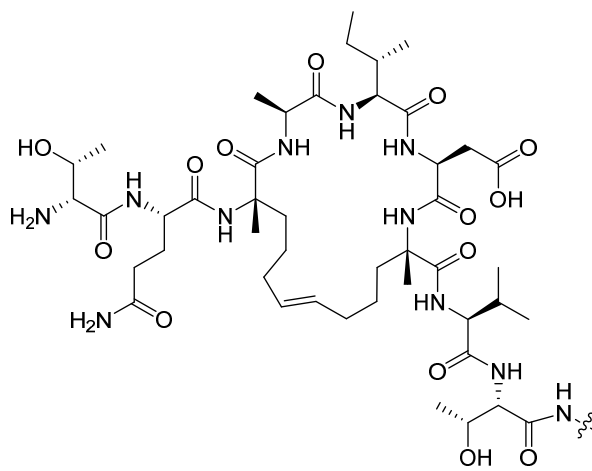
optionally substituted

(A-38),

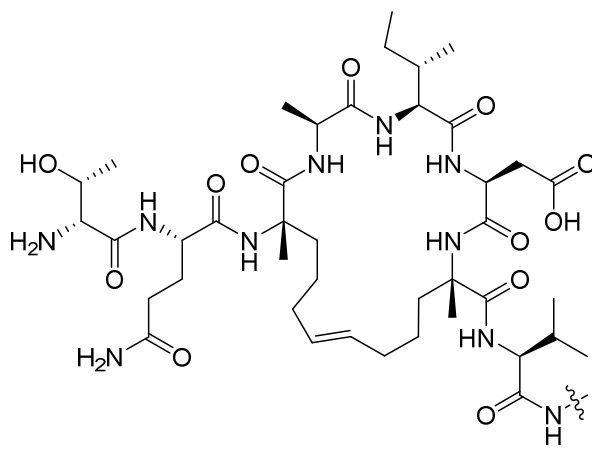


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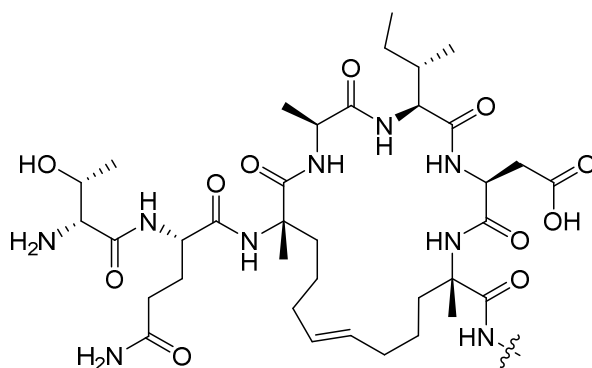
(A-39),



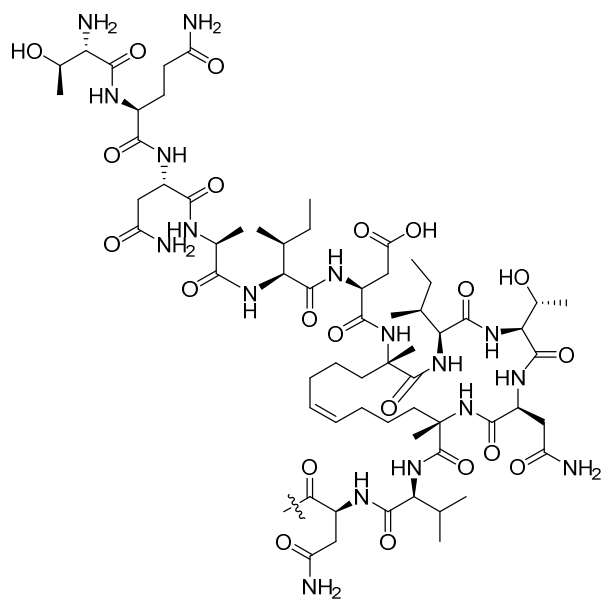
optionally substituted



optionally substituted

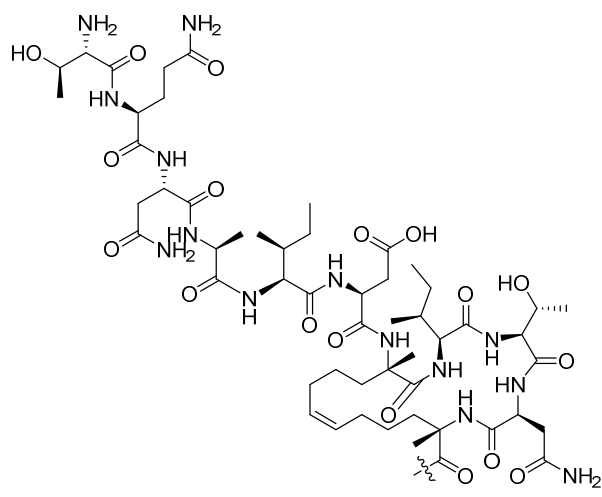


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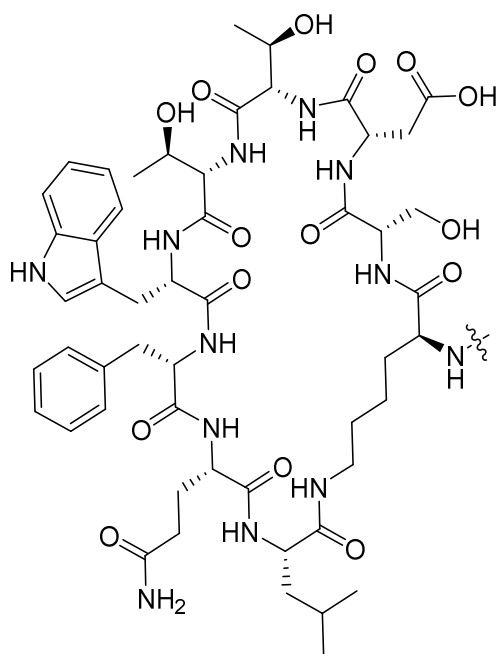
optionally substituted

(A-43),



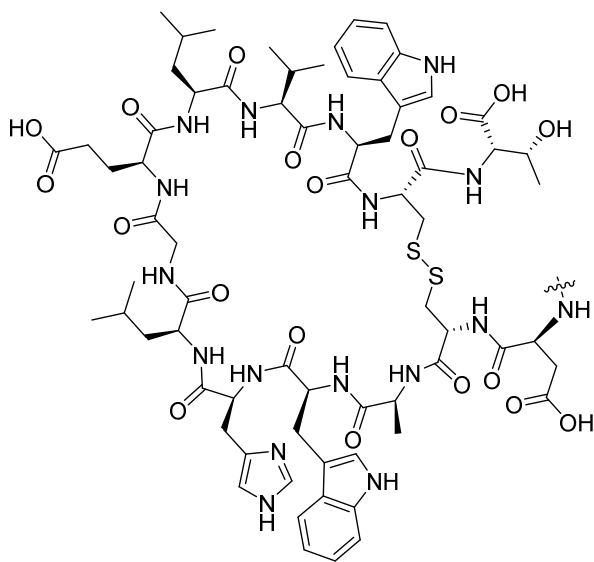
optionally substituted

(A-44),



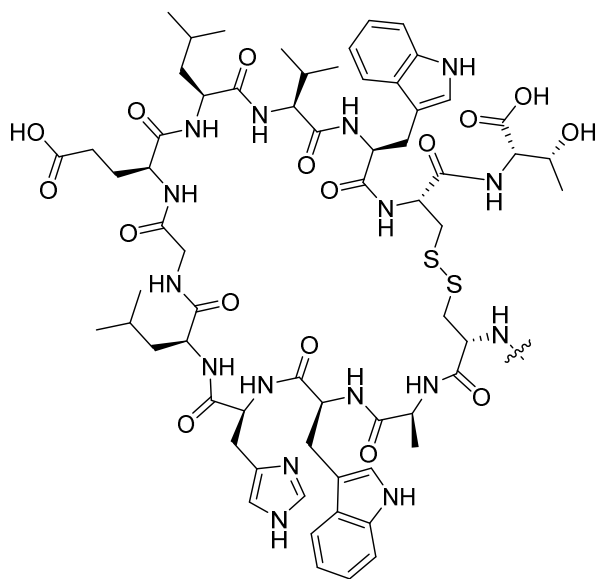
optionally substituted

(A-45),



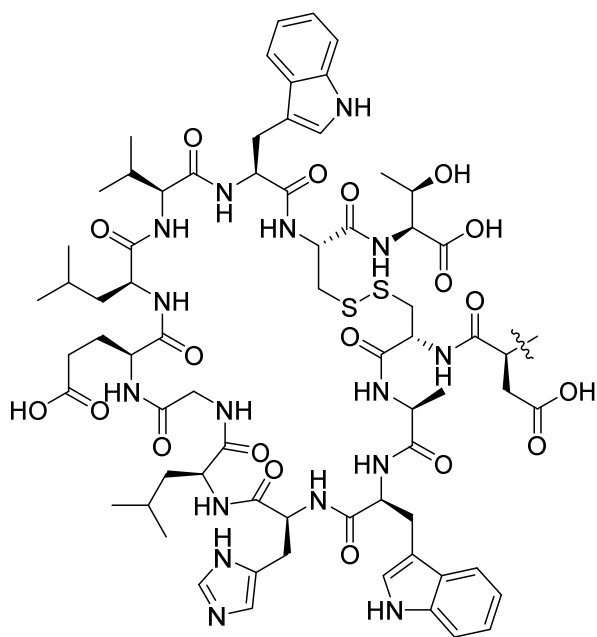
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(A46),



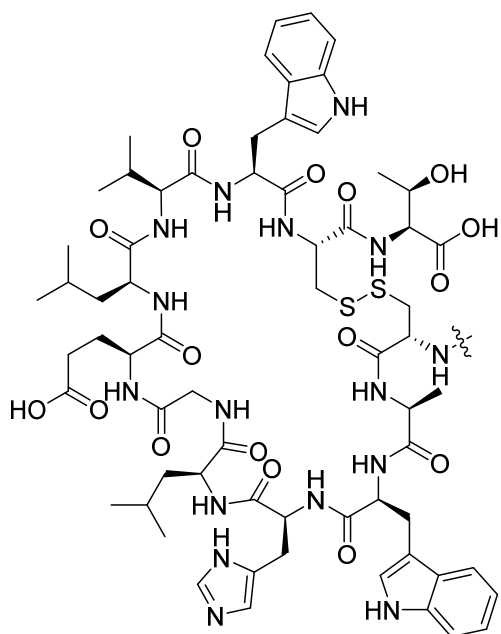
optionally substituted

(A-47),



optionally substituted

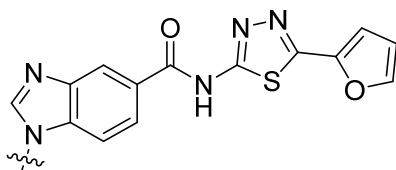
(A-48), or



optionally substituted

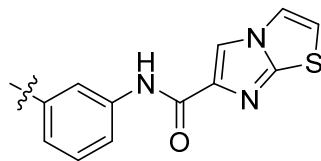
(A-49).

17. The agent of any one of claims 1-8, wherein the antibody binding moiety is or comprises

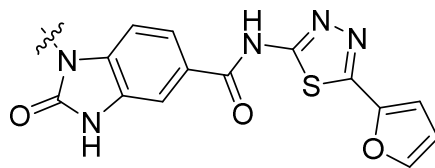


optionally substituted

, optionally substituted

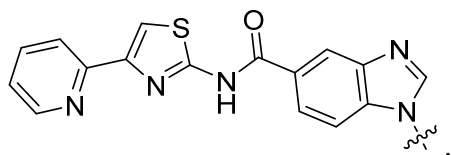


, optionally substituted

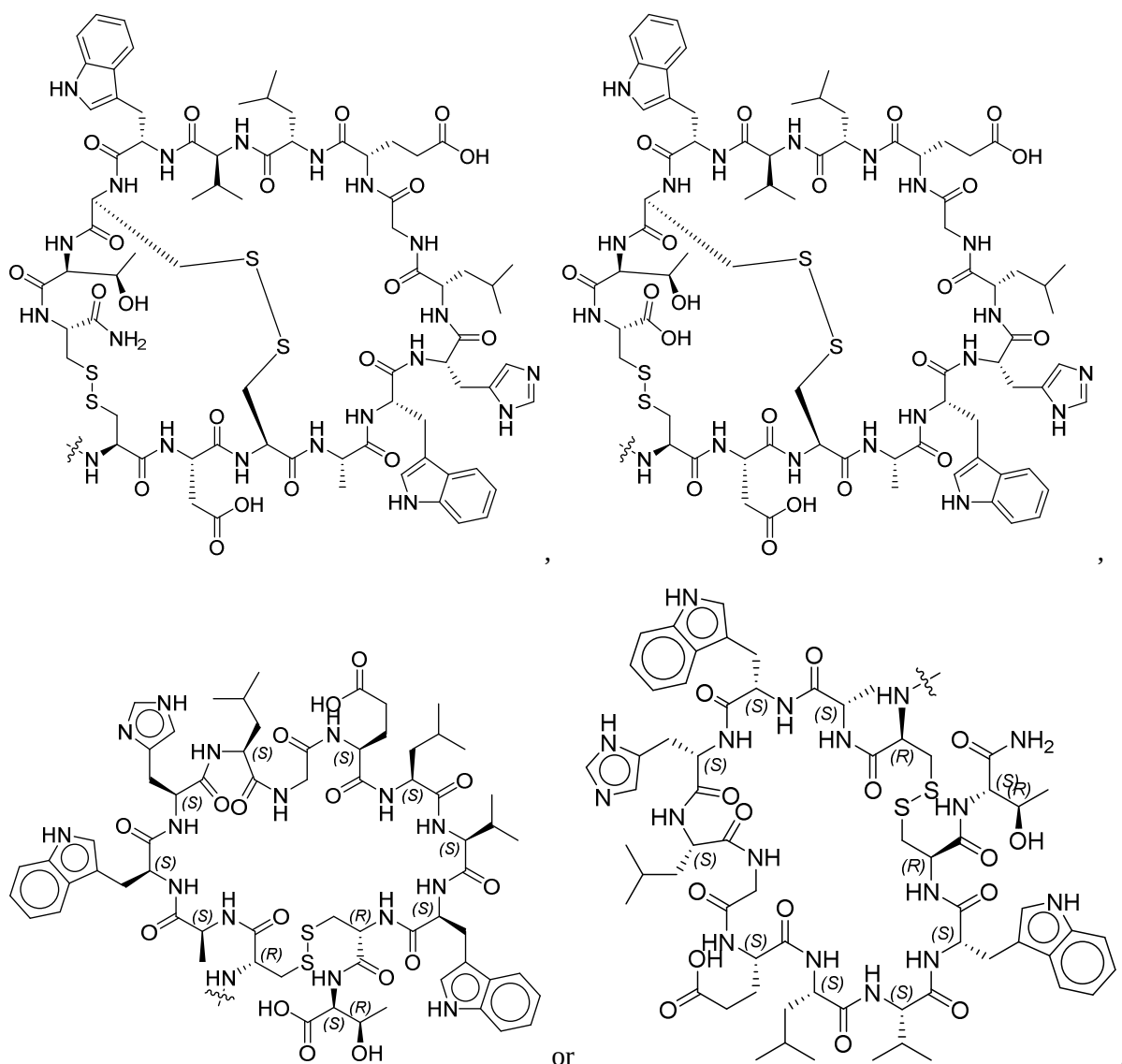


, or optionally

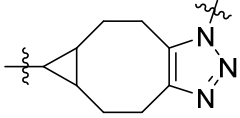
substituted



18. The agent of any one of claims 1-8, wherein the antibody binding moiety is or comprises



19. The agent of any one of claims 1-18, wherein
the bivalent linker comprises $-(\text{CH}_2\text{CH}_2\text{O})_n-$, wherein n is 1-20;
the bivalent linker moiety comprises one or more amino acid residues;

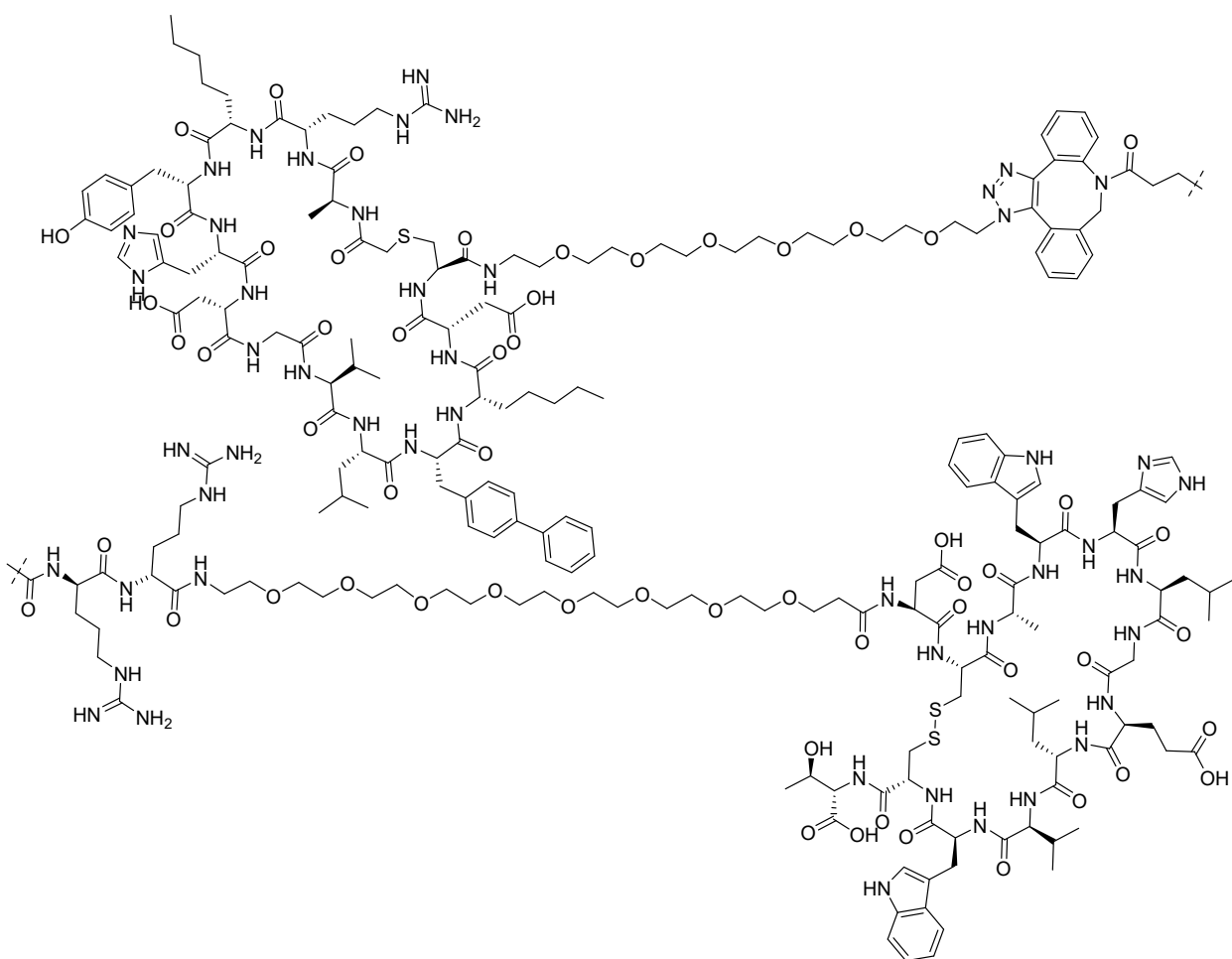
the bivalent linker moiety comprises
; or
a combination thereof.

20. The agent of claim 1, wherein the agent is

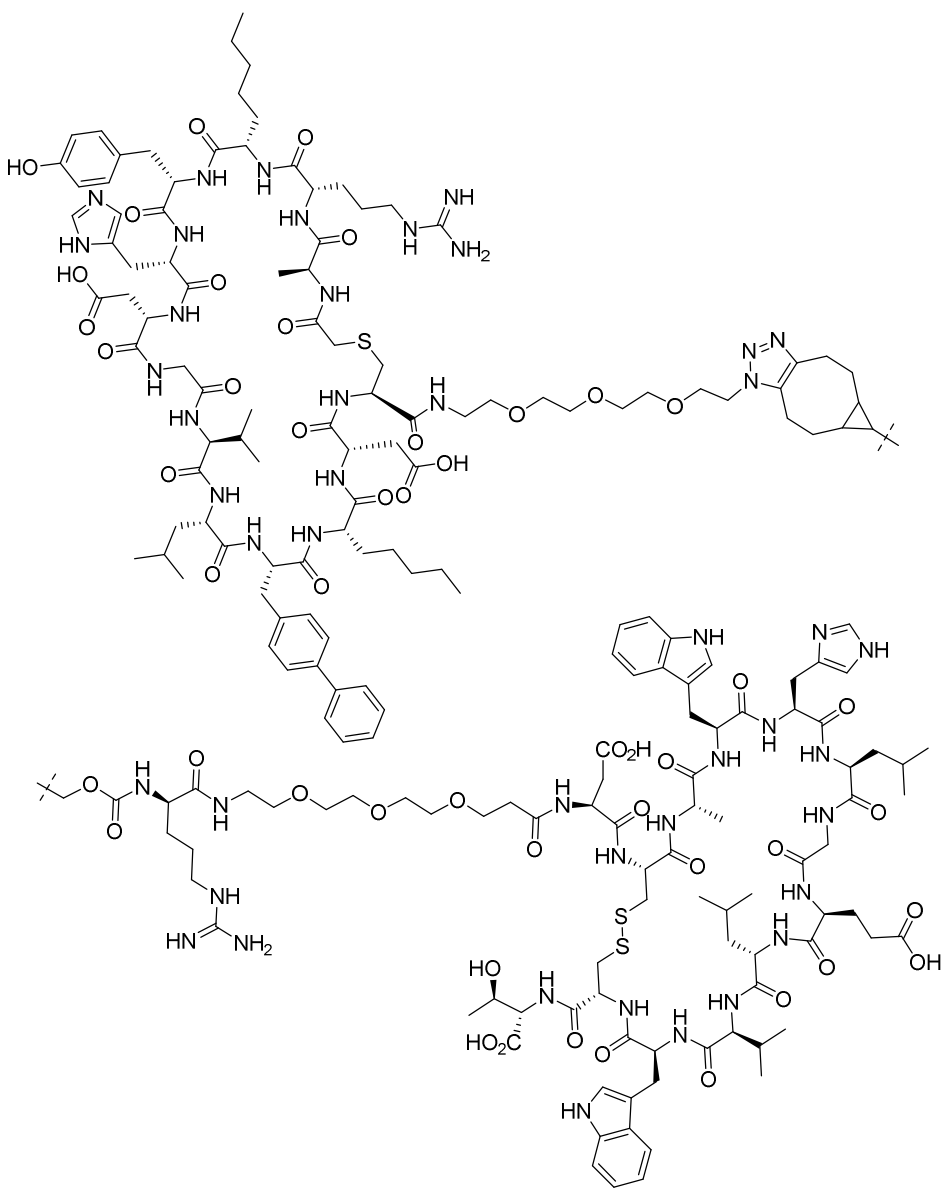
(I-1),

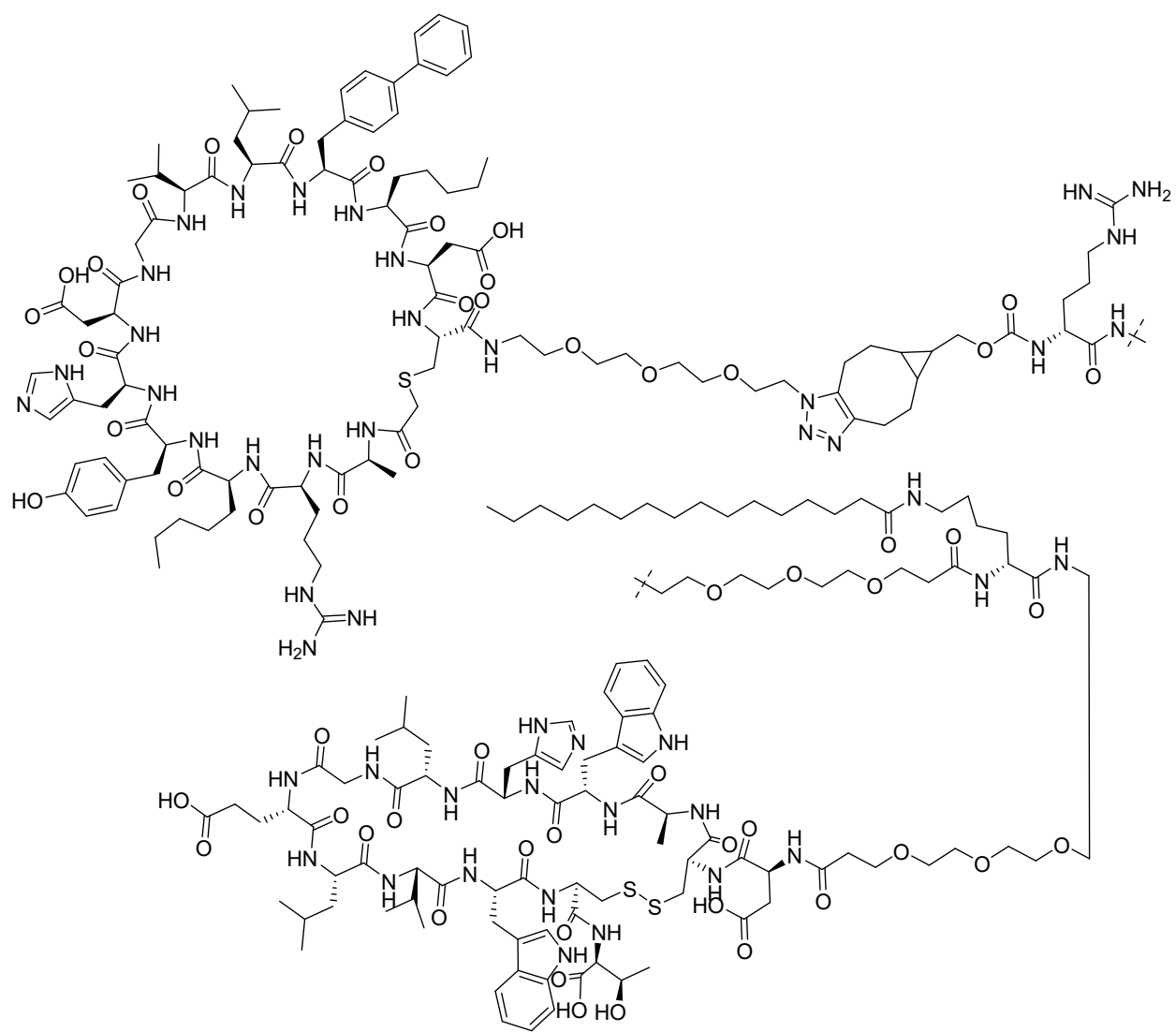
(I-2),

(I-3),



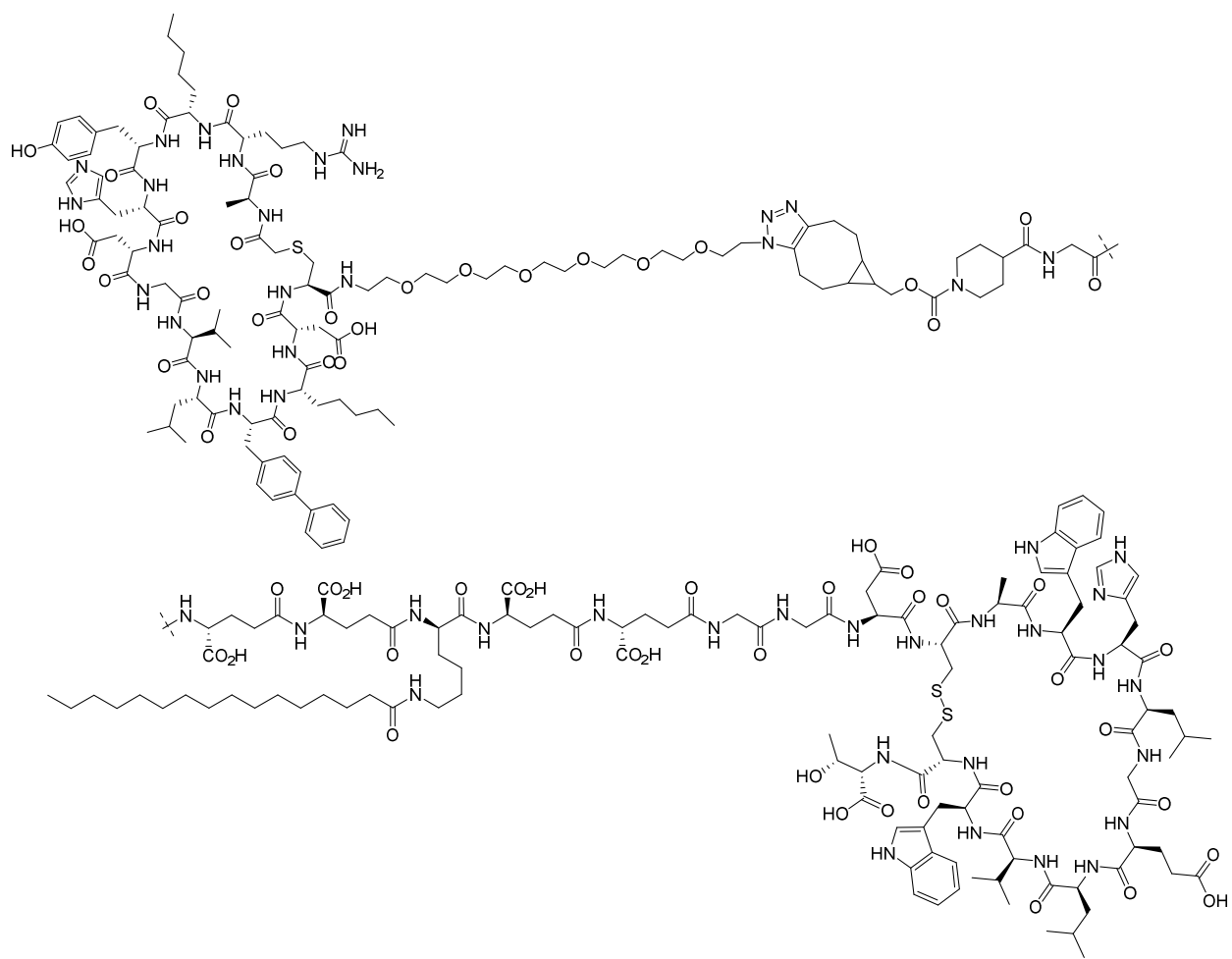
(I-4),





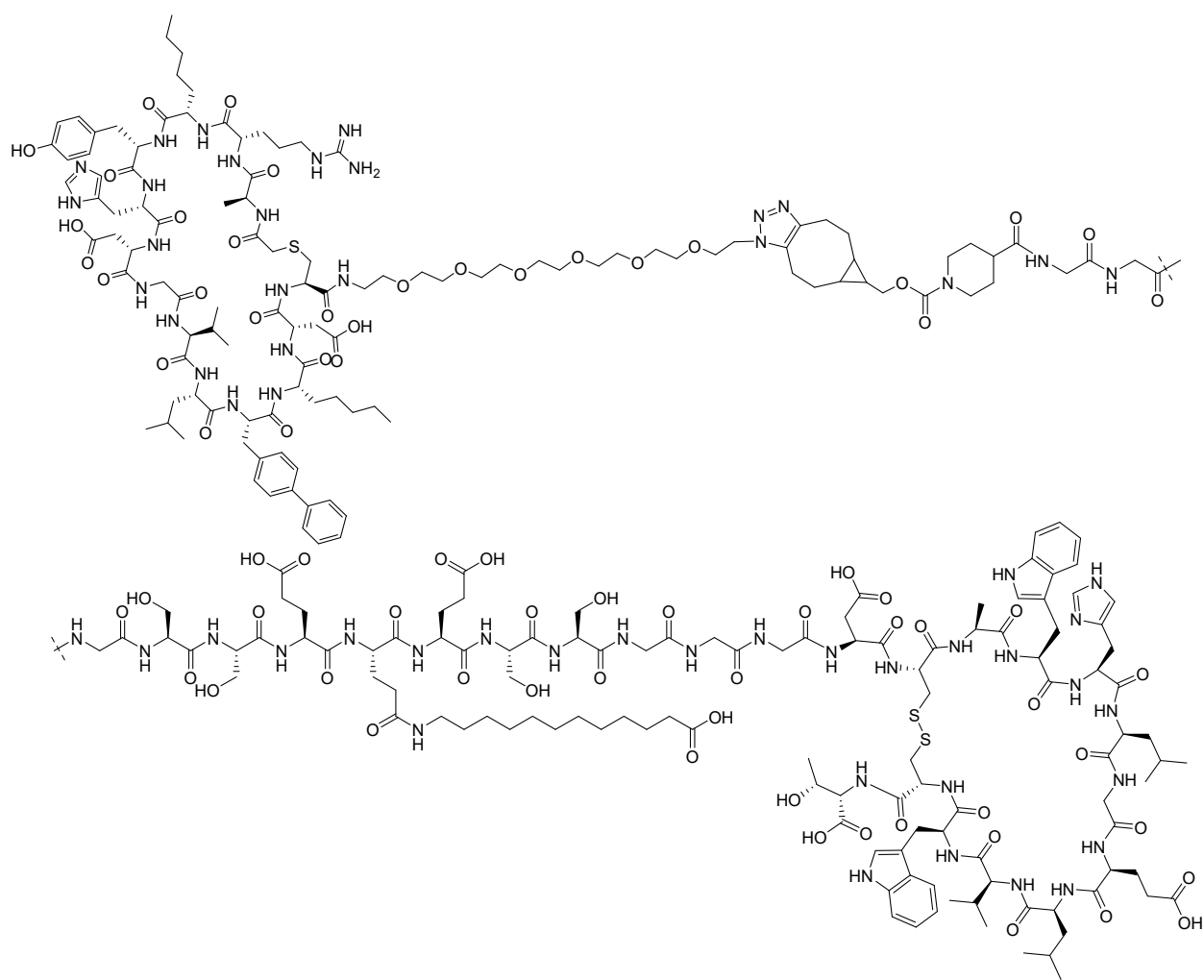
(I-6),

(I-7),

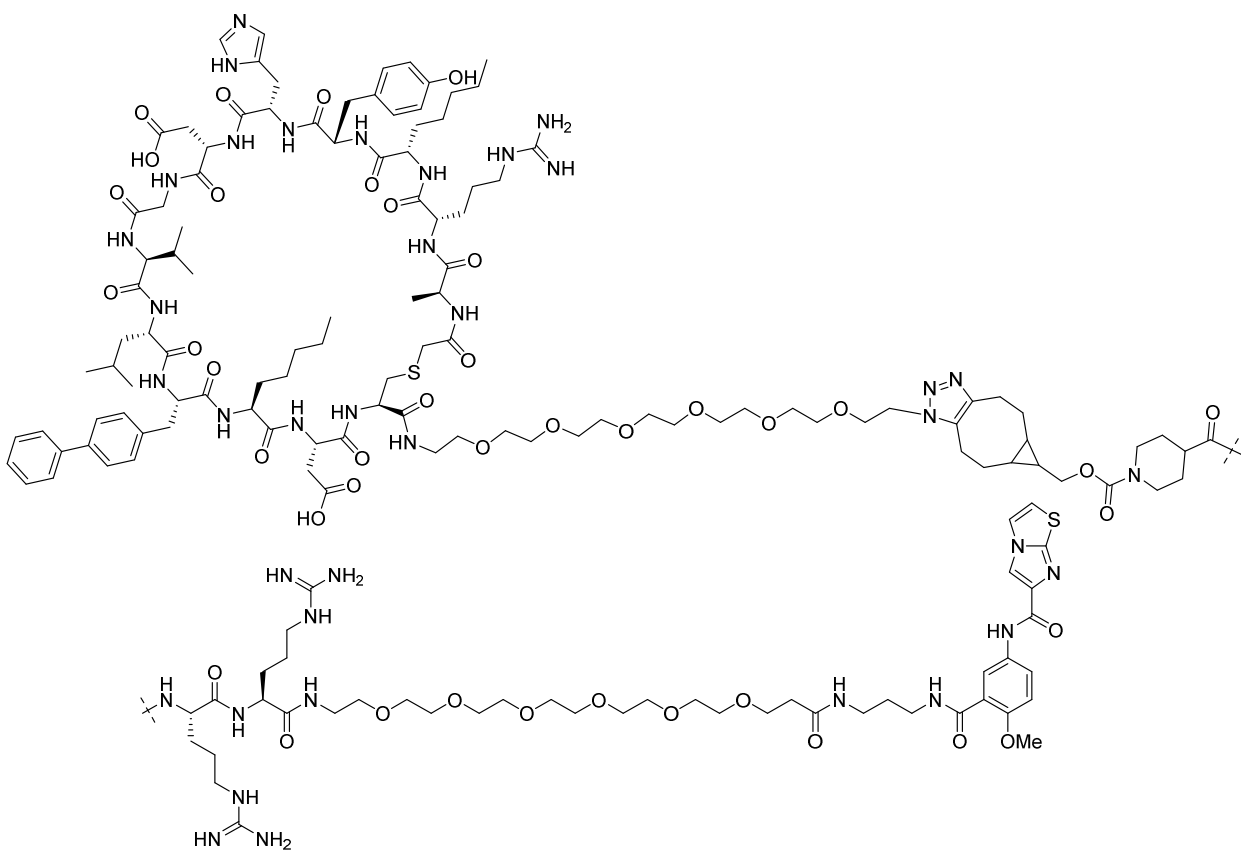


(I-8),

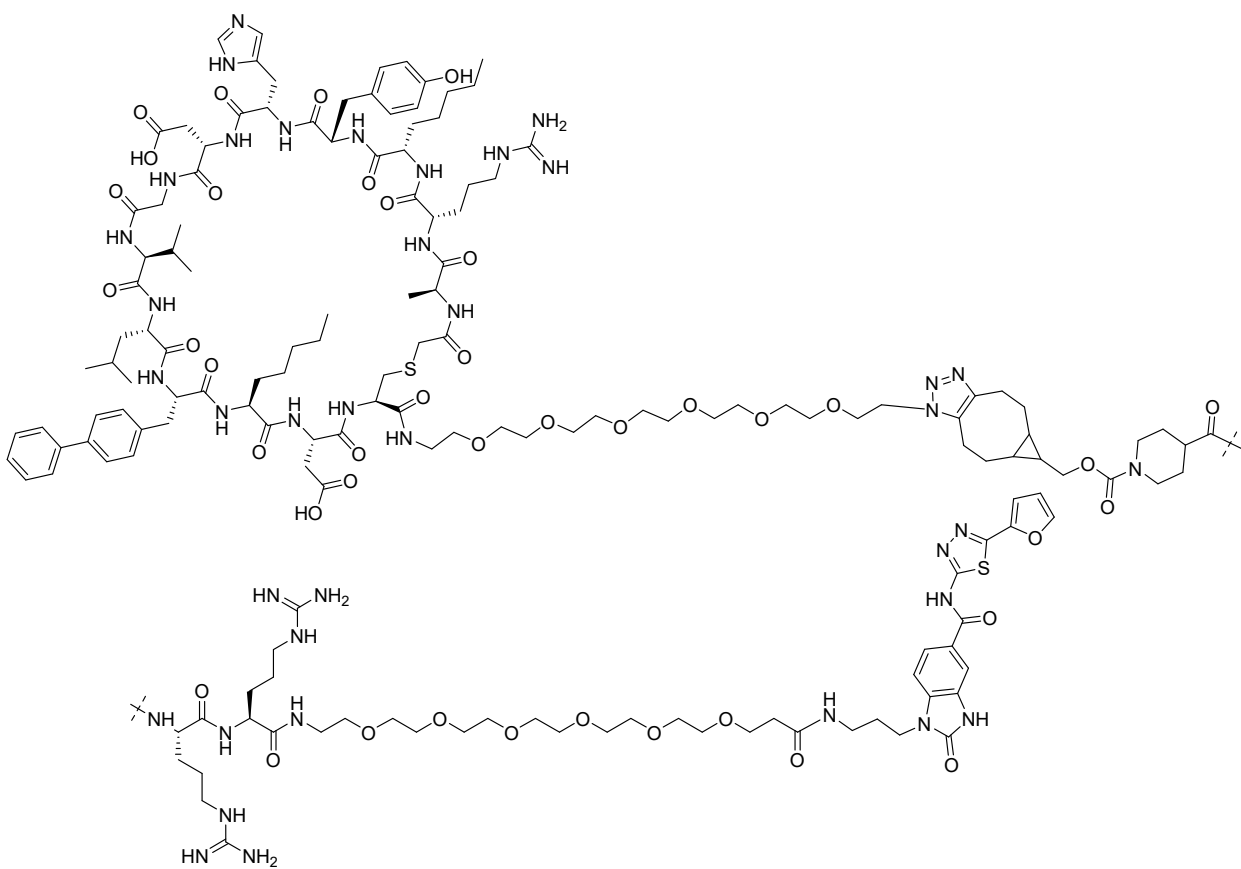
(I-9),



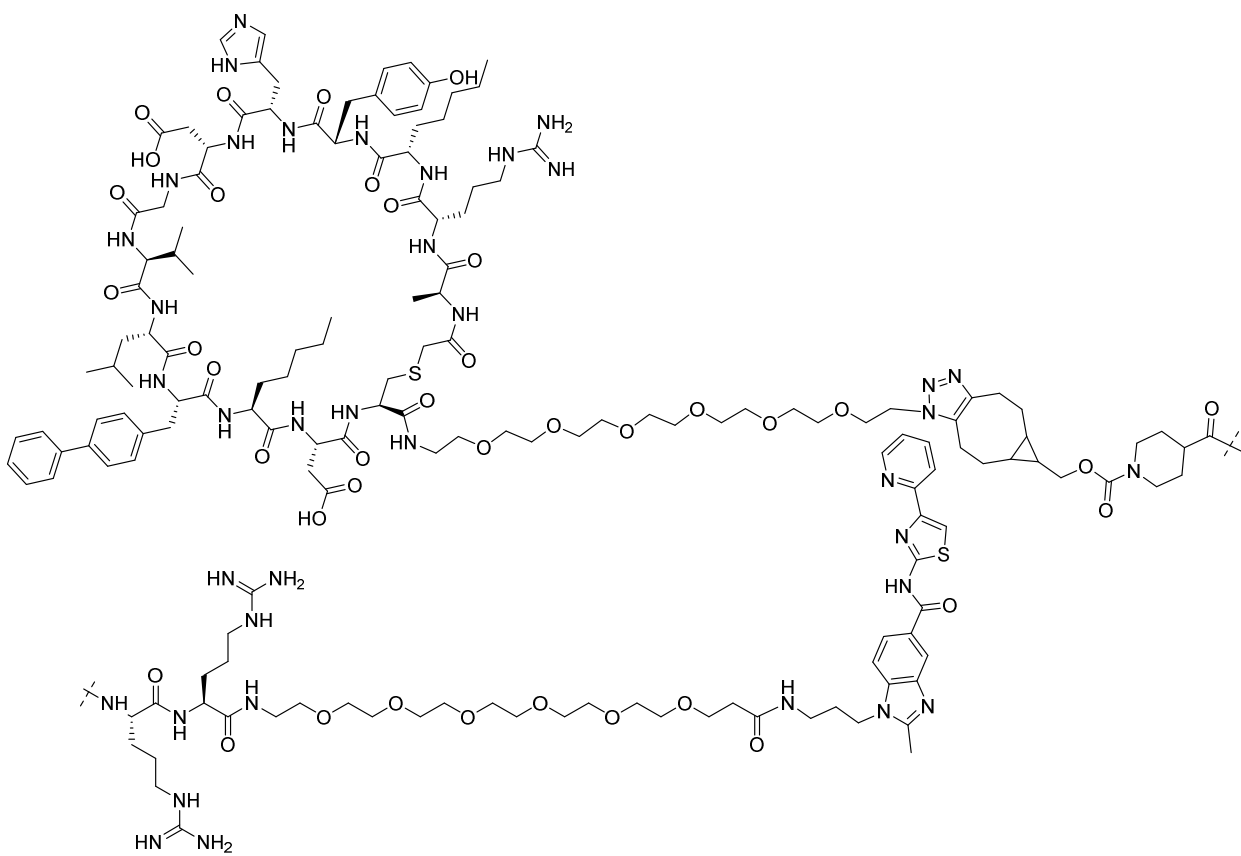
(I-10),



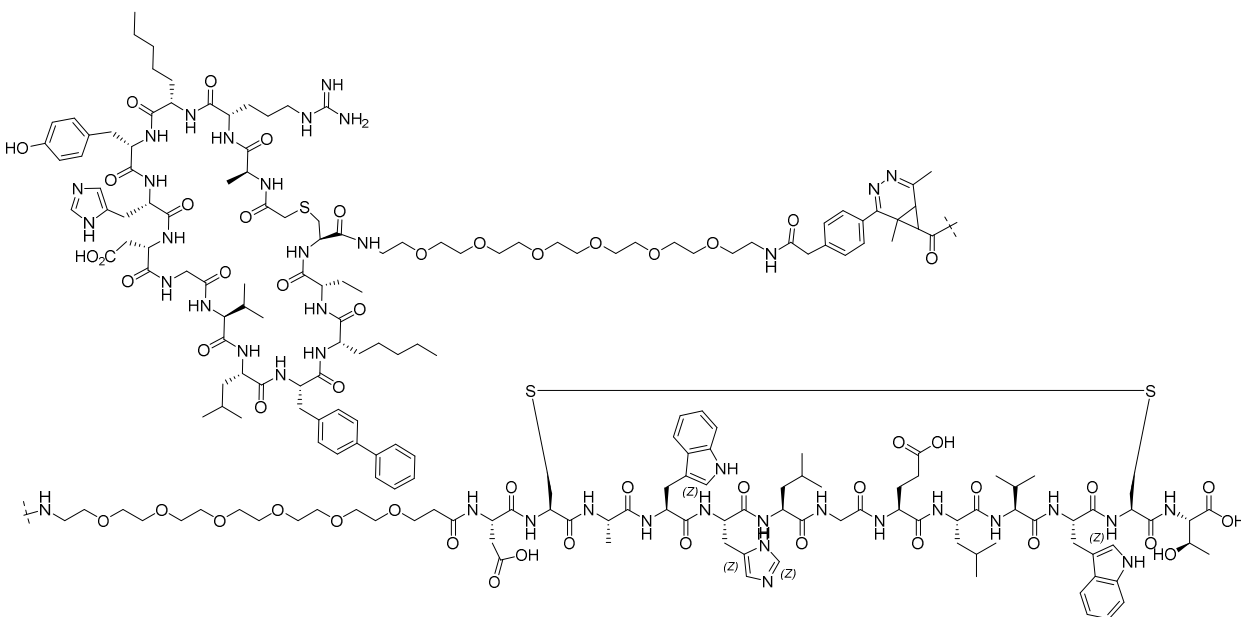
(I-11),



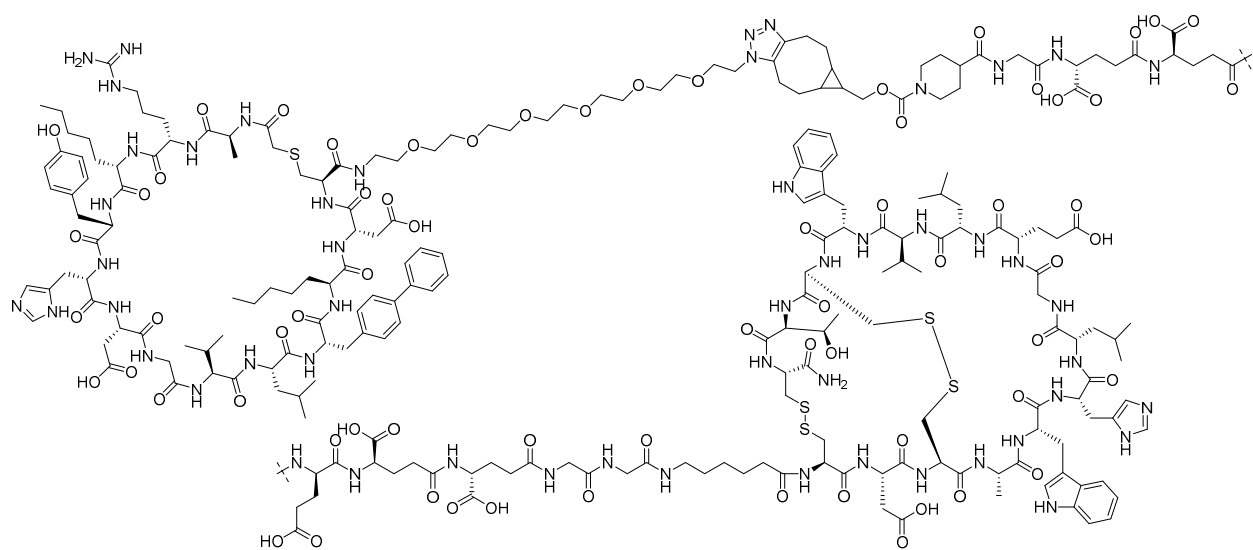
(I-12),



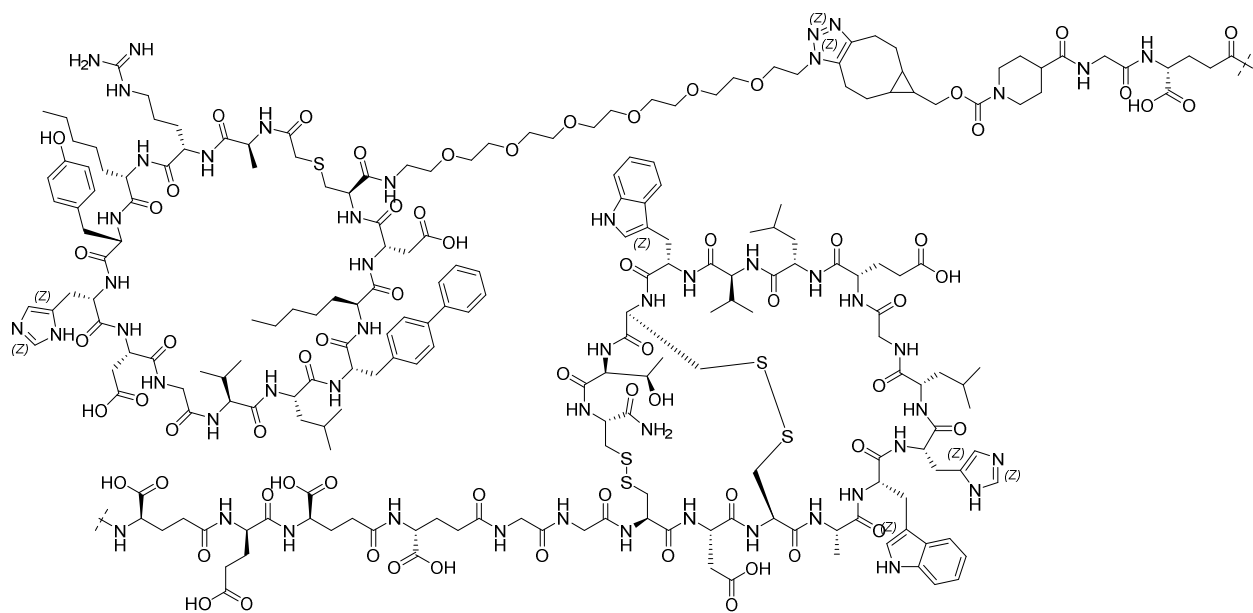
(I-13),



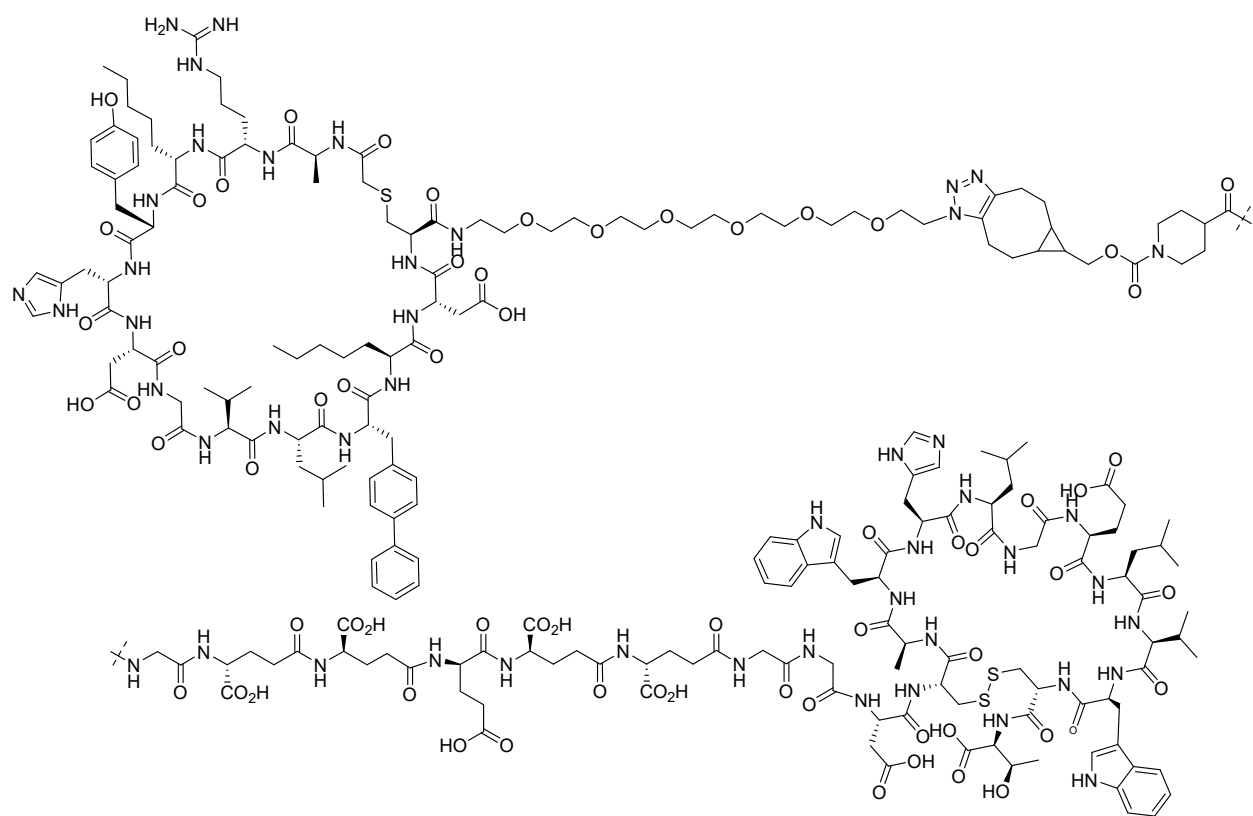
(I-14),



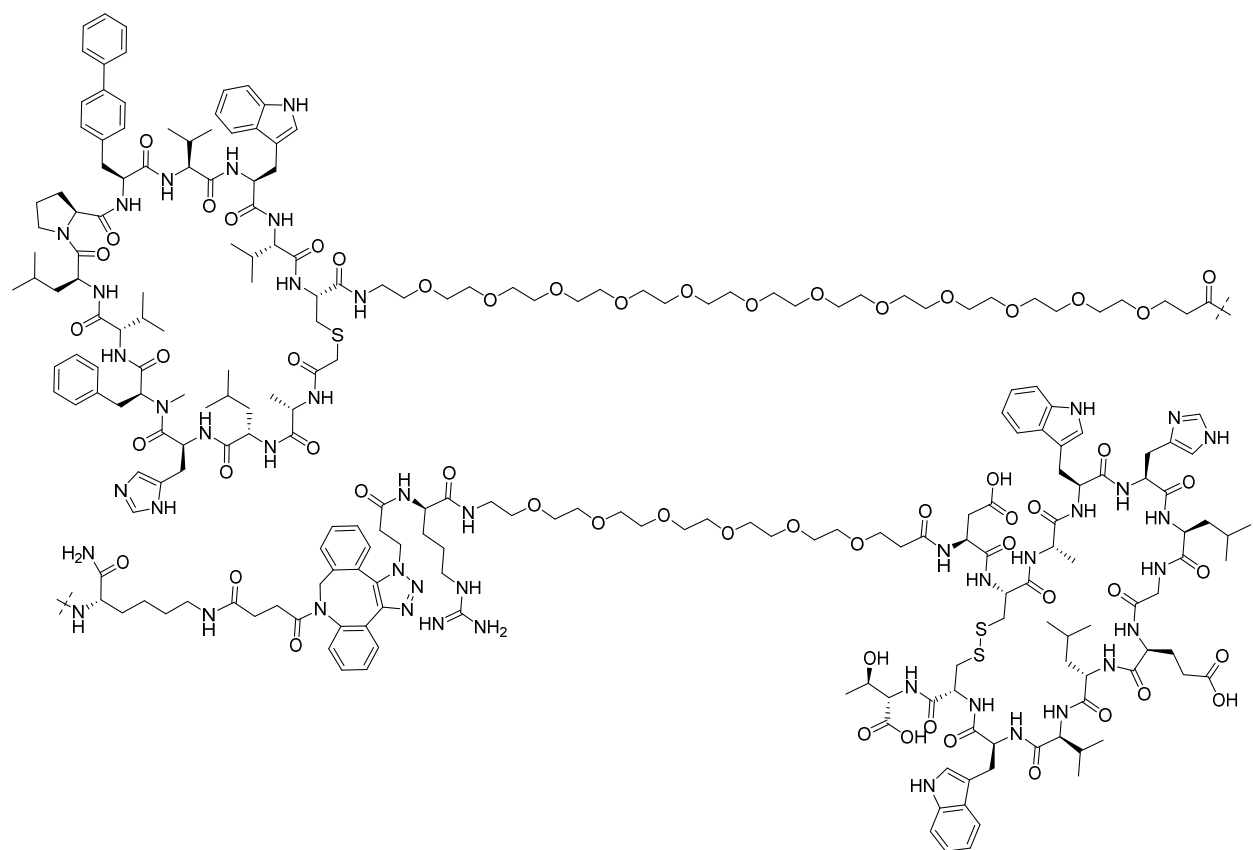
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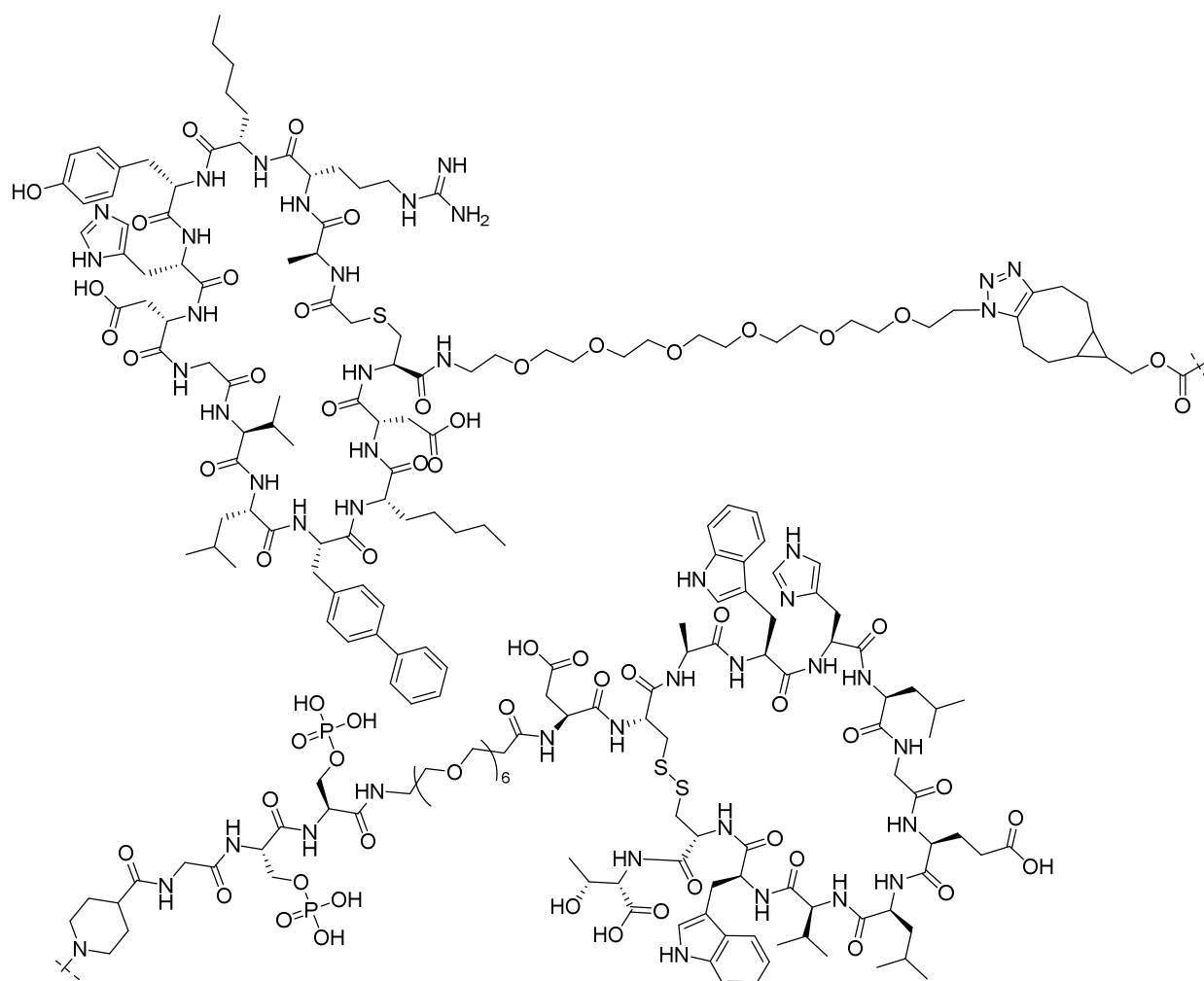
(I-16),



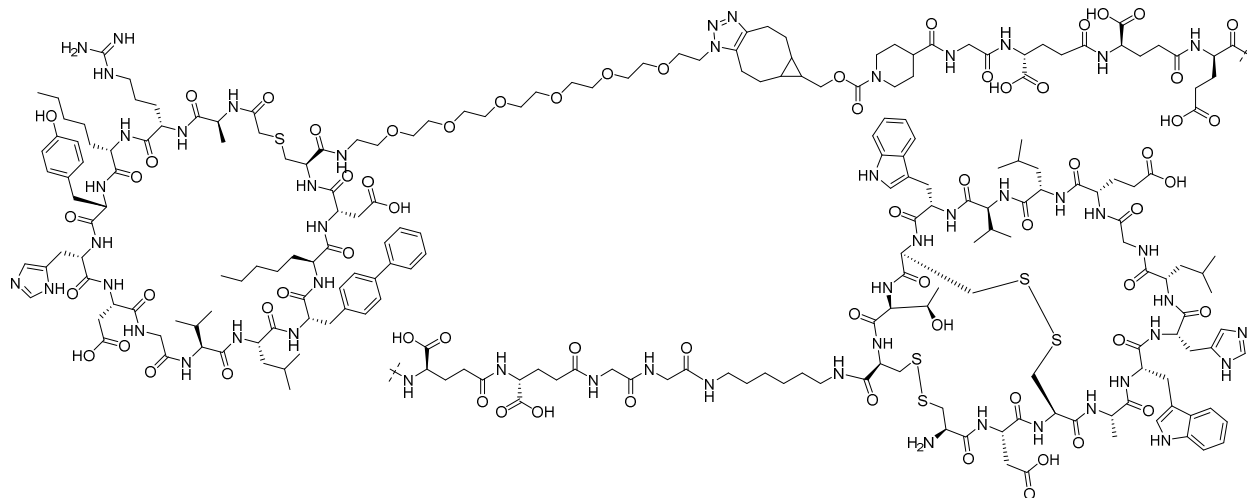
(I-17),



(I-18),



(I-19),



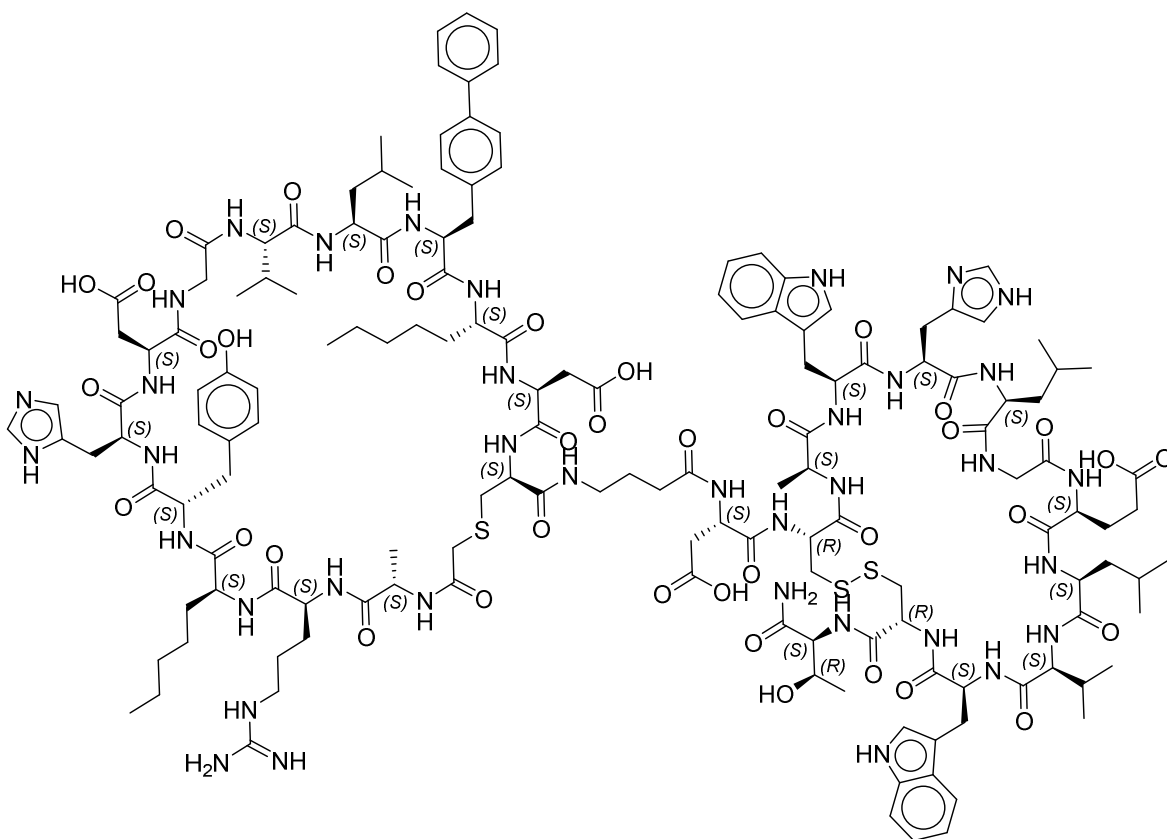
(I-24),

The chemical structure represents a complex polyketide molecule, likely a natural product. It features a long, branched chain with numerous stereocenters, indicated by (R) and (S) labels. Key functional groups include amides, esters, carboxylic acids, and hydroxyl groups. The molecule is highly functionalized, with various side chains and a terminal group that appears to be a carboxylic acid derivative. The structure is drawn in a detailed, skeletal format, showing the connectivity of atoms and the stereochemistry of the chiral centers.

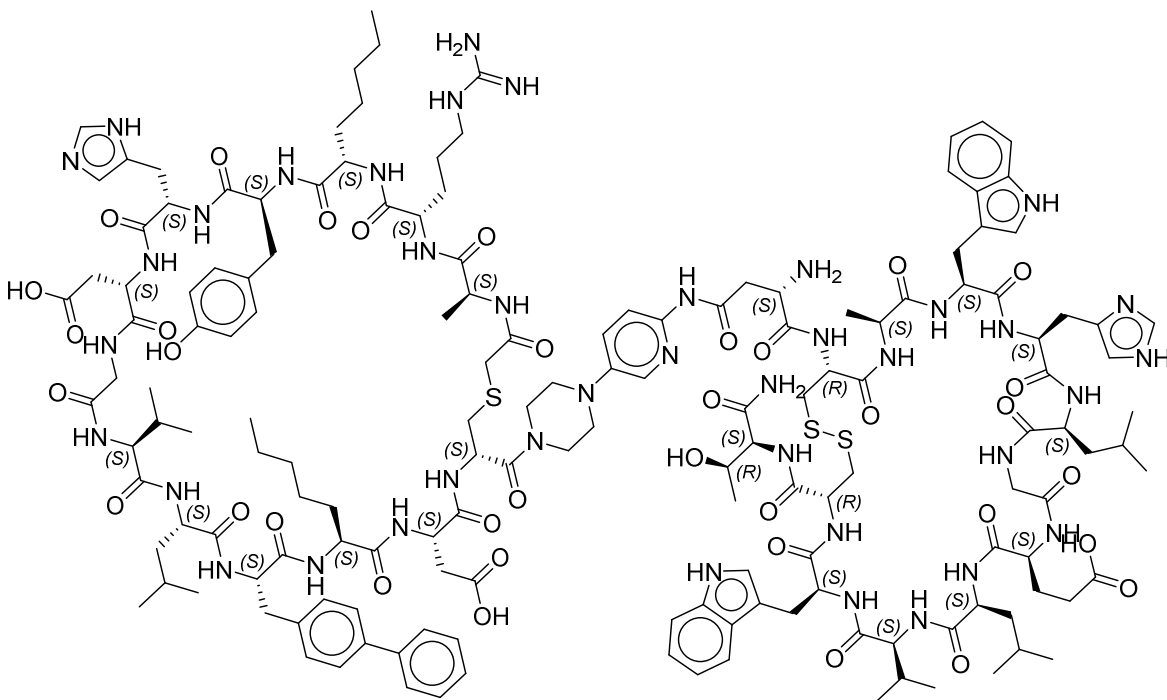
(I-26),

(I-28),

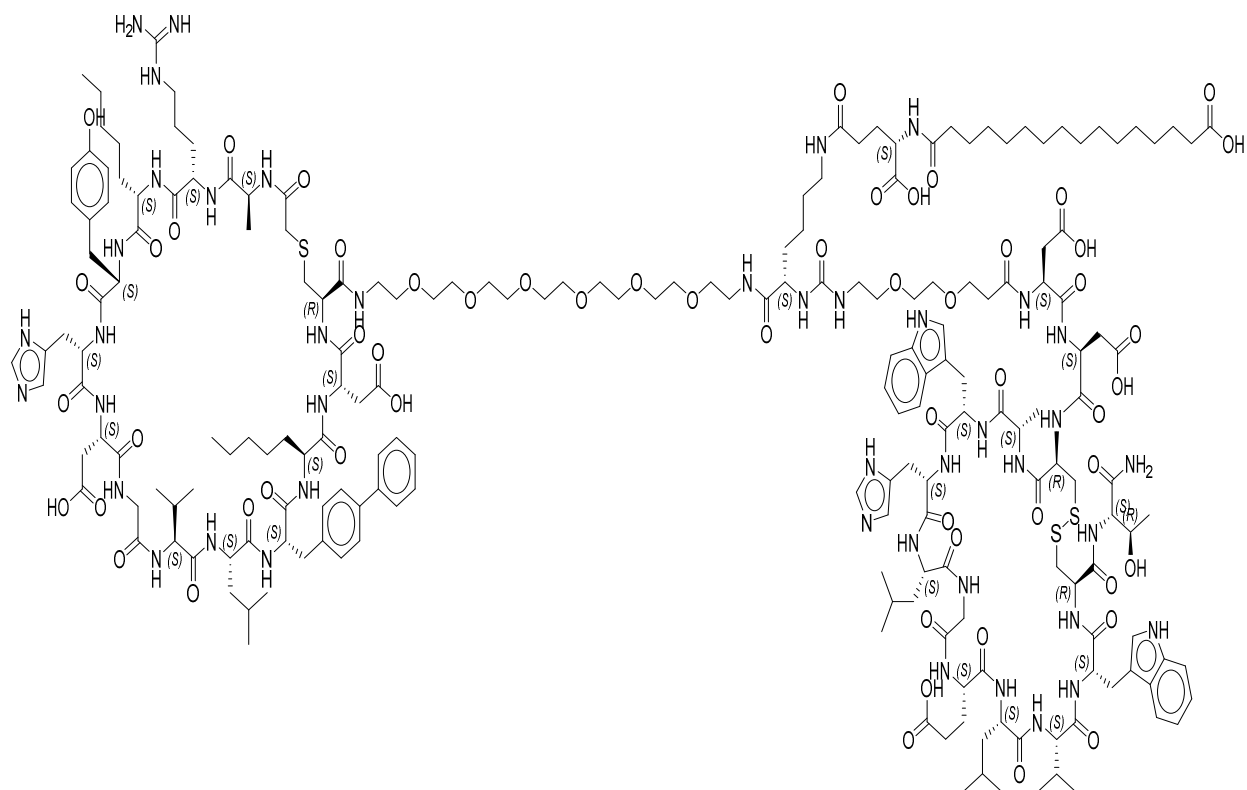
(I-29),



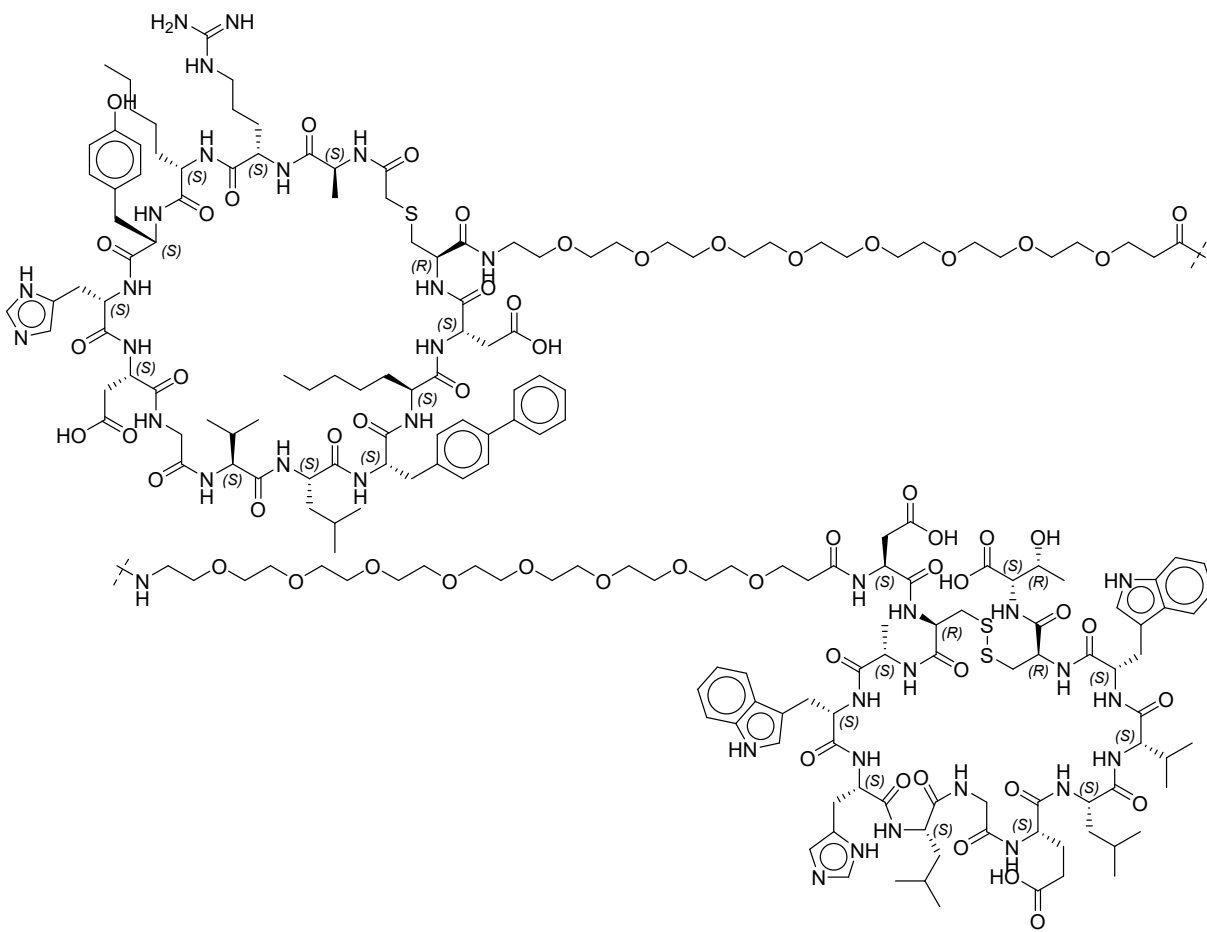
(I-30),



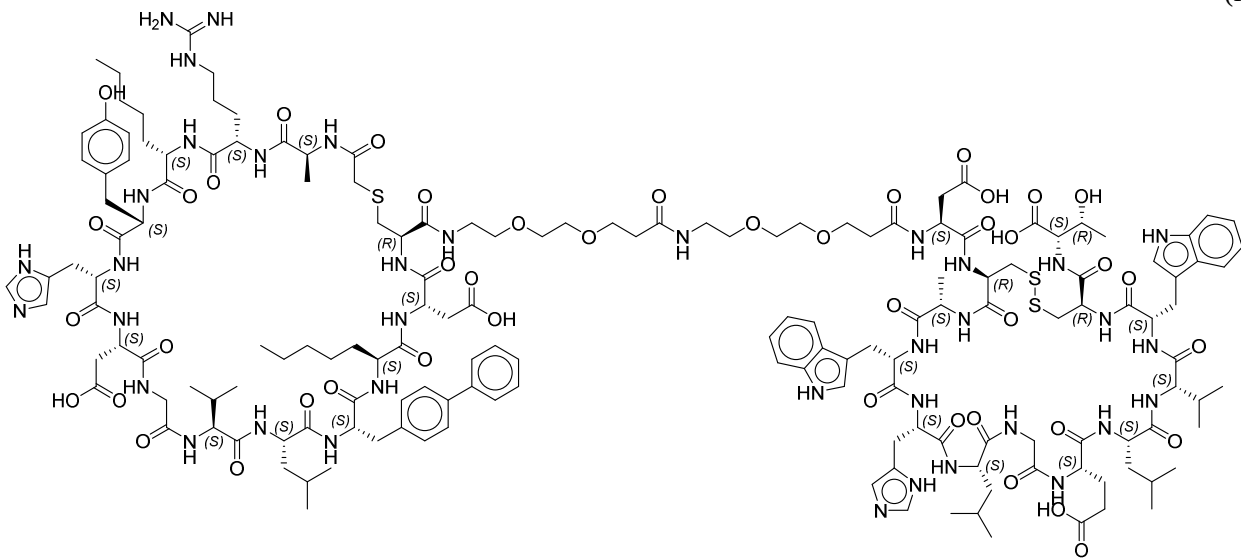
(I-31),



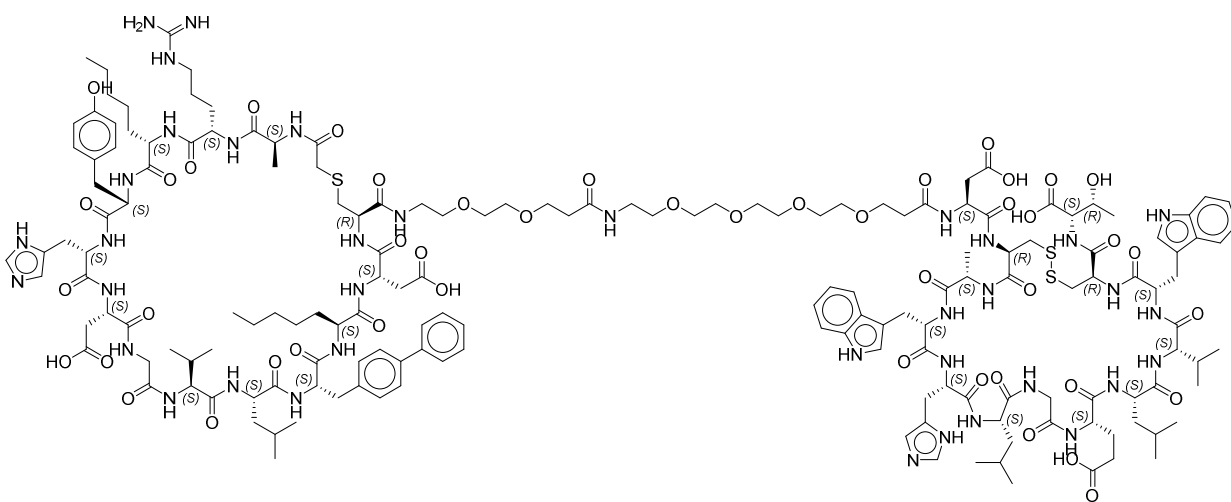
(I-32),



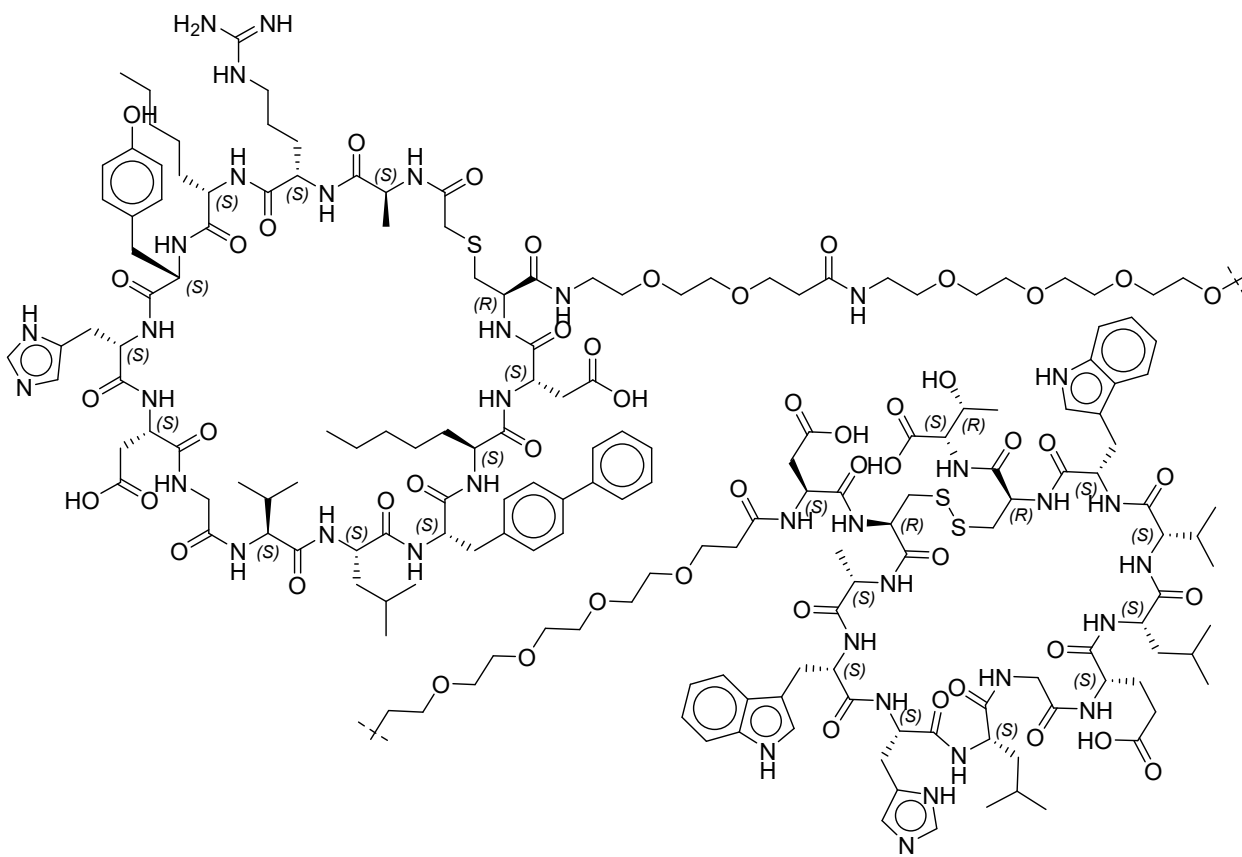
(I-33),



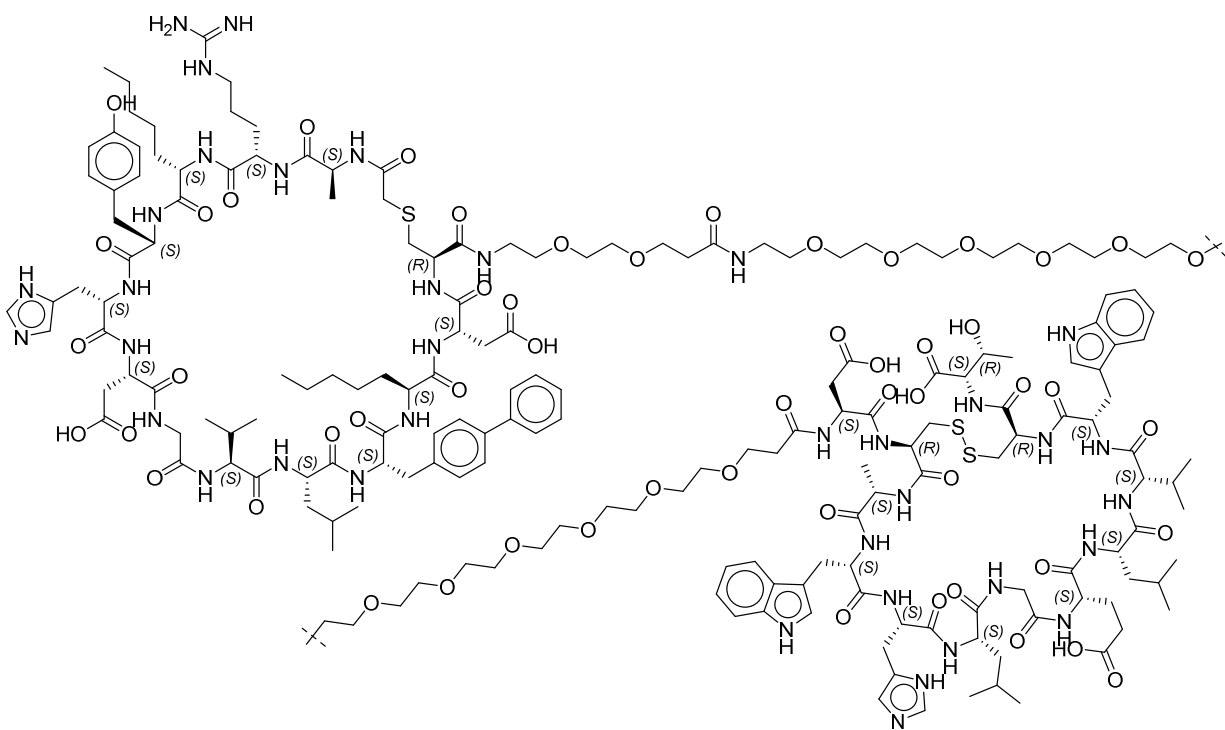
(I-34),



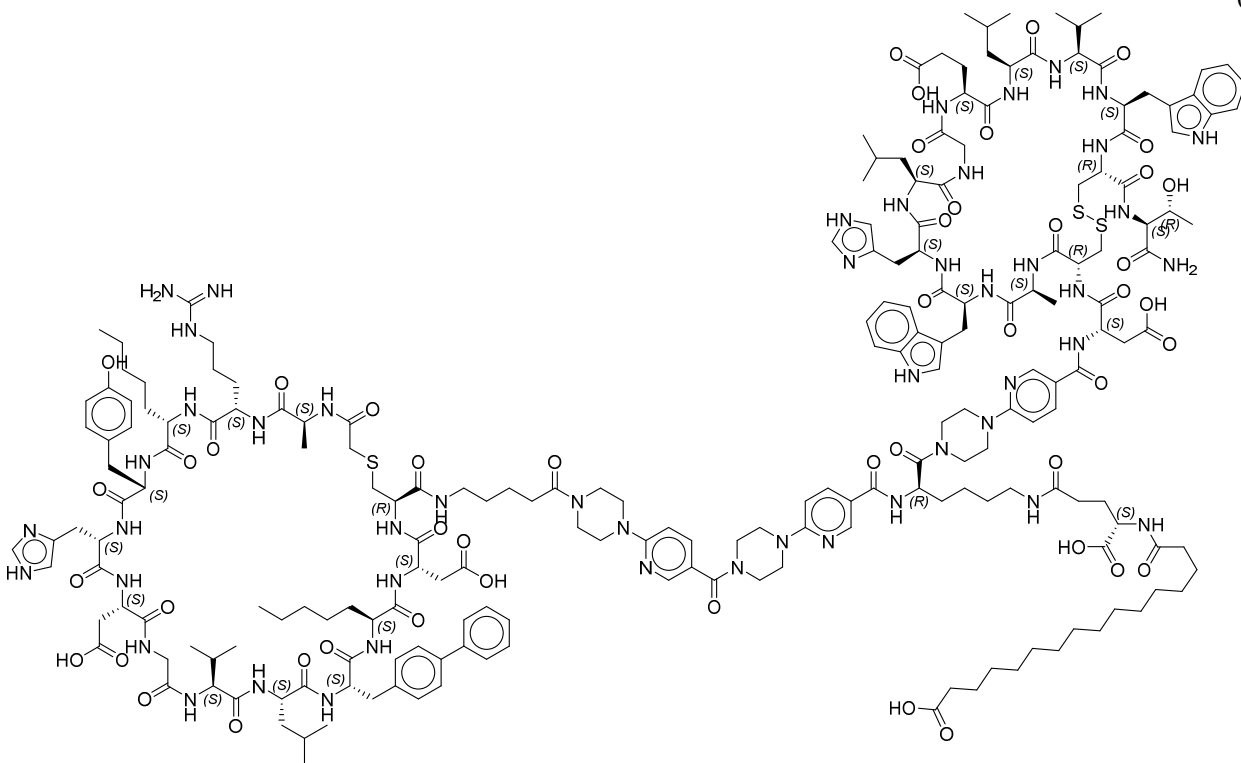
(I-35),



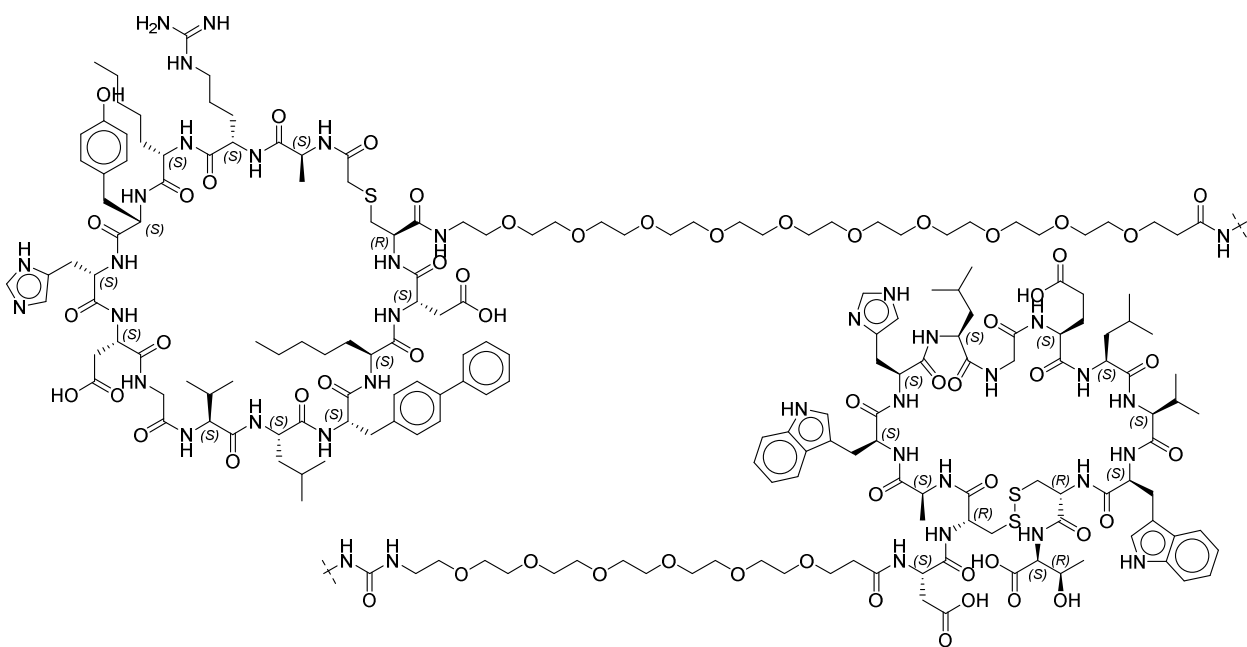
(I-36),



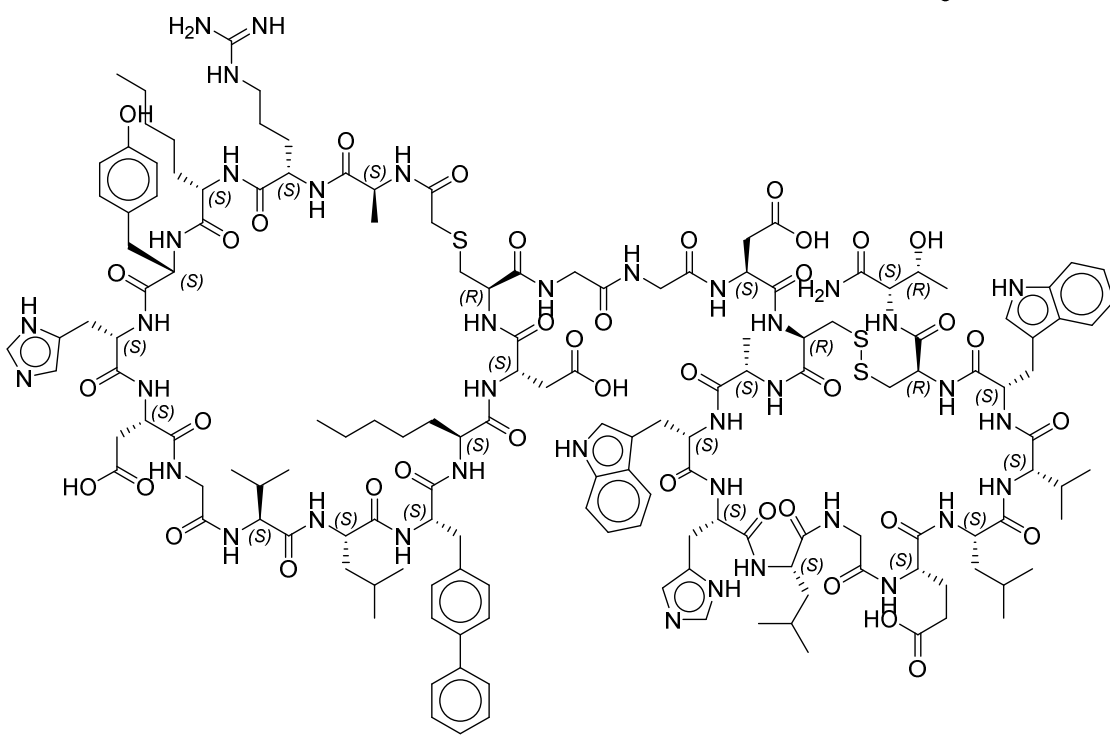
(I-37),



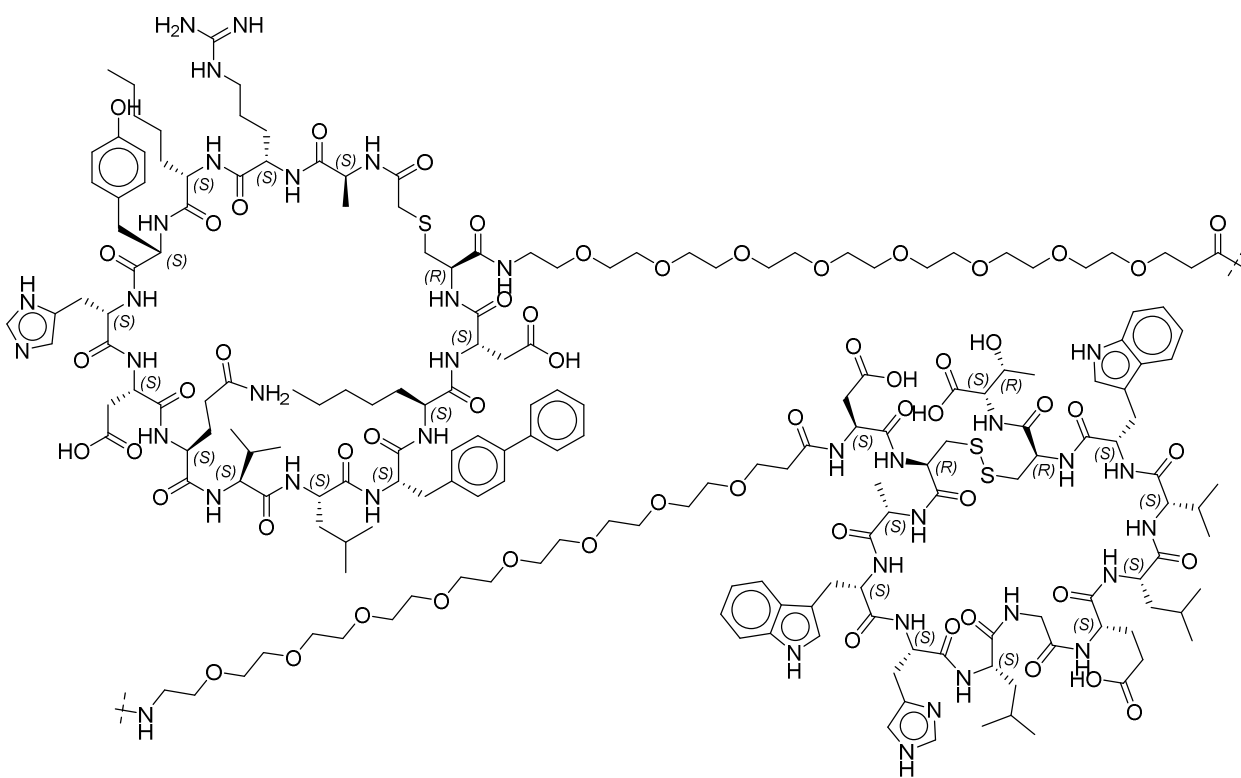
(I-38),



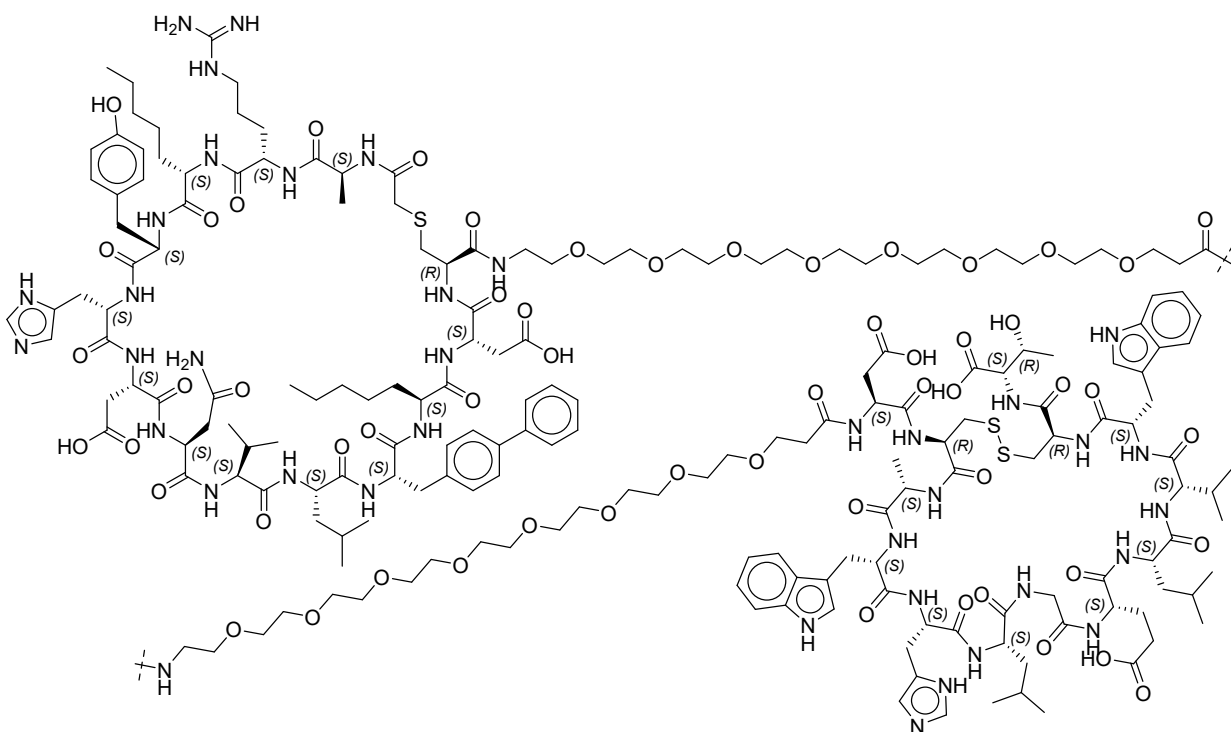
(I-39),



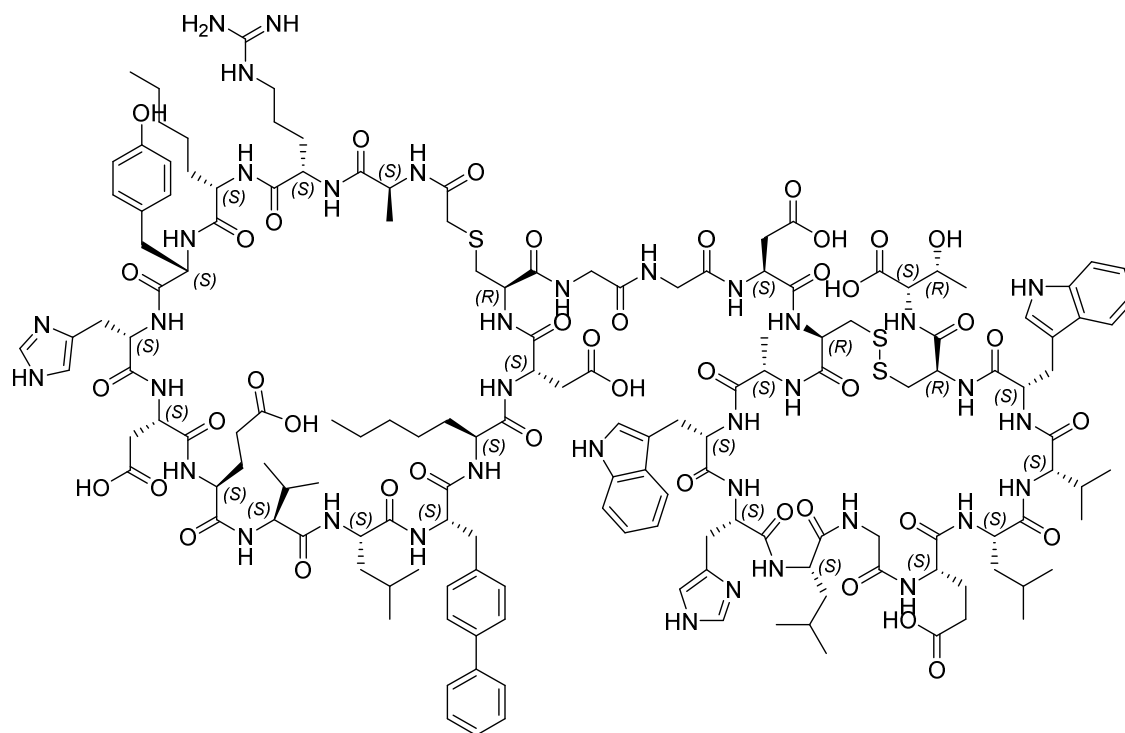
(I-40),



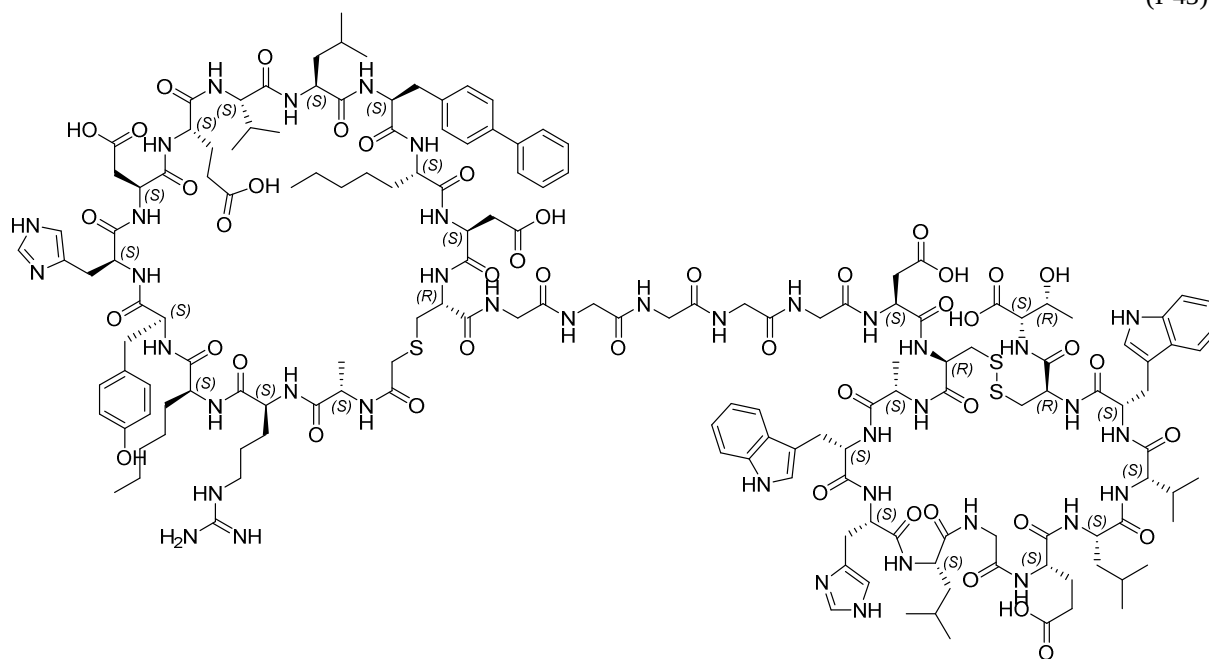
(I-41),



(I-42),



(I-43),



(I-44),

(I-45),

(I-46), or

or pharmaceutically acceptable salt thereof.

21. The agent of any one of claims 1-20, wherein the agent binds to CD38 as measured by SPR with a Kd no more than 200 nM.
22. A composition comprising an agent of any one of claims 1-21, and a population of cells.
23. The composition of claims 22, wherein the cells comprise NK cells, engineered NK cells, NK cells expanded ex vivo, memory-like NK cells, cytokine-induced memory like NK cells, NKT cells, monocytes, and/or macrophages.
24. The composition of claim 23, wherein the composition comprises an immunoglobulin.
25. The composition of claim 24, wherein the immunoglobulin is intravenous immunoglobulin.
26. A pharmaceutical composition comprising an agent of any one of claims 1-21 or a composition of any one of claims 22-25 and a pharmaceutically acceptable carrier.
27. The composition of claim 26, wherein the composition comprises an immunoglobulin.
28. The composition of claim 27, wherein the immunoglobulin is intravenous immunoglobulin.
29. The agent according to any one of claims 1-21 or the composition according to any one of claims

22-28 for use in treating a CD38-associated cancer.

30. The use of claim 29, wherein the cells comprise NK cells, engineered NK cells, NK cells expanded ex vivo, memory-like NK cells, cytokine-induced memory like NK cells, NKT cells, monocytes, and/or macrophages.

31. The use of claim 29 or 30, wherein the cells are to be administered concurrently with the agent or composition.

32. The use of any one of claims 29-31, wherein the cells are to be administered concurrently with the agent or composition in a composition comprising the cells and the agent or composition.

33. The use of claim 29 or 30, wherein the cells are to be administered prior to or subsequently to the administration of the agent or composition.

34. The use of any one of claims 29-33, wherein intravenous immunoglobulin is to be administered concurrently with, prior to or subsequently to with the agent or composition.

35. The use of any one of claims 29-32, wherein an administration of an agent is followed by one or more doses of cells of any one of the preceding claims and/or one or more dose of cells of any one of the preceding claims and an agent of any one of the preceding claims.

36. The agent according to any one of claims 1-21 or the composition according to any one of claims 22-28 for use in recruiting an antibody to a cell comprising or expressing CD38.

37. The use of claim 36, wherein the cell comprising or expressing CD38 is a tumor cell.

38. The agent according to any one of claims 1-20 or the composition according to any one of claims 22-28 for use in recruiting immune activity to a cell comprising or expressing CD38.

39. The method of claim 37, wherein the cell comprising or expressing CD38 is a tumor cell.