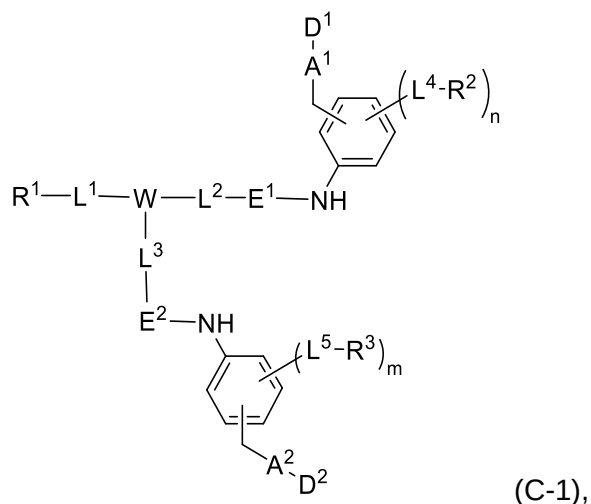


CLAIMS

1. A compound or pharmaceutically acceptable salt thereof, of formula (C-1):



- 5 wherein:

R^1 is an attachment group;

L^1 is a bridging spacer;

W is N or CR^w , wherein R^w is H or C_1 - C_6 alkyl (e.g. R^w is H);

L^2 and L^3 are each independently a connecting spacer;

- 10 E^1 and E^2 are each independently a peptide group comprising 1 to 6 amino acids, wherein said peptide group is optionally substituted by a hydrophilic group;

A^1 and A^2 are each independently a bond, $-OC(=O)-^*$, $-\zeta-O-\overset{\overset{O}{\parallel}}{P}-\zeta-^*$, $-\zeta-O-\overset{\overset{O}{\parallel}}{P}-O-\overset{\overset{O}{\parallel}}{P}-\zeta-^*$, $-\zeta-O-\overset{\overset{O}{\parallel}}{P}-O-\zeta-^*$, $-\zeta-O-\overset{\overset{O}{\parallel}}{P}-O-\overset{\overset{O}{\parallel}}{P}-O-\zeta-^*$, $-OC(=O)N(CH_3)CH_2CH_2N(CH_3)C(=O)-^*$ or $-OC(=O)N(CH_3)C(R^a)_2C(R^a)_2N(CH_3)C(=O)-^*$,

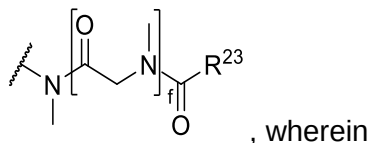
- 15 wherein each R^a is independently selected from H, C_1 - C_6 alkyl, and C_3 - C_8 cycloalkyl and the $*$ of A^1 or A^2 indicates the point of attachment to D^1 or D^2 ;

D¹ and D² are each independently a pharmaceutically active drug, optionally with the proviso that neither D¹ nor D² is a BH3 mimetic;

L⁴ and L⁵ are each independently a spacer moiety;

R² and R³ are each independently selected from:

- 5 (i) a polysarcosine with the following moiety:



f is an integer between 3 and 25; and

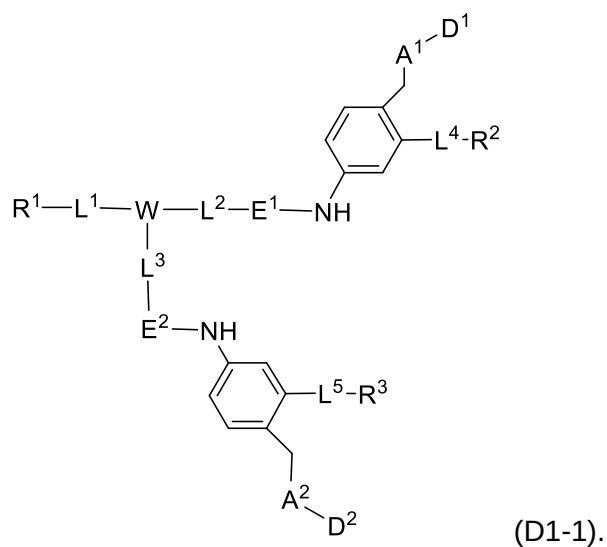
R²³ is H, -CH₃ or -CH₂CH₂C(=O)OH;

- 10 (ii) a polyethylene glycol of formula:
and h are independently an integer between 2 and 30; and

m and n are each independently 1;

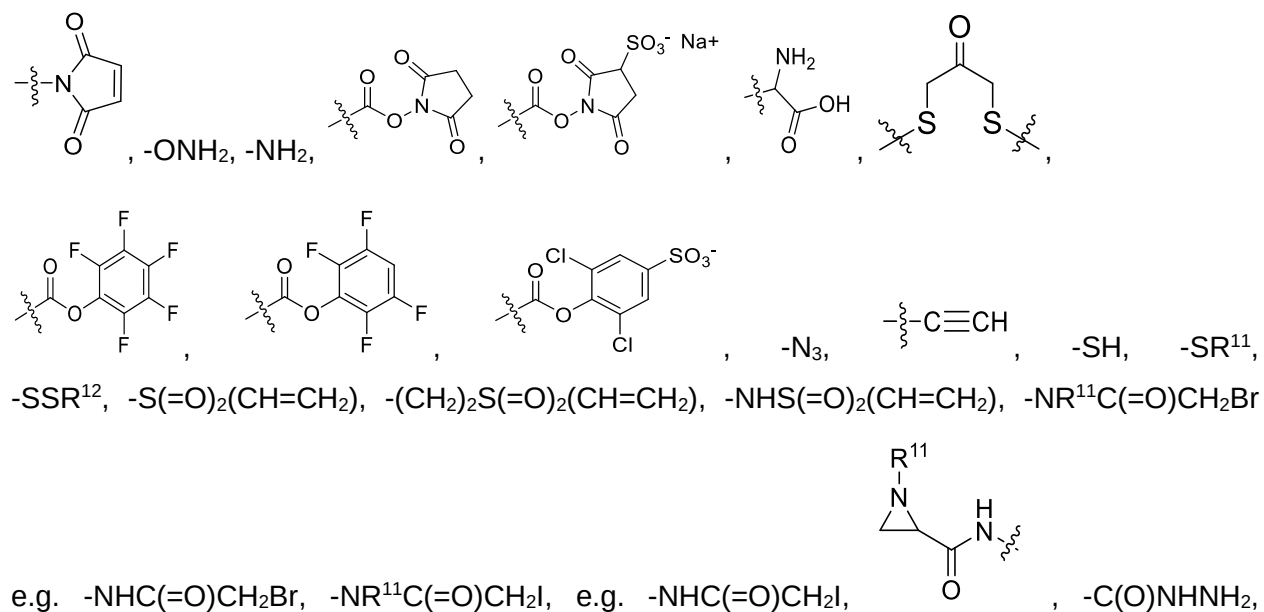
or a pharmaceutically acceptable salt thereof.

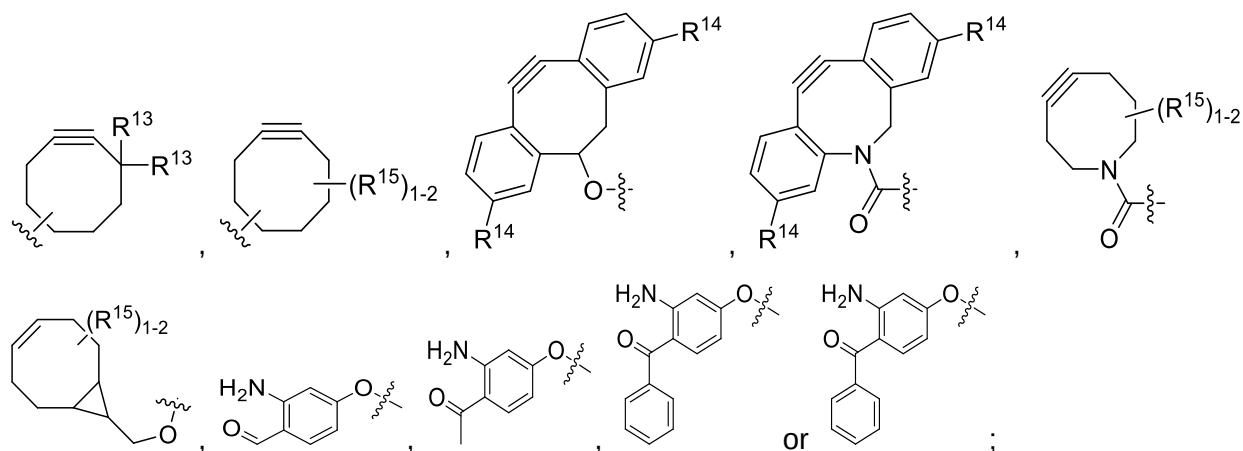
- 15 **2.** The compound or pharmaceutically acceptable salt thereof according to claim 1, of formula (D1-1)



3. The compound or pharmaceutically acceptable salt thereof according to claim 1 or claim 2, wherein R¹ is selected from the group consisting of:

5





wherein:

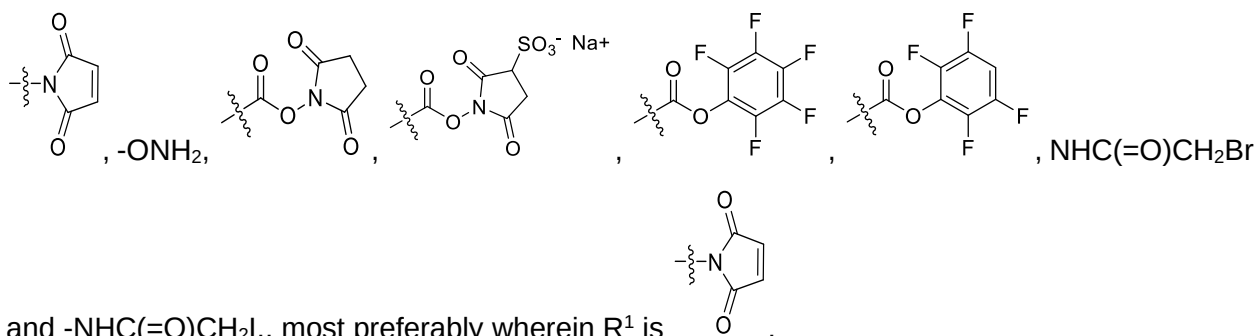
each R¹¹ is independently selected from H and C₁-C₆alkyl;

5 each R¹² is 2-pyridyl or 4-pyridyl;

each R¹³ is independently selected from H, C₁-C₆alkyl, F, Cl, and -OH;

each R¹⁴ is independently selected from H, C₁-C₆alkyl, F, Cl, -NH₂, -OCH₃, -OCH₂CH₃, -N(CH₃)₂, -CN, -NO₂ and -OH; and

10 each R¹⁵ is independently selected from H, C₁-C₆alkyl, fluoro, benzyloxy substituted with -C(=O)OH, benzyl substituted with -C(=O)OH, C₁-C₄alkoxy substituted with -C(=O)OH and C₁-C₄alkyl substituted with -C(=O)OH, preferably wherein R¹ is selected from the group consisting of:

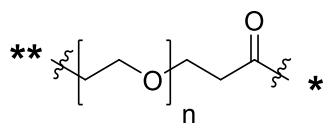
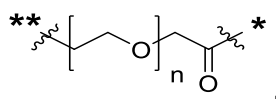


and -NHC(=O)CH₂l., most preferably wherein R¹ is

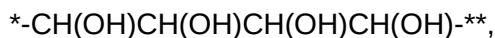
15

4. The compound or pharmaceutically acceptable salt thereof according to any one of the preceding claims, wherein:

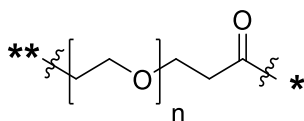
(1) L¹ comprises:



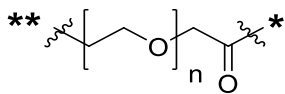
or



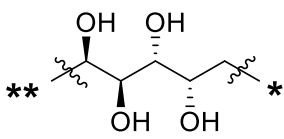
wherein each n is an integer from 1 to 12, wherein the $*$ of L^1 indicates the point of direct or indirect (e.g. direct) attachment to W , and the $**$ of L^1 indicates the point of direct or indirect (e.g. direct) attachment to R^1 ;



(2) L^1 is , and n is an integer from 1 to 12 or n is 1 or n is 12, wherein the $*$ of L^1 indicates the point of direct or indirect (e.g. direct) attachment to W , and the $**$ of L^1 indicates the point of direct or indirect (e.g. direct) attachment to R^1 ;

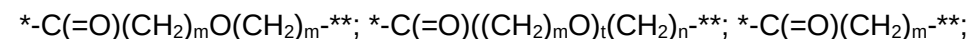
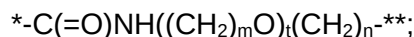
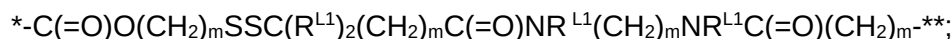
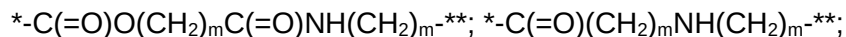
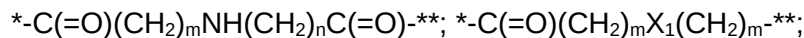
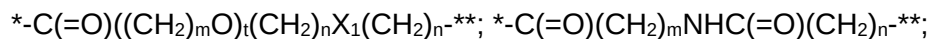
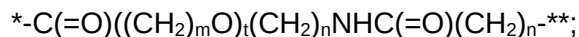
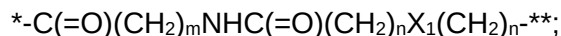
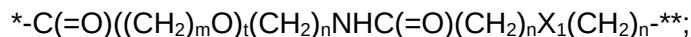


(3) L^1 is , and n is an integer from 1 to 12, wherein the $*$ of L^1 indicates the point of direct or indirect (e.g. direct) attachment to W , and the $**$ of L^1 indicates the point of direct or indirect (e.g. direct) attachment to R^1 ;

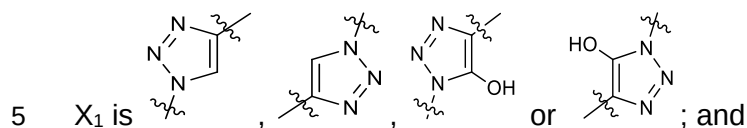


(4) L^1 comprises , wherein the $*$ of L^1 indicates the point of direct or indirect (e.g. direct) attachment to W , and the $**$ of L^1 indicates the point of direct or indirect (e.g. direct) attachment to R^1 ; or

(5) L^1 is a bridging spacer comprising:



*-C(=O)((CH₂)_mO)_t(CH₂)_nC(=O)NH(CH₂)_m-**; *-C(=O)(CH₂)_mC(R^{L1})₂-** or
*-C(=O)(CH₂)_mC(=O)NH(CH₂)_m-**, wherein the * of L¹ indicates the point of direct or indirect (e.g. direct) attachment to W, and the ** of L¹ indicates the point of direct or indirect (e.g. direct) attachment to R¹;

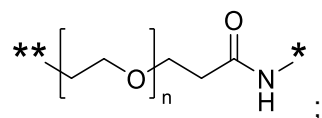


each m is independently selected from 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10;

each n is independently selected from 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10; and

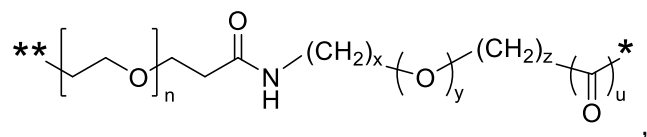
each t is independently selected from 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 30; and

- 10 each R^{L1} is independently selected from H and C₁-C₆alkyl, preferably wherein L¹ comprises a moiety represented by



- wherein n is an integer from 1 to 12 (e.g. 4 to 8, e.g. 4 or 8), wherein the * of L¹ indicates the point of direct or indirect (e.g. direct) attachment to W, and the ** of L¹ indicates the point of direct or indirect attachment to R¹.
- 15

5. The compound or pharmaceutically acceptable salt thereof according to any one of the preceding claims, wherein L¹ is represented by a formula



- 20 wherein

n is an integer from 1 to 12 (e.g. 4 to 8, e.g. 4 or 8);

x is an integer from 0 to 6 (e.g. 0 to 4, e.g. 0 to 2, e.g. 0 or 2);

y is 0 or 1;

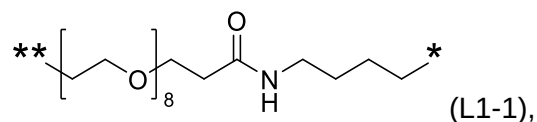
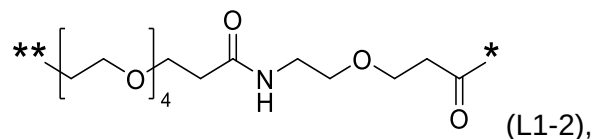
z is an integer from 0 to 6 (e.g. 0 to 4, e.g. 0 to 2, e.g. 0 or 2);

u is 0 or 1; and

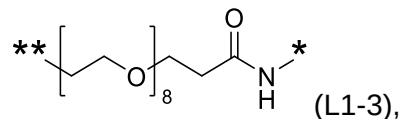
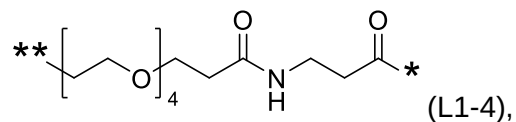
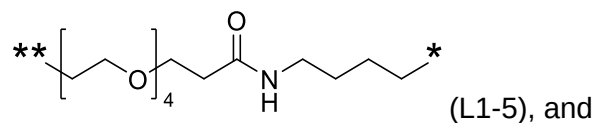
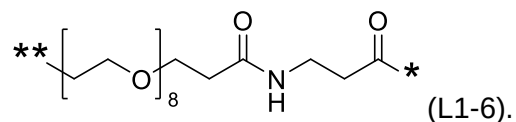
wherein the * of L¹ indicates the point of direct attachment to W, and the ** of L¹ indicates the point of direct attachment to R¹.

5

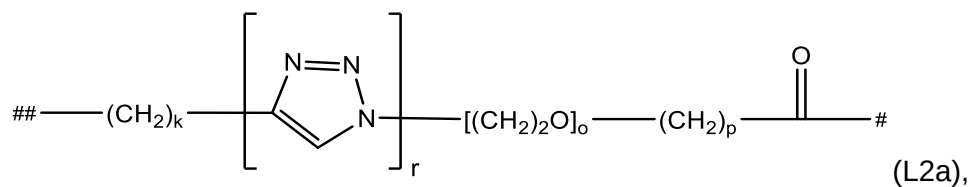
6. The compound or pharmaceutically acceptable salt thereof according to any one of the preceding claims, wherein L¹ is selected from the group consisting of:



10



15 7. The compound or pharmaceutically acceptable salt thereof according to any one of the preceding claims, wherein L² and L³ are each independently a connecting spacer comprising a moiety represented by:



wherein

k is an integer from 0 to 6;

r is 0 or 1;

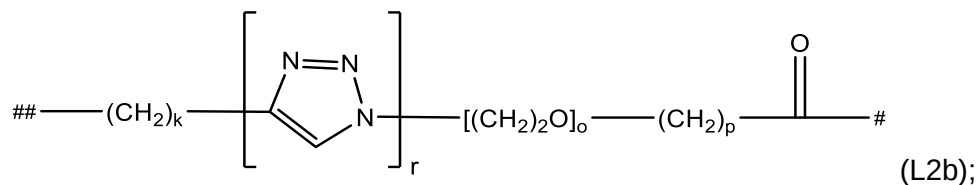
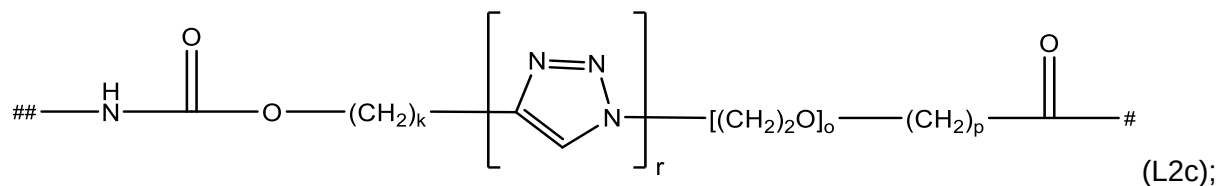
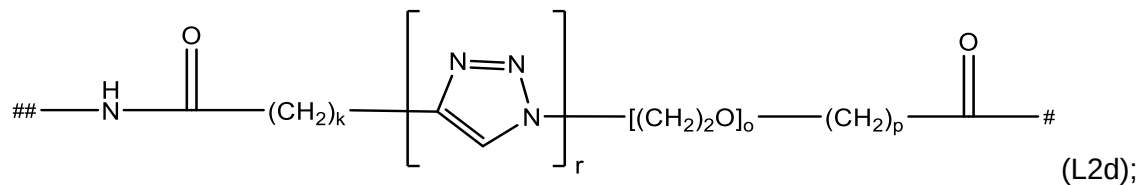
5 o is an integer from 0 to 12;

p is an integer from 0 to 6; and

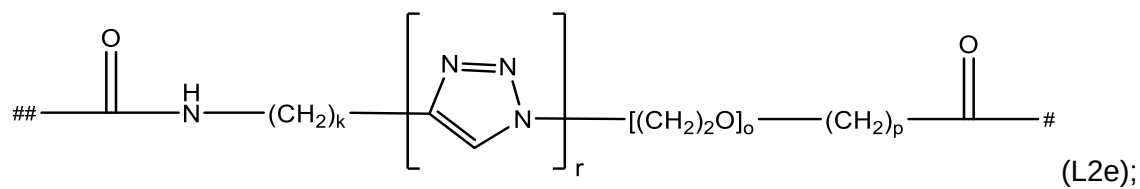
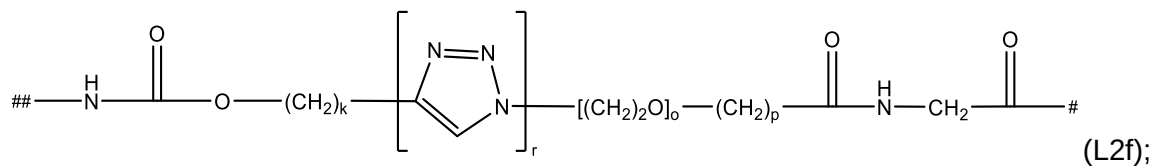
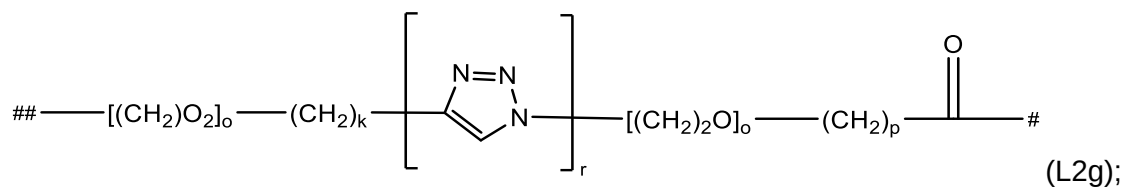
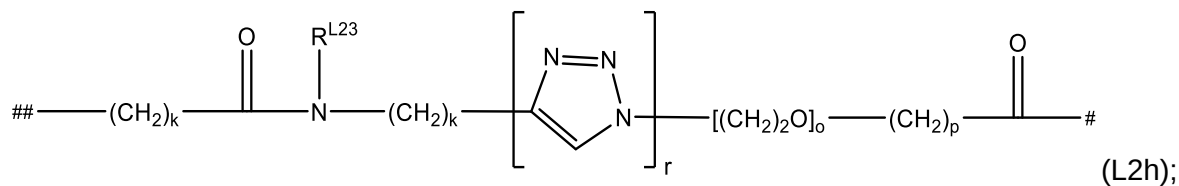
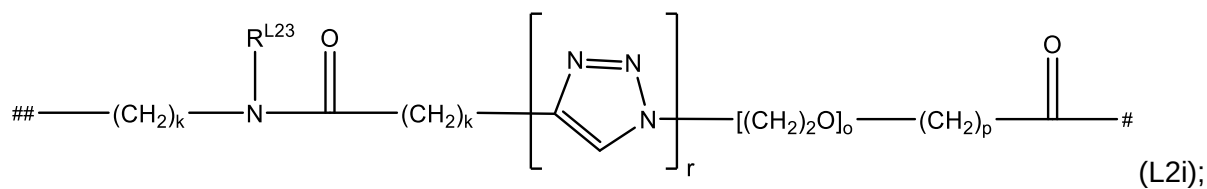
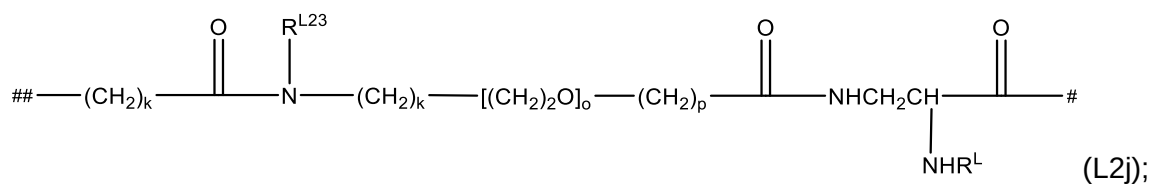
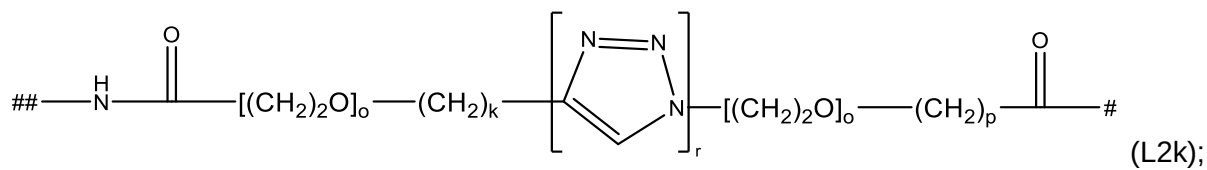
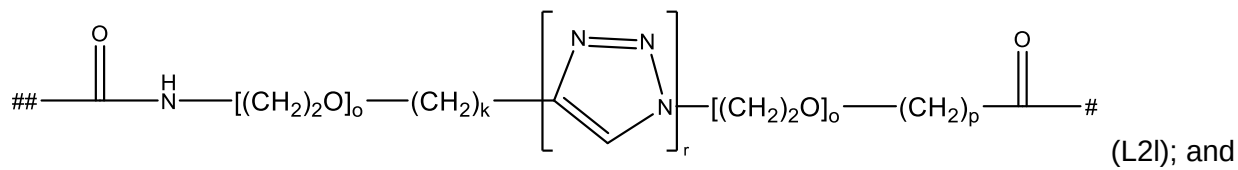
wherein the # of L² or L³ indicates the point of direct or indirect attachment to E¹ or E², respectively, and the ## of L² or L³ indicates the point of direct or indirect attachment to W.

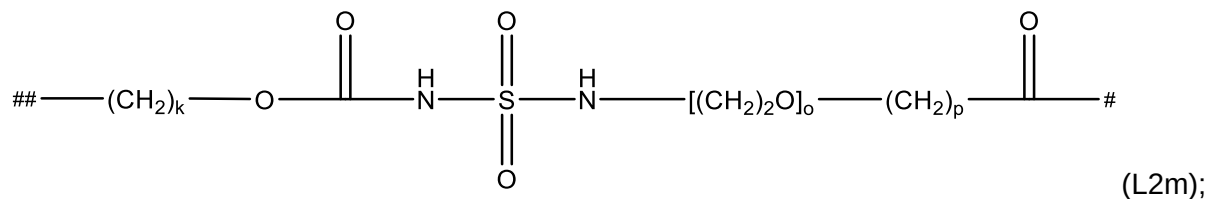
10 **8.** The compound or pharmaceutically acceptable salt thereof according to any one of the preceding claims, wherein

L² and L³ are each independently a connecting spacer selected from a group consisting of



15





wherein

k, in each occurrence, is independently an integer from 0 to 4;

r, in each occurrence, is independently 0 or 1;

5 o, in each occurrence, is independently an integer from 0 to 10;

p, in each occurrence, is independently an integer from 0 to 4;

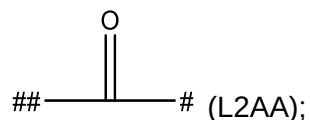
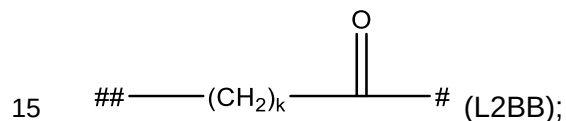
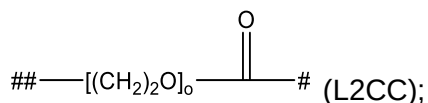
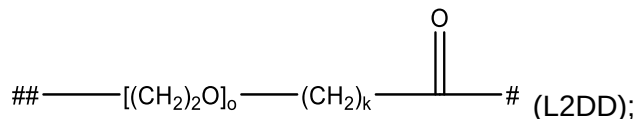
R^{L23} is hydrogen or C₁-C₆alkyl;

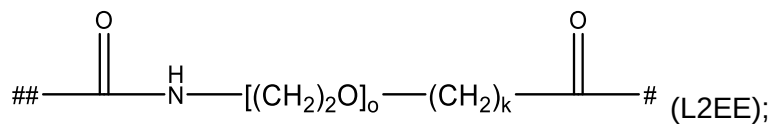
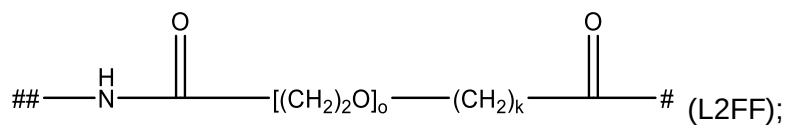
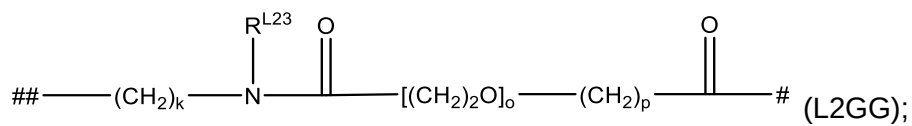
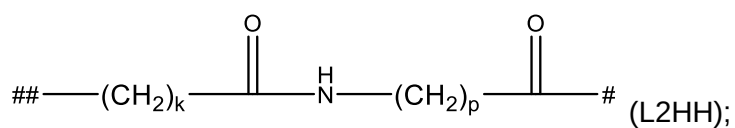
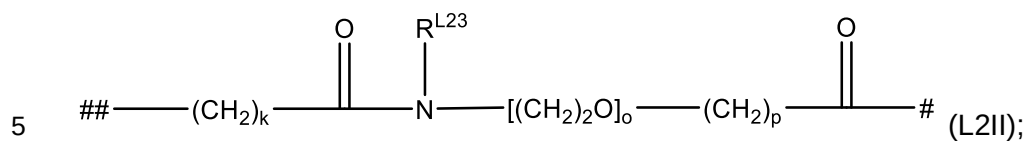
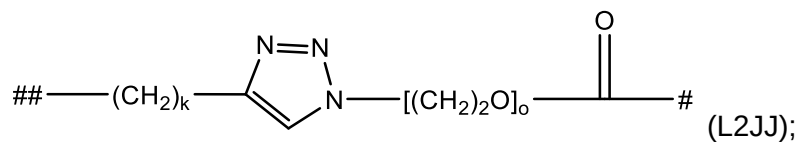
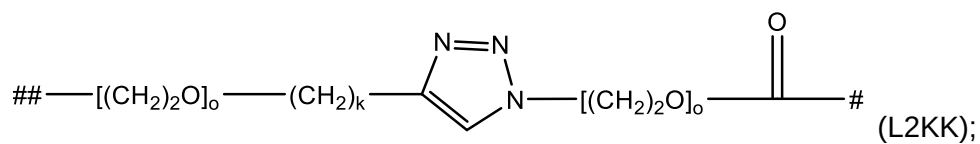
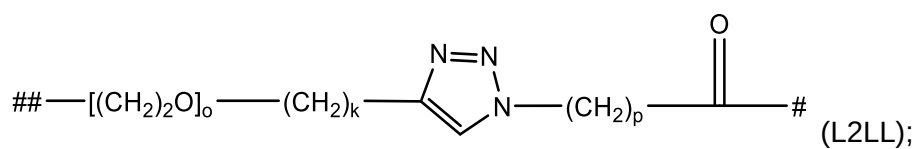
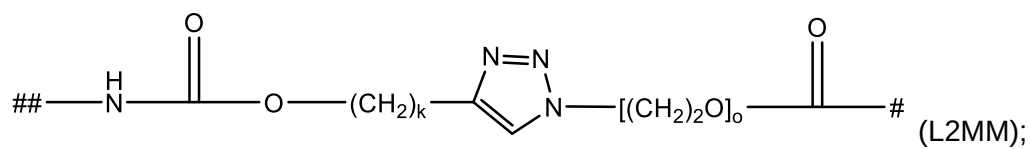
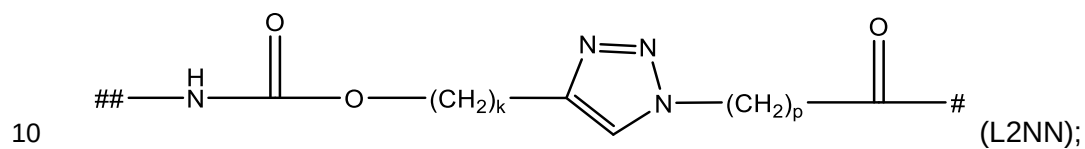
R^L is hydrogen or -C(O)-R^H;

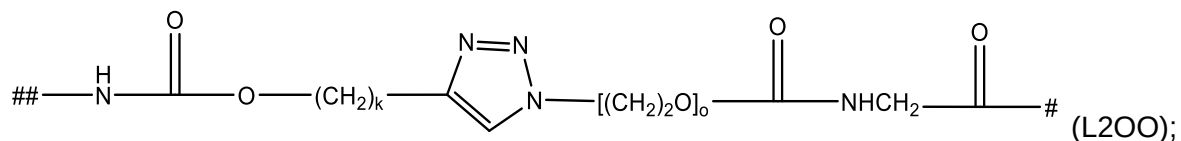
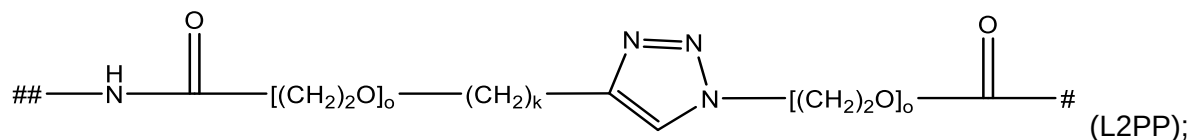
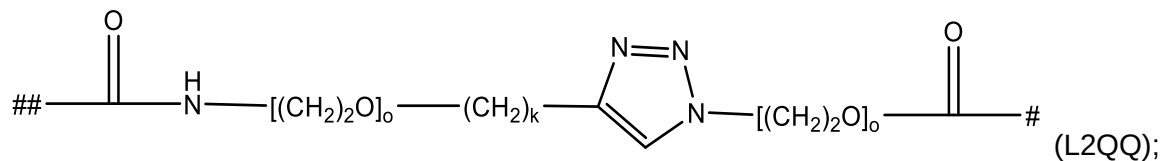
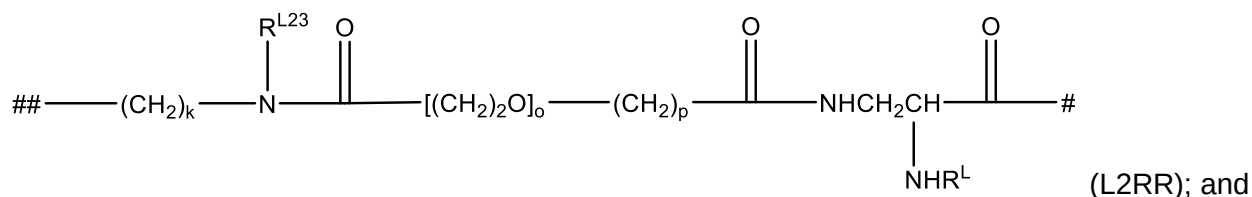
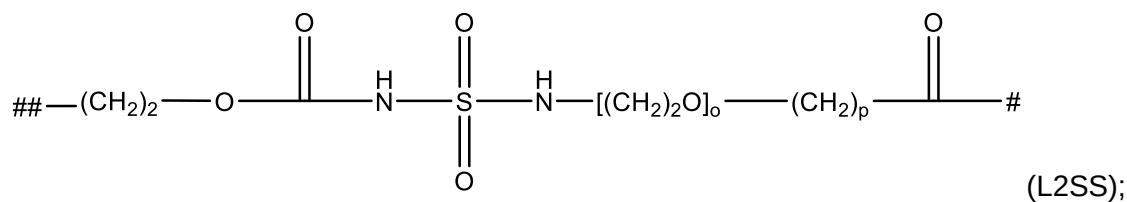
R^H is a hydrophilic group; and

10 the # of L² or L³ indicates the point of direct attachment to E¹ or E², respectively, and the ## of L² or L³ indicates the point of direct attachment to W;

provided that when W is N, L² and L³ are not (L2c), (L2d), (L2f) or (L2k), preferably wherein L² and L³ are each independently a connecting spacer selected from a group consisting of:







wherein

k, in each occurrence, is independently an integer from 1 to 3;

o, in each occurrence, is independently an integer from 1 to 9;

p, in each occurrence, is independently an integer from 1 to 3;

10 $\text{R}^{\text{L}^{23}}$ is hydrogen or $\text{C}_1\text{-C}_3$ alkyl;

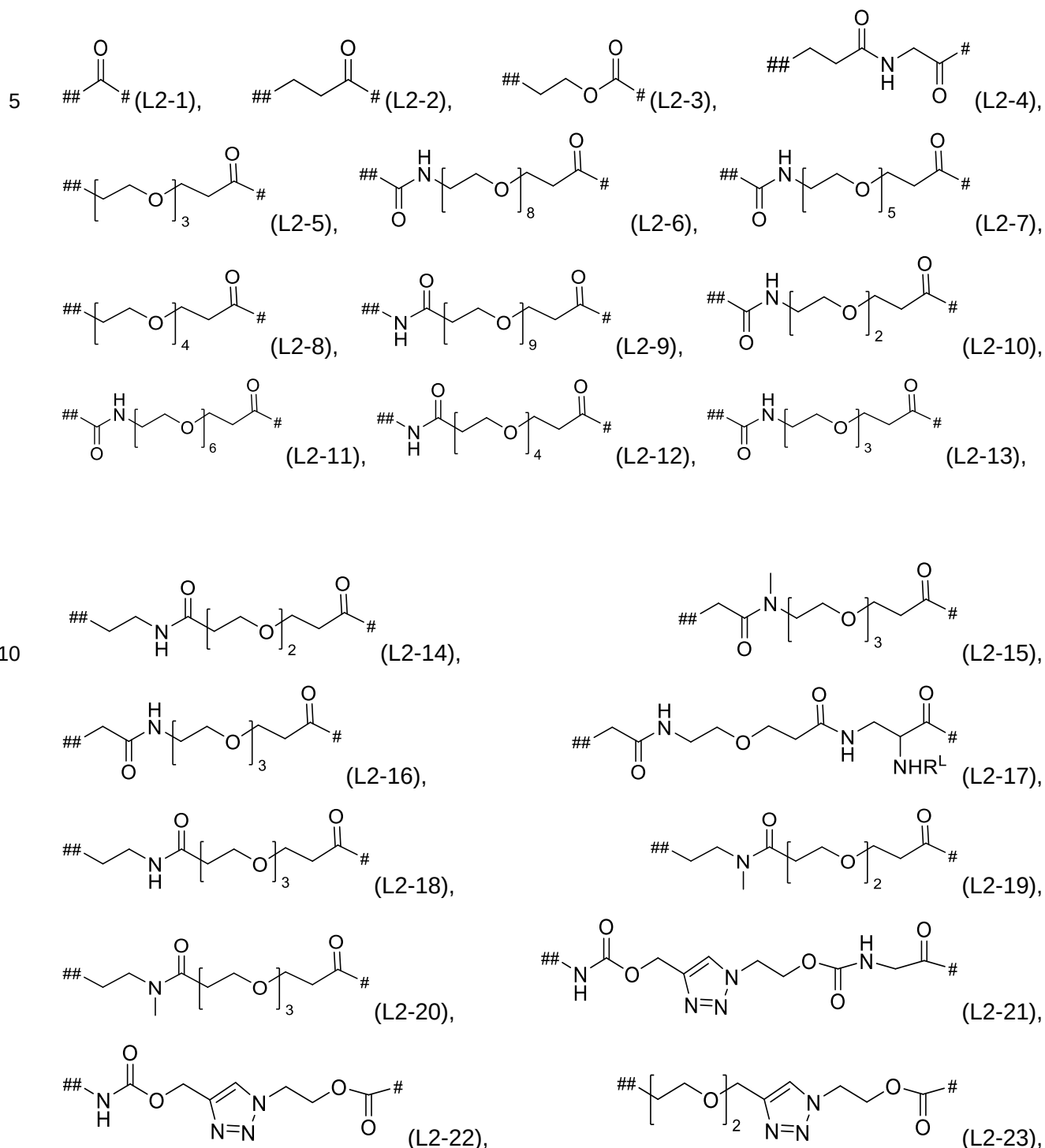
R^{L} is hydrogen or $-\text{C}(\text{O})-\text{R}^{\text{H}}$;

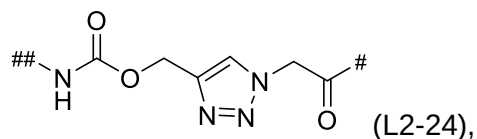
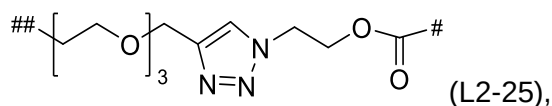
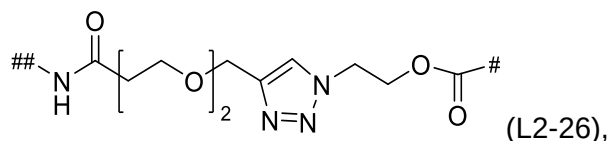
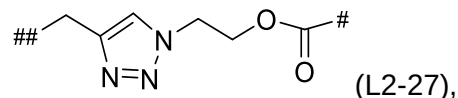
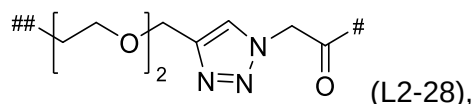
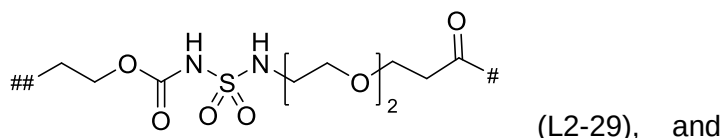
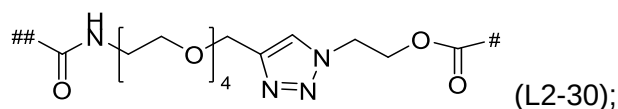
R^{H} is a hydrophilic group; and

the # of L^2 or L^3 indicates the point of direct attachment to E^1 or E^2 , respectively, and the ## of L^2 or L^3 indicates the point of direct attachment to W; provided that when W is N, L^2 and L^3 are not (L2FF), (L2MM), (L2NN), (L2OO), or (L2PP).

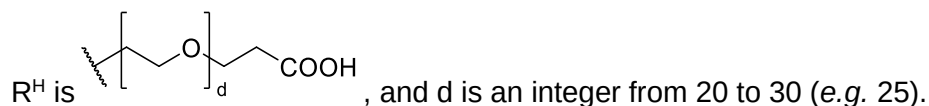
15

9. The compound or pharmaceutically acceptable salt thereof according to any one of the preceding claims, wherein L^2 and L^3 , independently, are a connecting spacer selected from a group consisting of:





- 5 wherein the # of L² or L³ indicates the point of direct attachment to E¹ or E², respectively, the ## of L² or L³ indicates the point of direct attachment to W; R^L is hydrogen or -C(O)-R^H; and

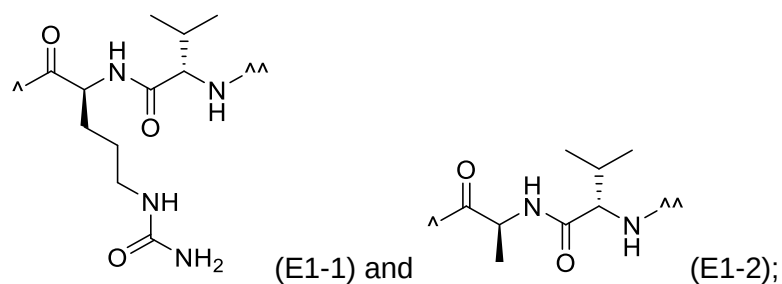


- 10 **10.** The compound or pharmaceutically acceptable salt thereof according to any one of claims 6 to 20, wherein each peptide group independently comprises 1 to 4, 1 to 3, or 1 to 2 amino acid residues, preferably wherein each amino acid residues is independently selected from glycine (Gly), L-valine (Val), L-citrulline (Cit), L-cysteic acid (sulfo-Ala), L-lysine (Lys), L-isoleucine (Ile), L-phenylalanine (Phe), L-methionine (Met), L-asparagine (Asn), L-proline (Pro), L-alanine (Ala), L-leucine (Leu), L-tryptophan (Trp), L-tyrosine (Tyr) and β -alanine (β -Ala).

15

- 11.** The compound or pharmaceutically acceptable salt according to any one of the preceding claims, wherein each peptide group is independently selected from Val-Cit, Phe-Lys, Val-Ala, Val-Lys, Leu-Cit, Cit-(β -Ala), Gly-Gly-Gly, Gly-Gly-Phe-Gly, and sulfo-Ala-Val-Ala.

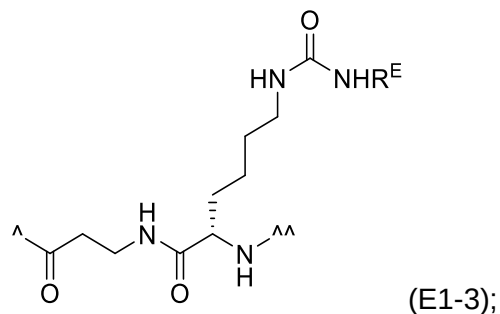
- 20 **12.** The compound or pharmaceutically acceptable salt according to any one of the preceding claims, wherein E¹ and/or E², independently, is/are each a peptide group selected from a group consisting of:



wherein $\wedge$ of E1-1 or E1-2 indicates the point of direct attachment to V^1 or V^2 in Formula (B) or direct attachment to the $-\text{NH}-$ group in Formula (C) and (D); and $\wedge\wedge$ of E1-1 or E1-2 indicates the point of direct attachment to L^2 or L^3 , respectively (e.g. where E^1 and E^2 are each a peptide group

5 independently selected from (E1-1) and (E1-2)).

13. The compound or pharmaceutically acceptable salt thereof according to any one of claims 1 to 10, wherein E^1 and/or E^2 , independently, is/are each a peptide group represented by



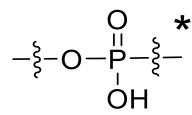
10 wherein R^E is a hydrophilic group R^H .

14. The compound or pharmaceutically acceptable salt thereof according to claim 13, wherein

the hydrophilic group R^H in (E1-3) is ; wherein e is an integer between 20 and 30 (e.g. 25).

15

15. The compound or pharmaceutically acceptable salt according to any one of the preceding



claims, wherein A¹ and A² are independently selected from a bond, and -OC(=O)-*, wherein * indicates the point of attachment to D¹ or D² respectively.

5 16. The compound or pharmaceutically acceptable salt according to any one of the preceding claims, wherein:

i) L⁴ and L⁵ are each independently a spacer moiety having the structure $\text{---} \text{Z} \text{---} \text{X} \text{---}$,

wherein:

10 Z is -O-, -CH₂-, -CH₂O-, -CH₂N(R^{L45})C(=O)O-, -NHC(=O)C(R^{L45})₂NHC(=O)O-, -NHC(=O)C(R^{L45})₂NH-, -NHC(=O)C(R^{L45})₂NHC(=O)-, -C(=O)NR^{L45}-, -C(=O)NH-, -CH₂NR^{L45}C(=O)-, -CH₂NR^{L45}C(=O)NH-, -CH₂NR^{L45}C(=O)NR^{L45}-, -NHC(=O)-, -NHC(=O)O-, -NHC(=O)NH-, -OC(=O)NH-, -S(O)₂NH-, -NHS(O)₂-, -C(=O)-, -C(=O)O- or -NH-, wherein each R^{L45} is independently selected from H, C₁-C₆alkyl, and C₃-C₈cycloalkyl; and

X is a bond, triazolyl, or -CH₂-triazolyl-,

15 wherein X is connected to R² or R³; or

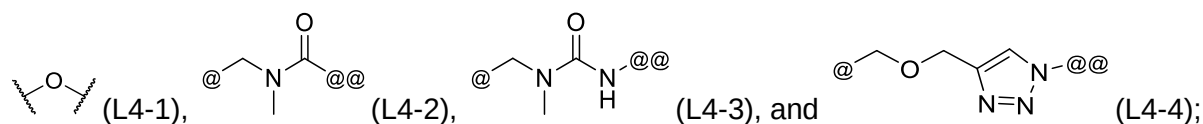
(ii) L⁴ and L⁵, independently, are a spacer moiety having the structure $\text{---} \text{Z} \text{---} \text{X} \text{---}$,

wherein:

20 Z is -CH₂-, -CH₂O-, -CH₂N(R^{L45})C(=O)O-, -NHC(=O)C(R^{L45})₂NHC(=O)O-, -NHC(=O)C(R^{L45})₂NH-, -NHC(=O)C(R^{L45})₂NHC(=O)-, -C(=O)NR^b-, -C(=O)NH-, -CH₂NR^{L45}C(=O)-, -CH₂NR^{L45}C(=O)NH-, -CH₂NR^{L45}C(=O)NR^{L45}-, -NHC(=O)-, -NHC(=O)O-, -NHC(=O)NH-, -OC(=O)NH-, -S(O)₂NH-, -NHS(O)₂-, -C(=O)-, -C(=O)O- or -NH-, wherein each R^{L45} is independently selected from H, C₁-C₆alkyl, and C₃-C₈cycloalkyl; and

25 X is -CH₂-triazolyl-C₁-C₄alkylene-OC(O)NHS(O)₂NH-, -C₄-C₆cycloalkylene-OC(O)NHS(O)₂NH-, -(CH₂CH₂O)_n-C(O)NHS(O)₂NH-, -(CH₂CH₂O)_n-C(O)NHS(O)₂NH-(CH₂CH₂O)_n-, -CH₂-triazolyl-C₁-C₄alkylene-OC(O)NHS(O)₂NH-(CH₂CH₂O)_n-, -C₄-C₆cycloalkylene-OC(O)NHS(O)₂NH-(CH₂CH₂O)_n-, wherein each n independently is 1, 2, or 3,

wherein X is connected to R² or R³, preferably wherein L⁴ and L⁵ are each independently a spacer moiety selected from a group consisting of



wherein the @ of L⁴ or L⁵ indicates the point of direct attachment to the phenyl group, and the @@ of L⁴ or L⁵ indicates the point of direct attachment to R² or R³.

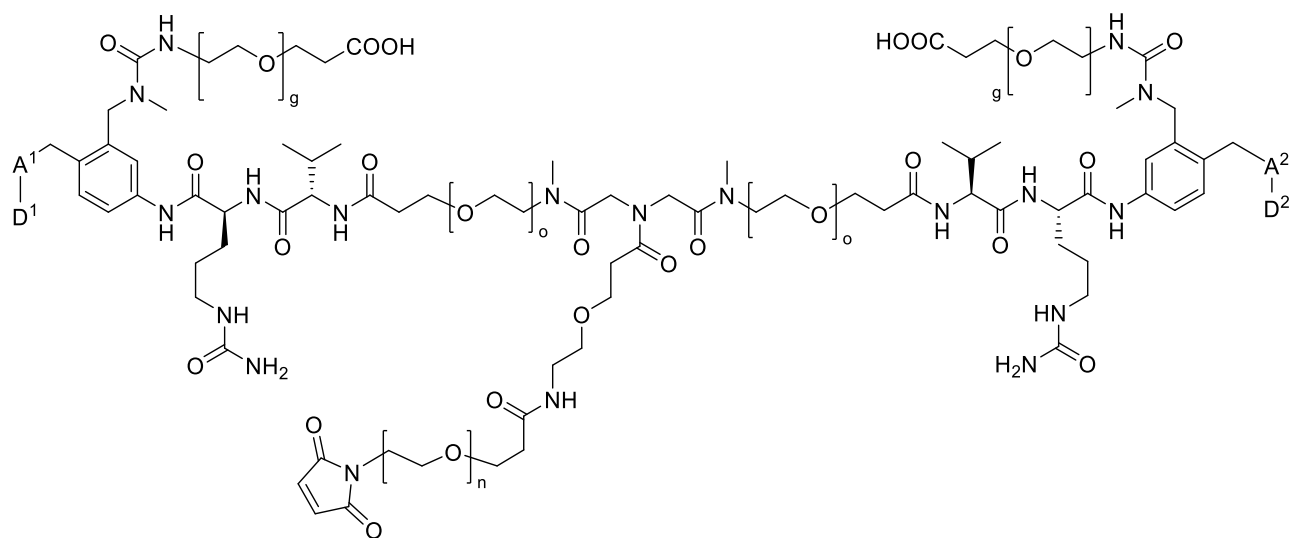
17. The compound or pharmaceutically acceptable salt thereof according to any one of the preceding claims, wherein R² and R³ each independently comprises a polyethylene glycol of

formula: or , wherein g and h are independently an integer between 2 and 30.

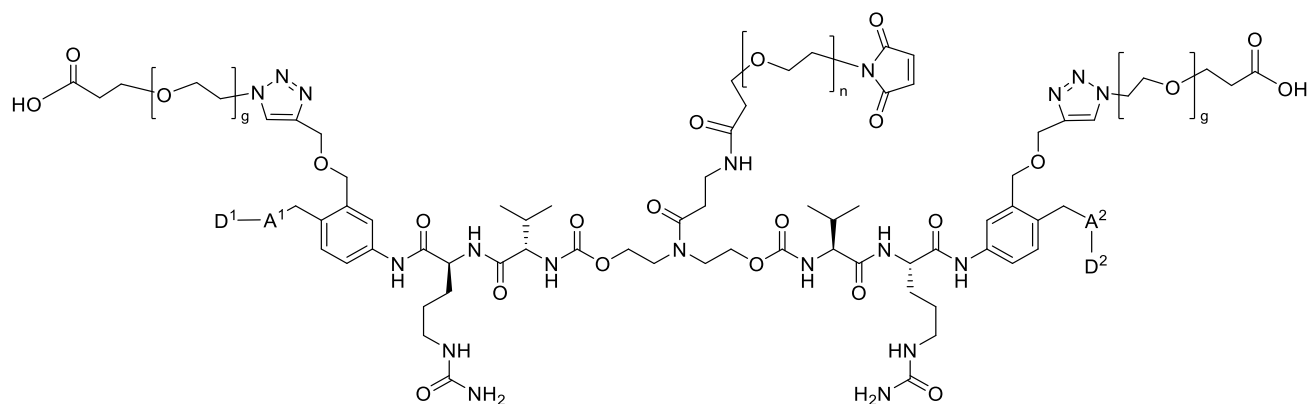
18. A conjugate comprising an antibody or an antigen-binding fragment thereof covalently linked to two pharmaceutically active drugs through a dual linker, wherein the dual linker has one attachment point connected to the antibody and two attachment points to the two pharmaceutically active drugs, with the proviso that neither pharmaceutically active drug is a BH3 mimetic, and wherein the conjugate comprises the compound or pharmaceutically acceptable salt thereof according to any one of claims 1 to 16.

19. A composition comprising multiple copies of the antibody-drug conjugate according to claim 18, wherein the average a of the antibody-drug conjugates in the composition is from about 1 to about 8, e.g., about 1 to about 6, about 1 to about 4, or about 1 to about 2.

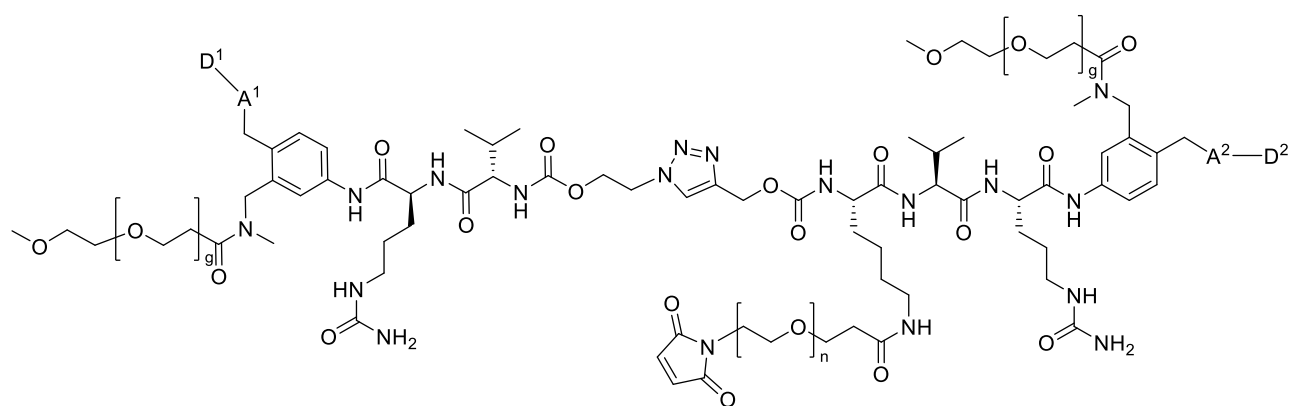
20. The compound or pharmaceutically acceptable salt thereof according to any one of claims 1 to 17, represented by any one of the following formulae:



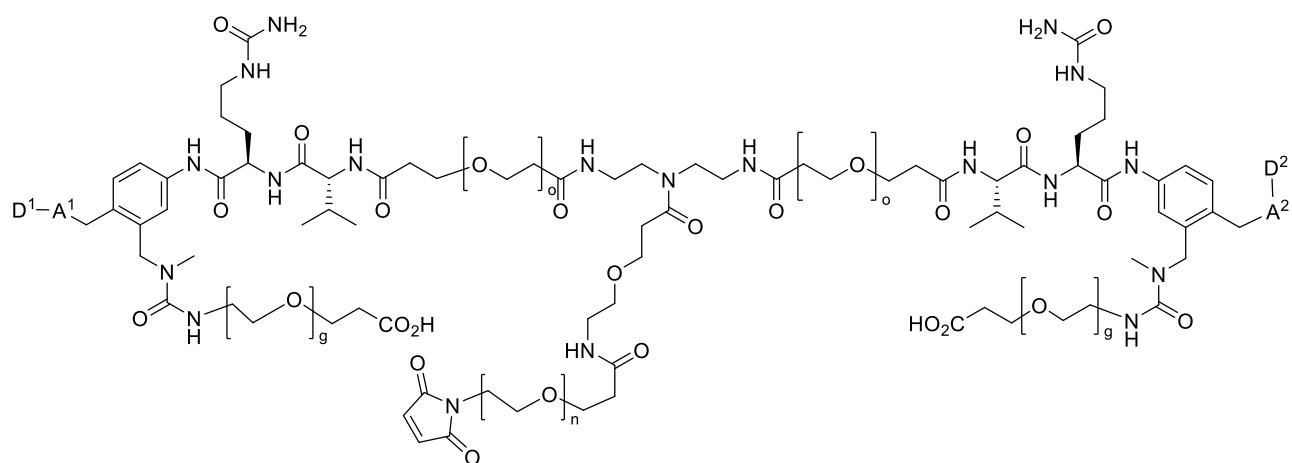
(D4a-1),



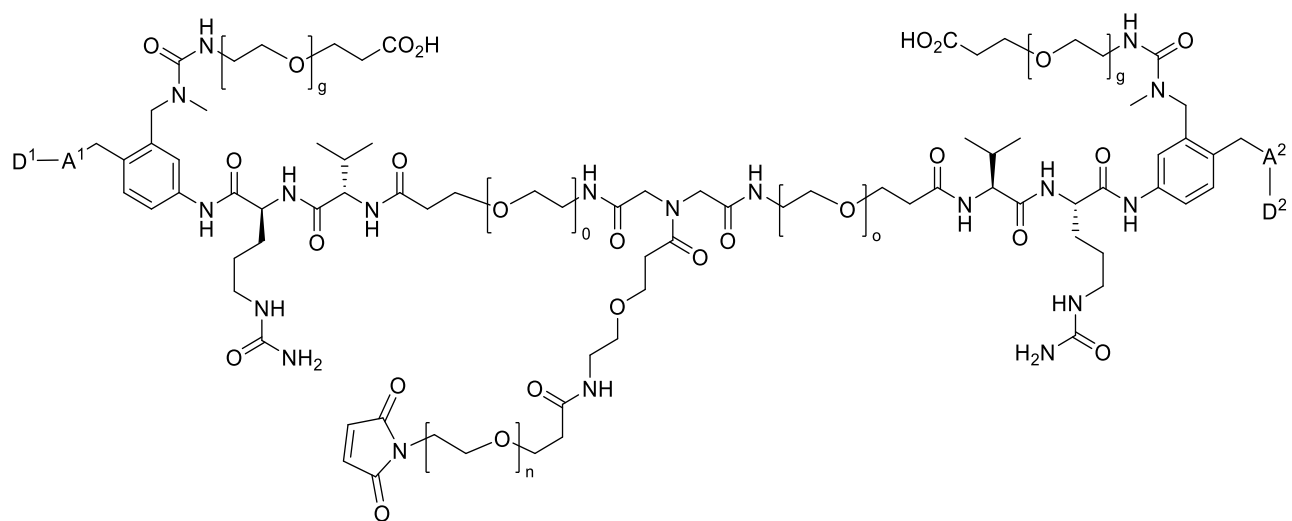
(D4b-1),



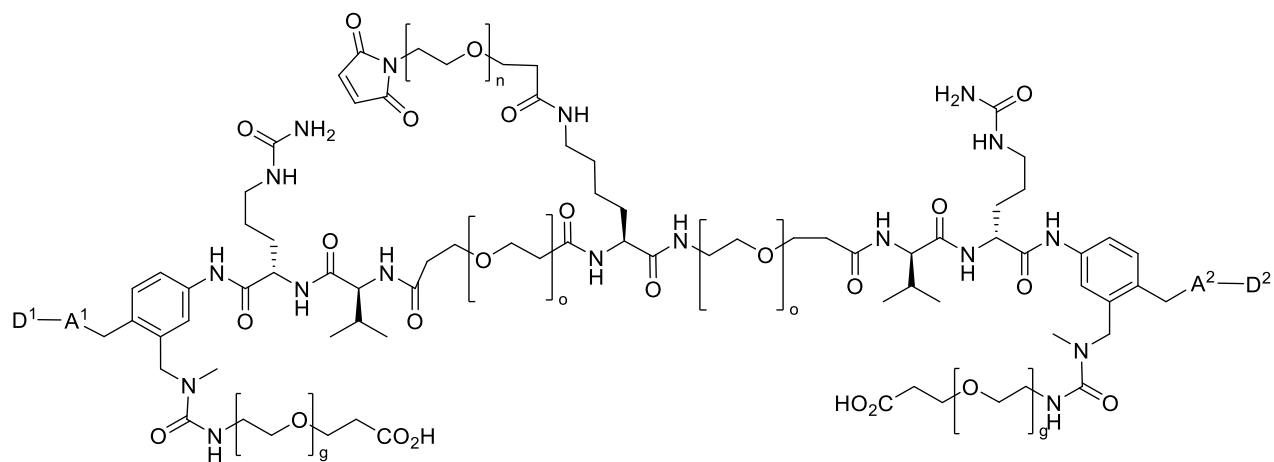
(D4c-1),



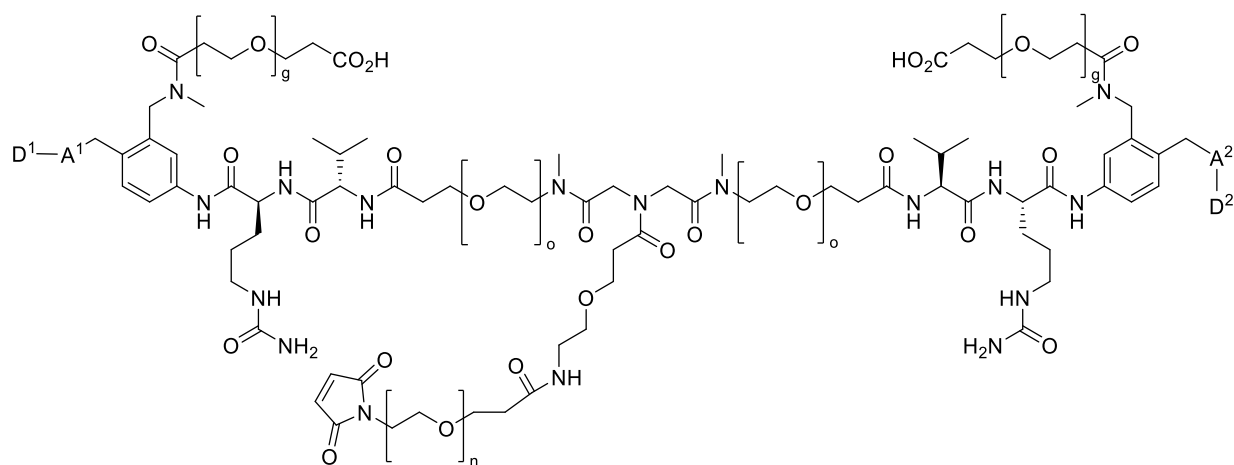
(D4d-1),



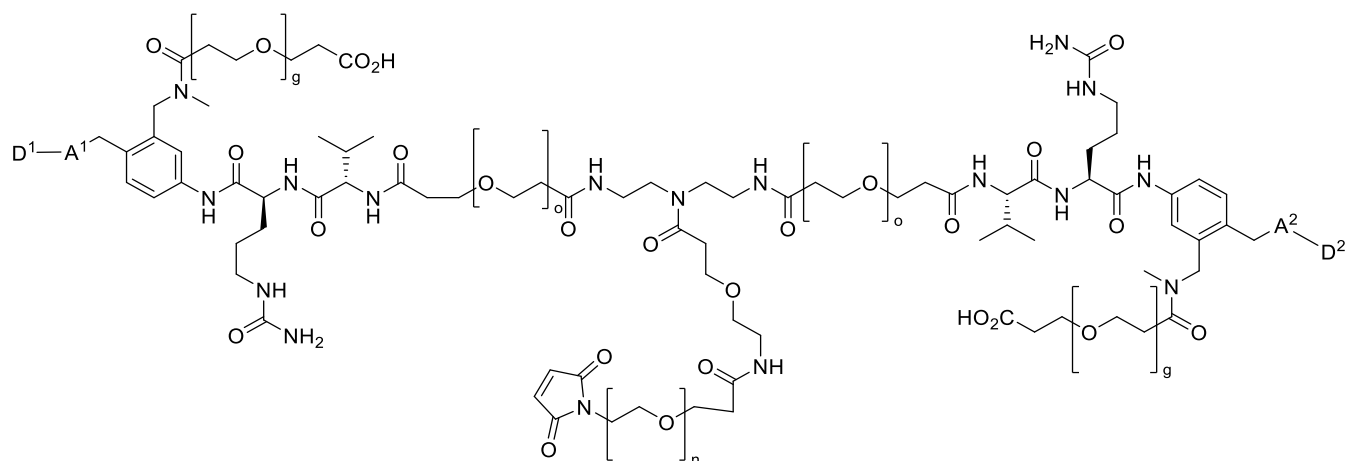
(D4e-1),



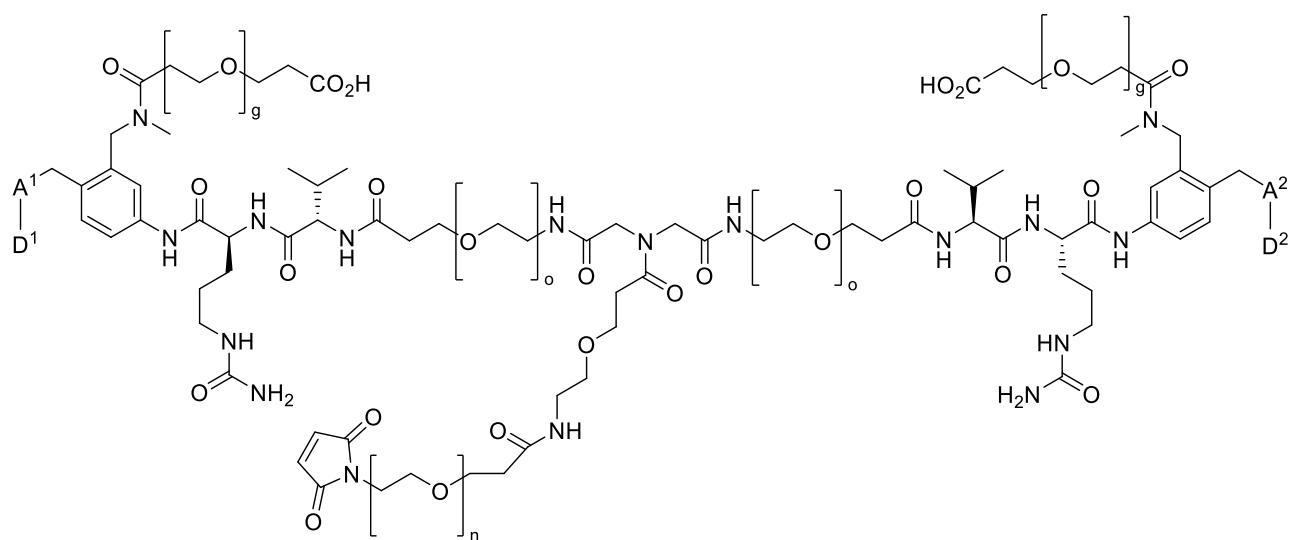
(D4f-1),



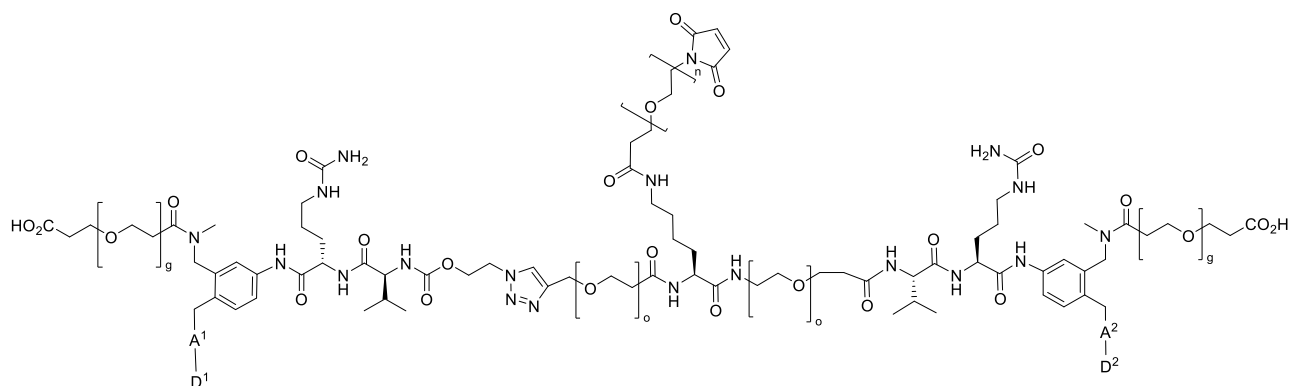
(D4g-1),



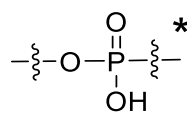
(D4h-1),



(D4i-1), or



wherein:



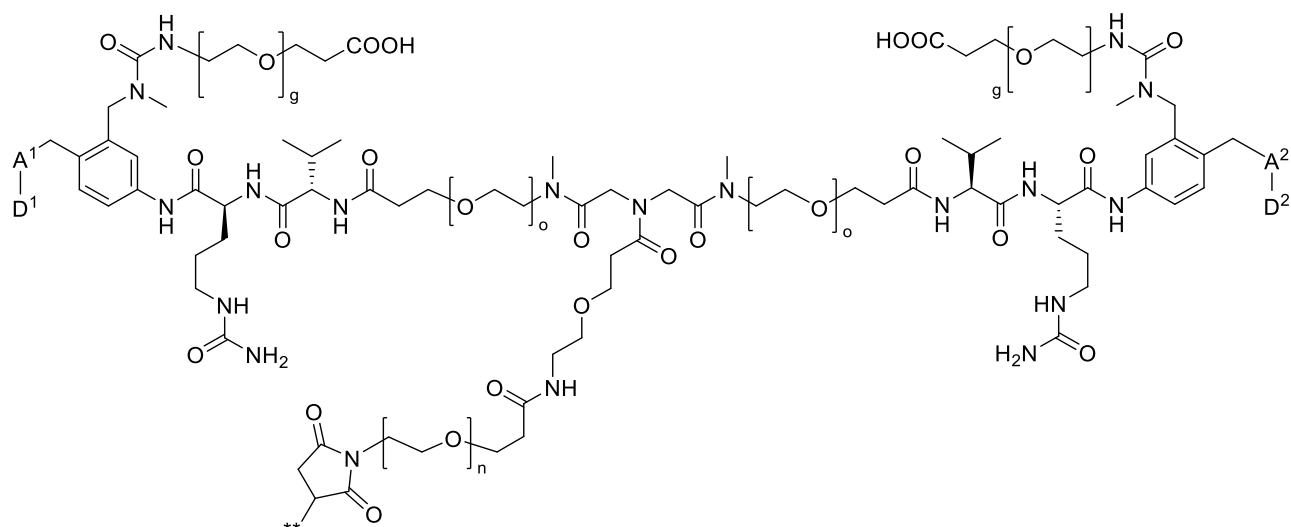
A¹ and A² are each independently selected from a bond, and -O-C(=O)-*, wherein * in A¹ and A² indicates the point of attachment to D¹ or D²;

5 g for each occurrence is independently an integer between 20 and 30 (e.g., 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 or 30);

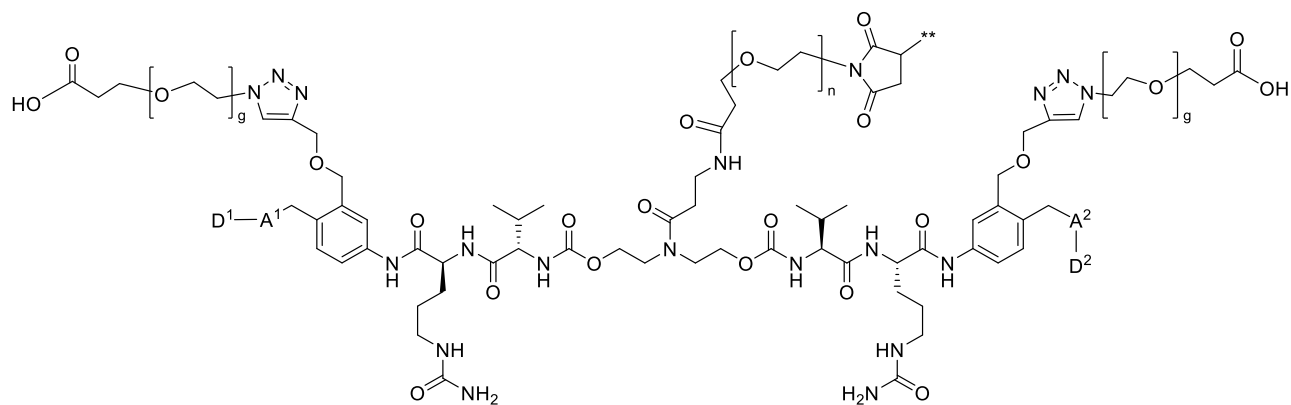
o for each occurrence is independently an integer between 1 and 9 (e.g., between 2 and 5); and

n is an integer between 1 and 12 (e.g., between 2 and 5).

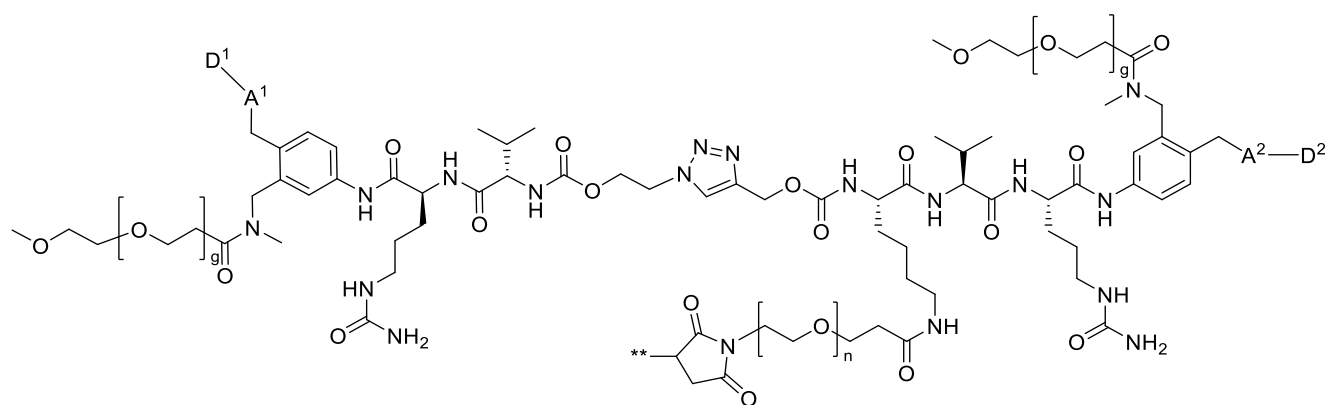
10 **21.** The conjugate according to claim 18, represented by any one of the following formulae:



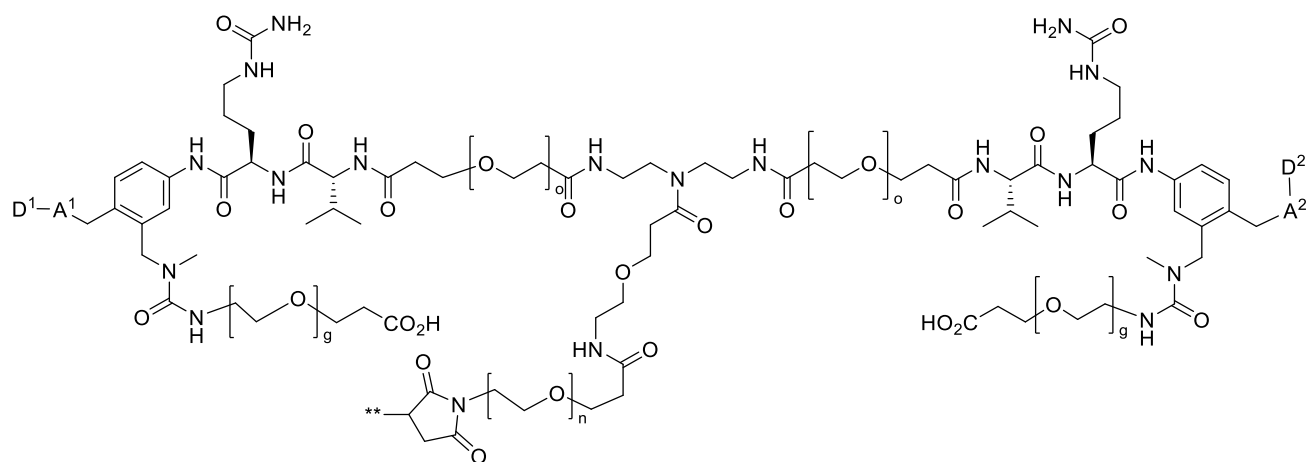
(D4a-2),



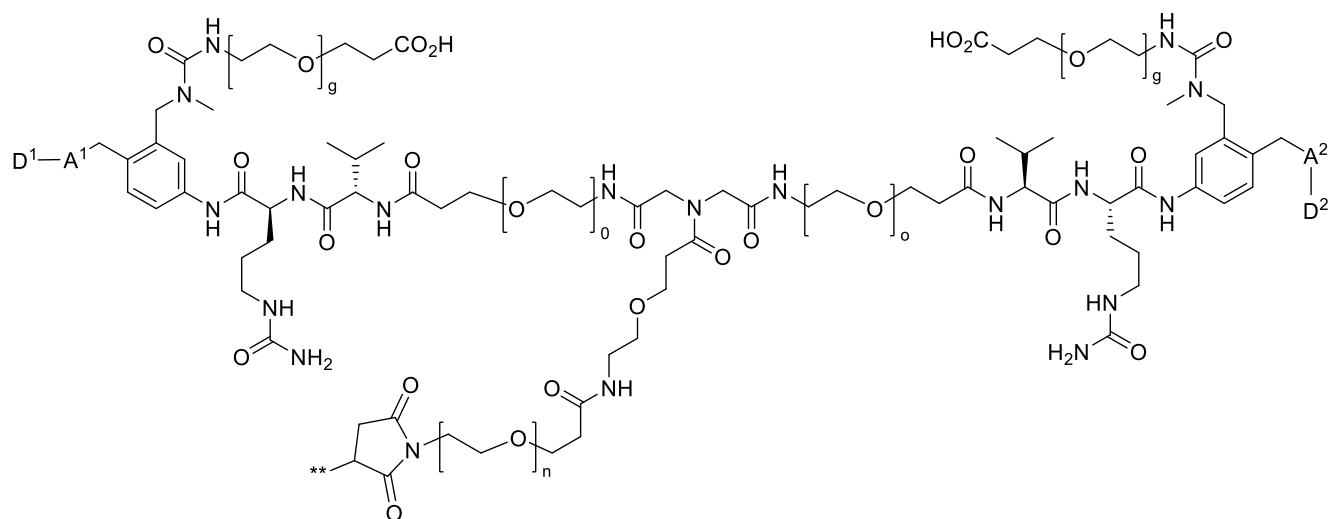
(D4b-2),



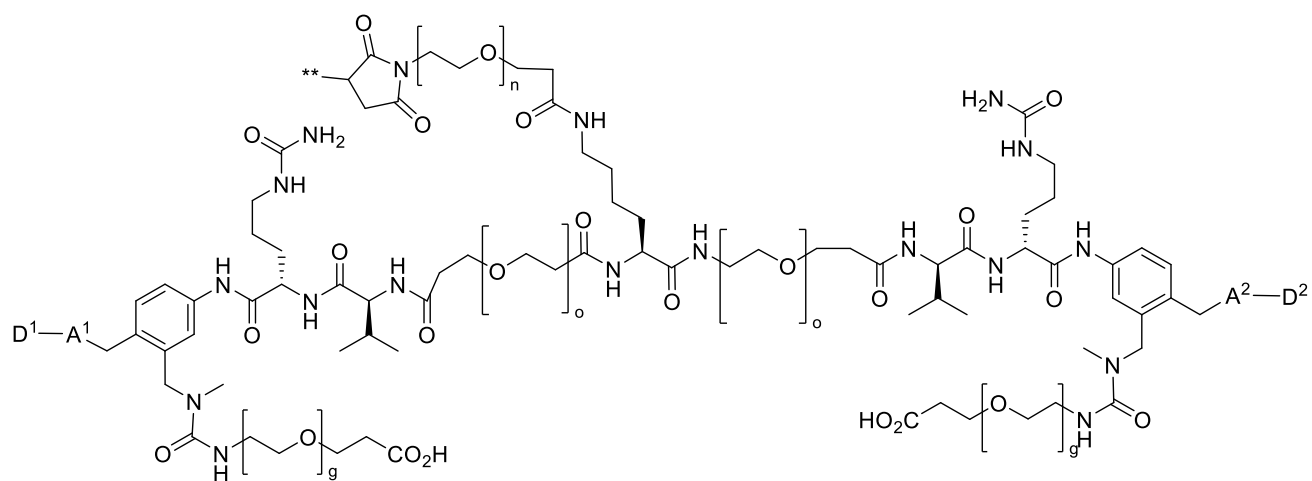
(D4c-2),



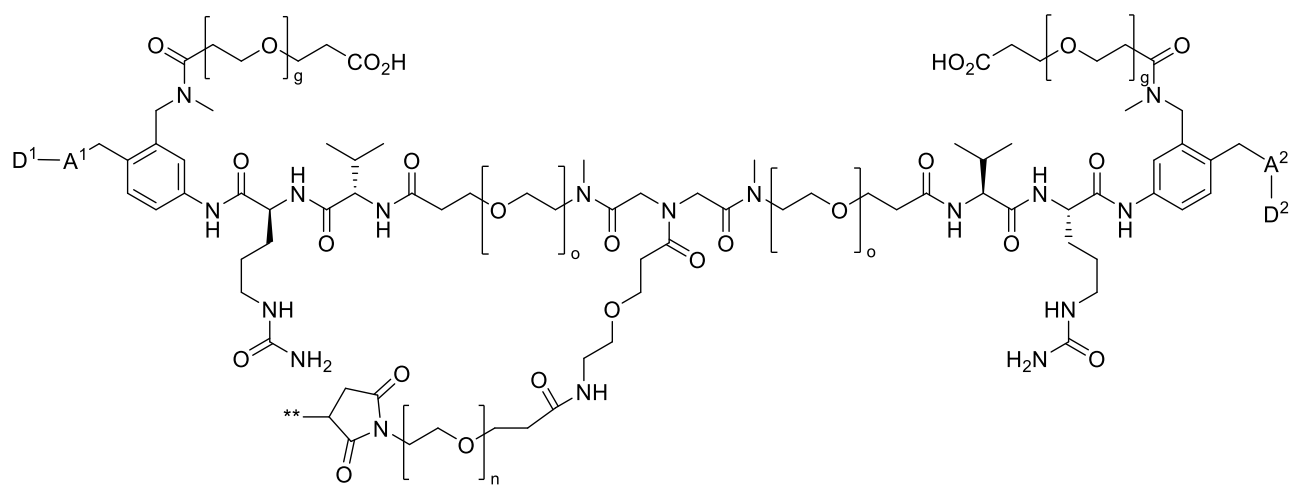
(D4d-2),



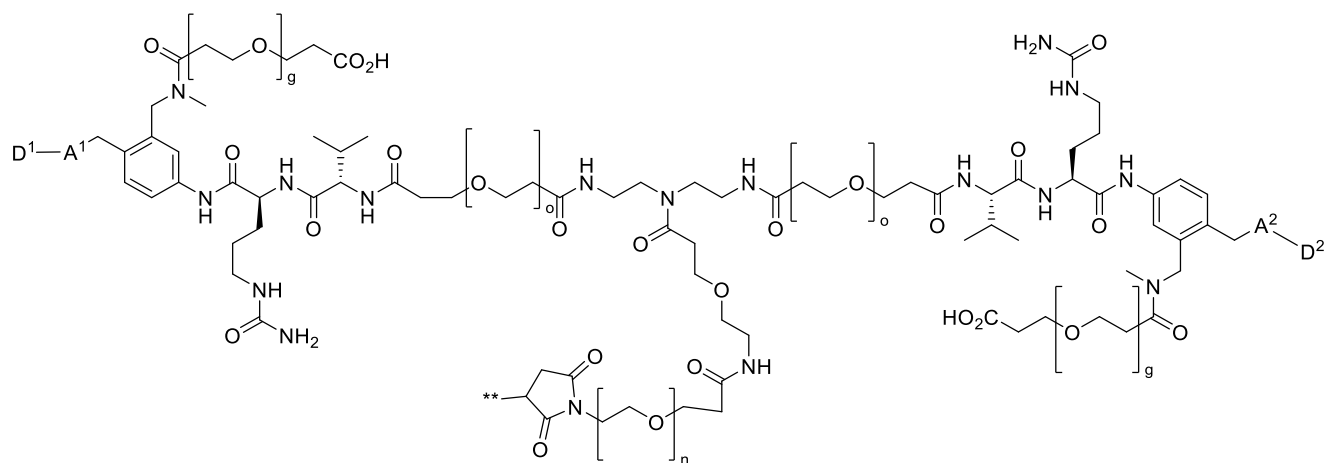
(D4e-2),



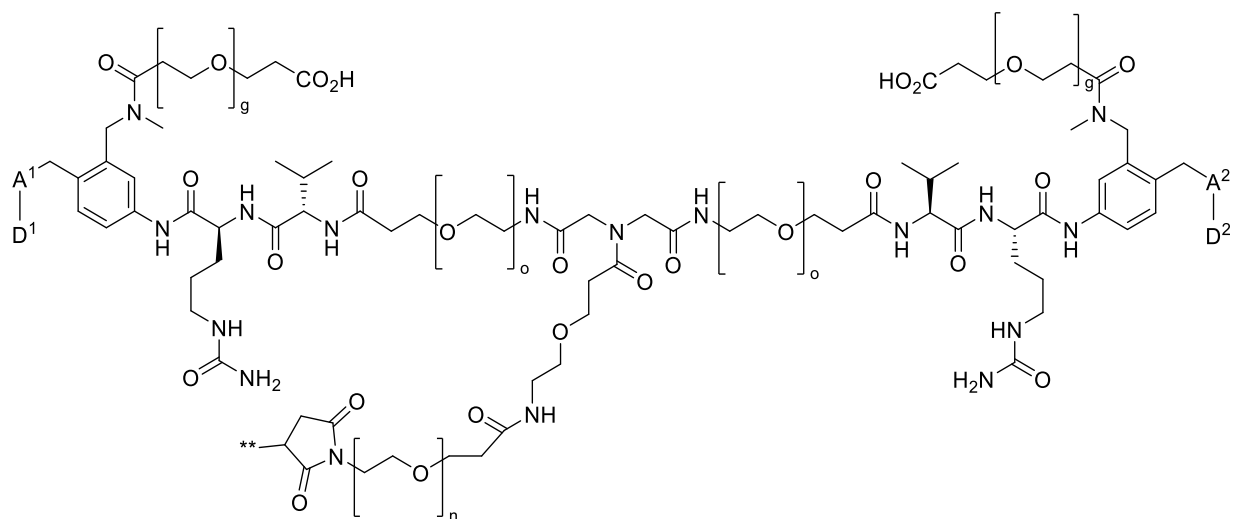
(D4f-2),



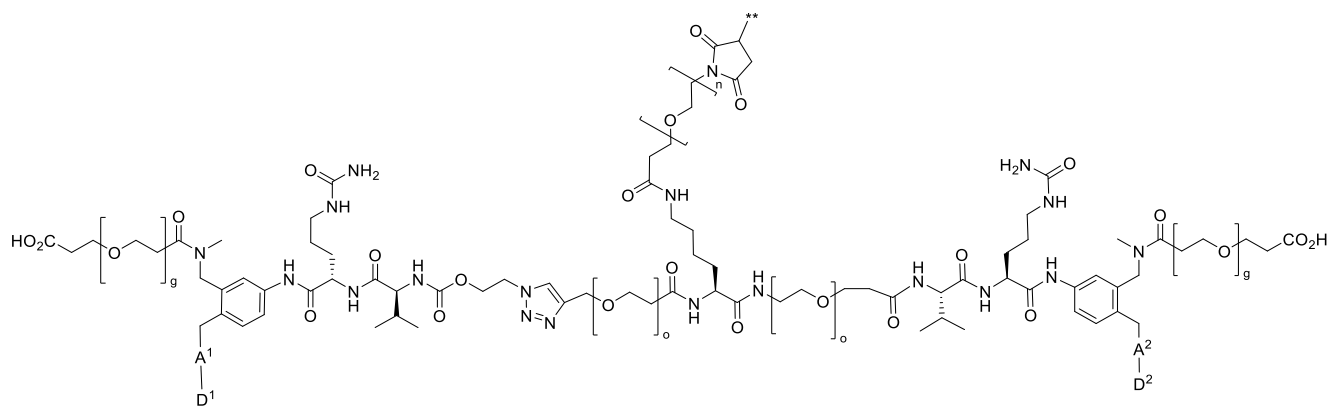
(D4g-2),



(D4h-2),



(D4i-2), or



(D4j-2),

wherein:

A^1 and A^2 are each independently selected from a bond, $\text{---}\text{O---P(=O)(OH)---}^*$, and ---O-C(=O)-^* , wherein $*$ in A^1 and A^2 indicates the point of attachment to D^1 or D^2 ;

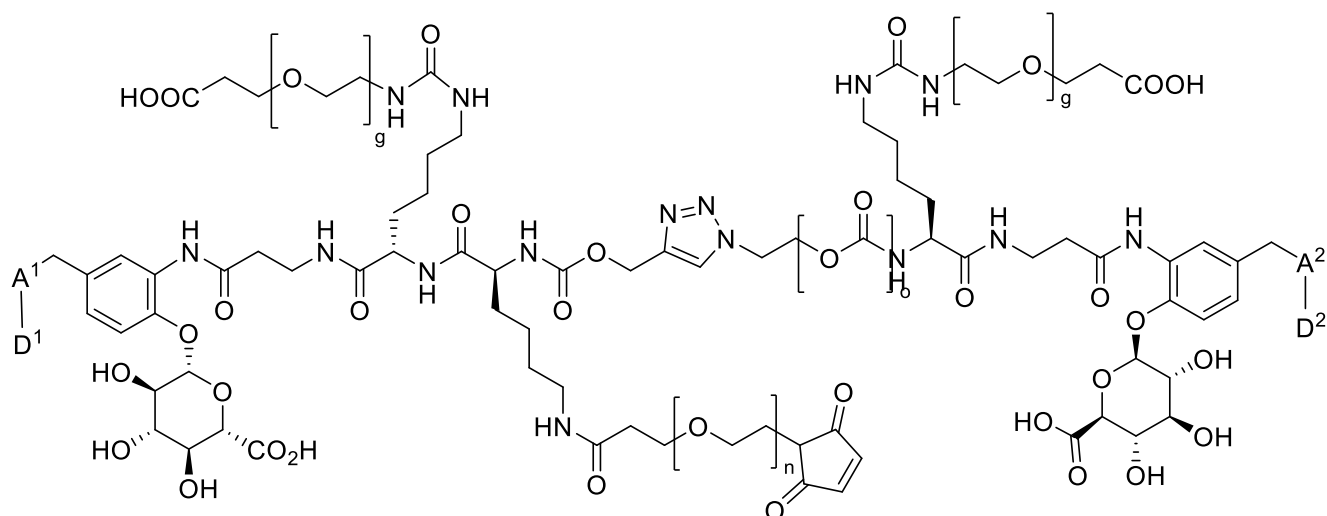
g for each occurrence is independently an integer between 20 and 30 (e.g., 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 or 30);

5 o for each occurrence is independently an integer between 1 and 9 (e.g., between 2 and 5);

n is an integer between 1 and 12 (e.g., between 2 and 5); and

**— indicates the point of attachment to the Ab.

22. The compound or pharmaceutically acceptable salt thereof according to any one of claims 10 1 to 17, of formula (D5a-1):



(D5a-1)

wherein:

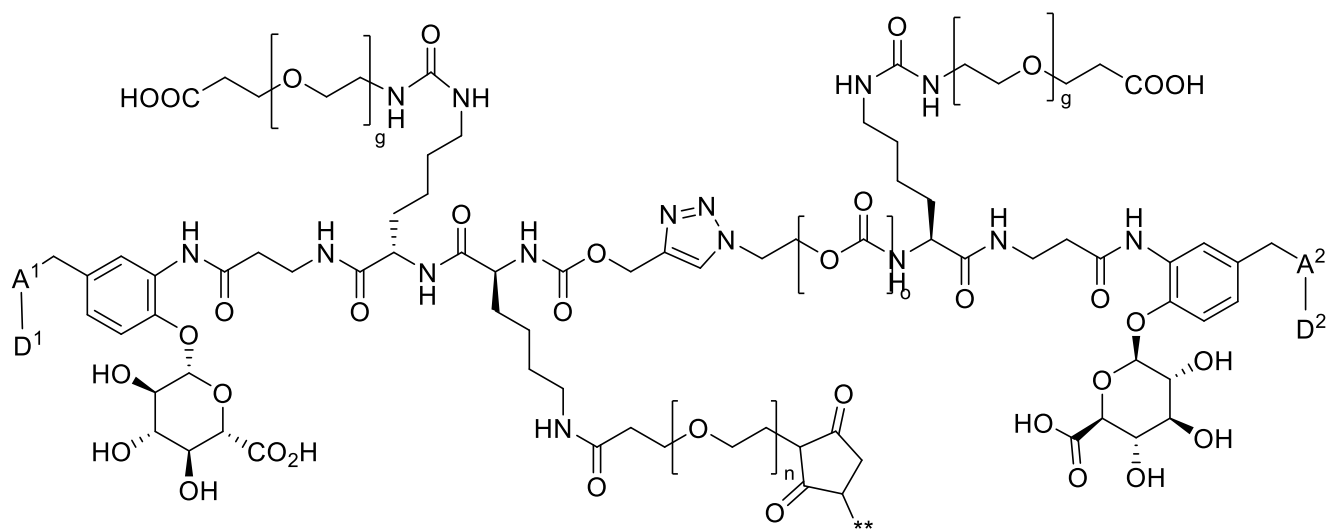
A^1 and A^2 are each independently selected from a bond, $\text{---}\text{O---P(=O)(OH)---}^*$, and ---O-C(=O)-^* , wherein $*$ in A^1 and A^2 indicates the point of attachment to D^1 or D^2 ;

g for each occurrence is independently an integer between 20 and 30 (e.g., 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 or 30);

o for each occurrence is independently an integer between 1 and 9 (e.g., between 1 and 3); and

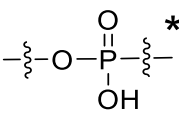
5 n is an integer between 1 and 12 (e.g., between 5 and 10).

23. The conjugate according to claim 18, of formula (D5a-2):



10 (D5a-2)

wherein:

A¹ and A² are each independently selected from a bond, , and -O-C(=O)-*, wherein * in A¹ and A² indicates the point of attachment to D¹ or D²;

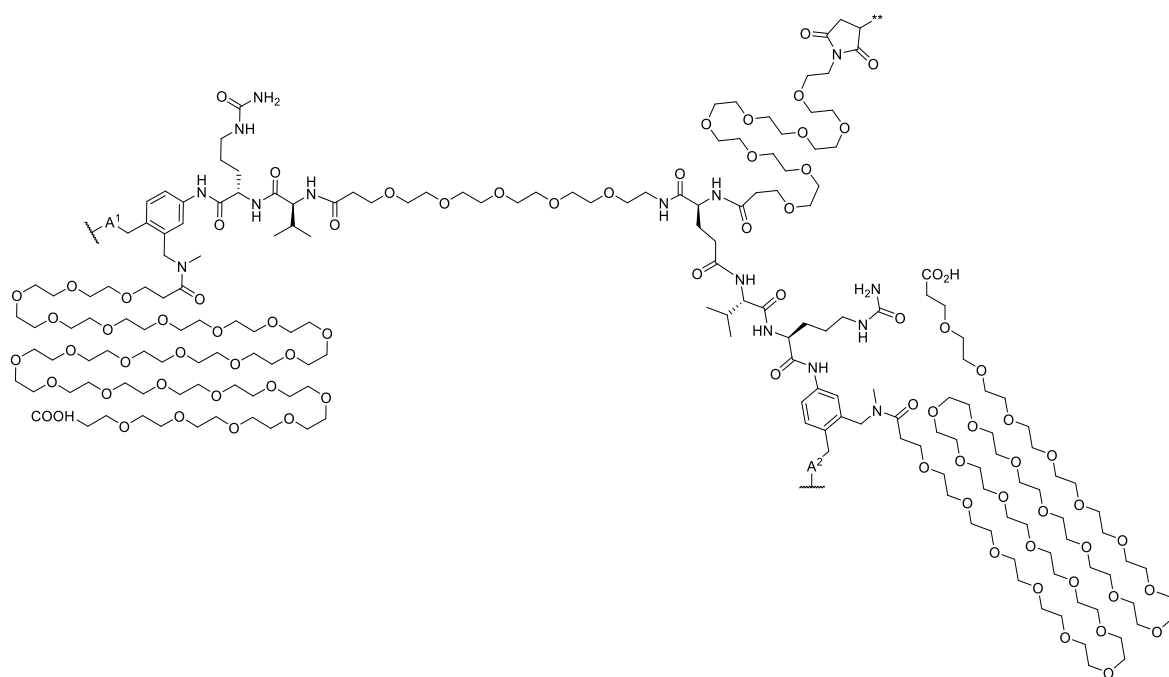
15 g for each occurrence is independently an integer between 20 and 30 (e.g., 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 or 30);

o for each occurrence is independently an integer between 1 and 9 (e.g., between 1 and 3);

n is an integer between 1 and 12 (e.g., between 5 and 10); and

**— indicates the point of attachment to the Ab;

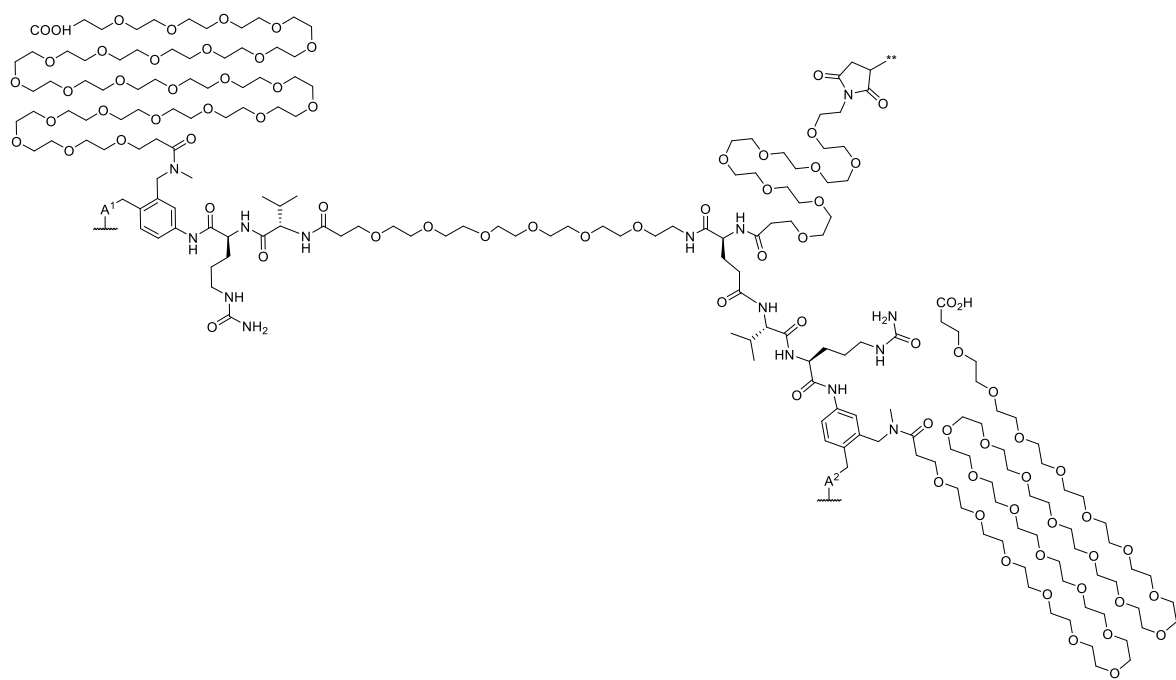
or represented by the following formulae:



5

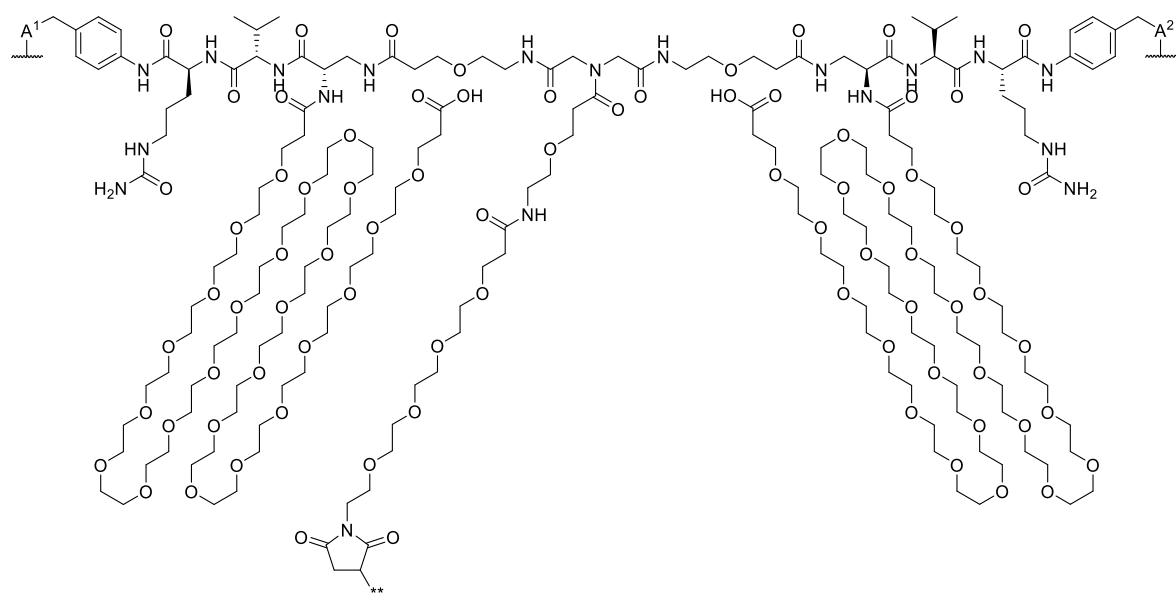
L1-A2);

(A1-



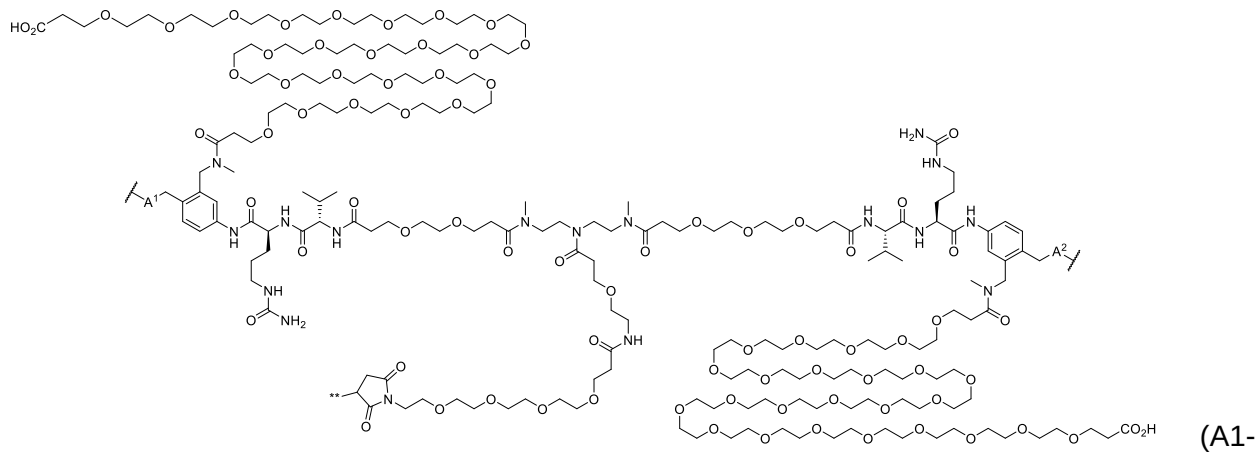
(A1-

L2-A2);

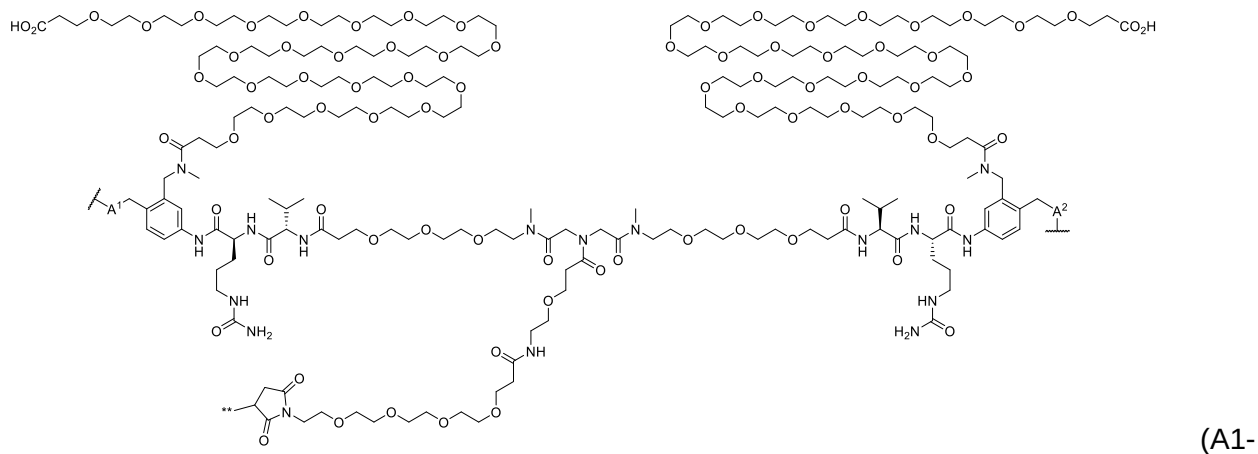


(A1-

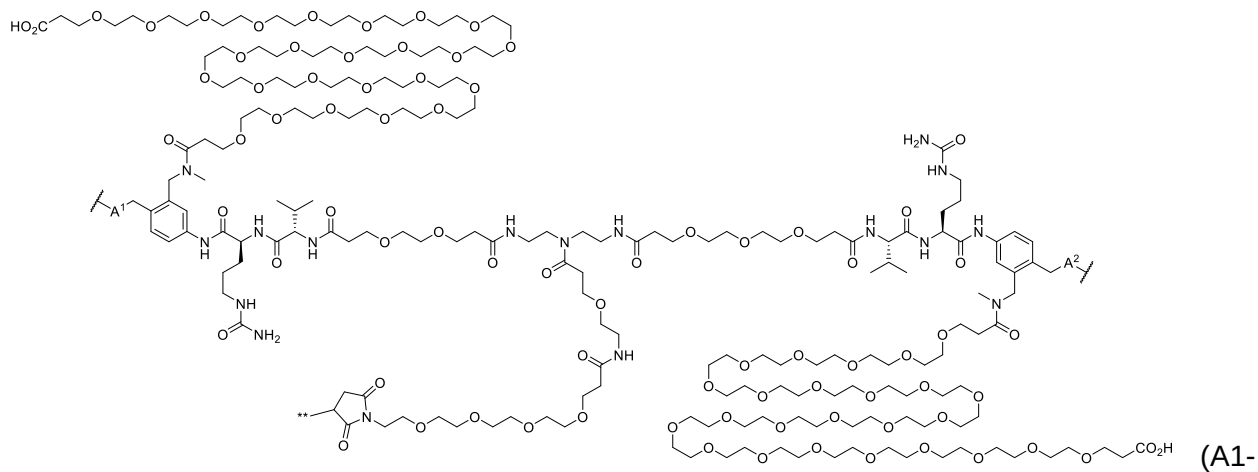
L3-A2);



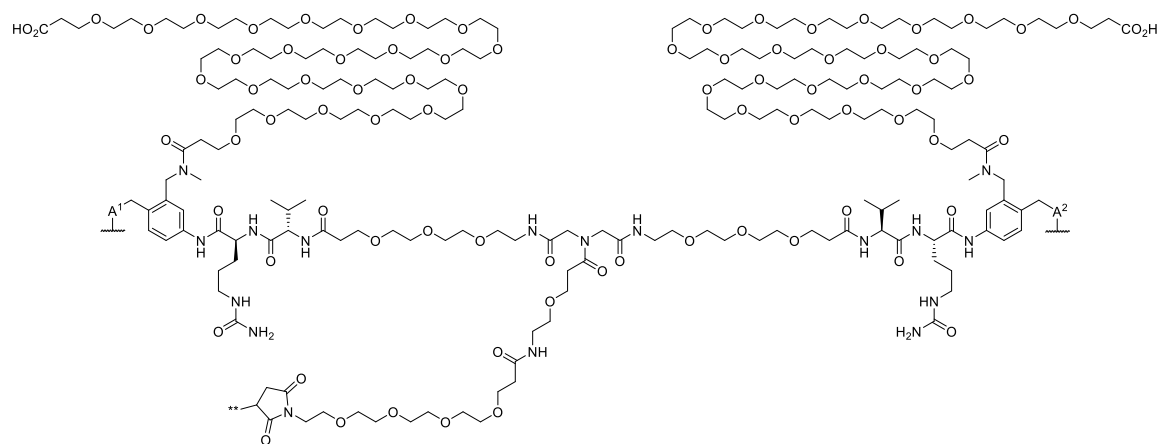
L4-A2);



L5-A2);

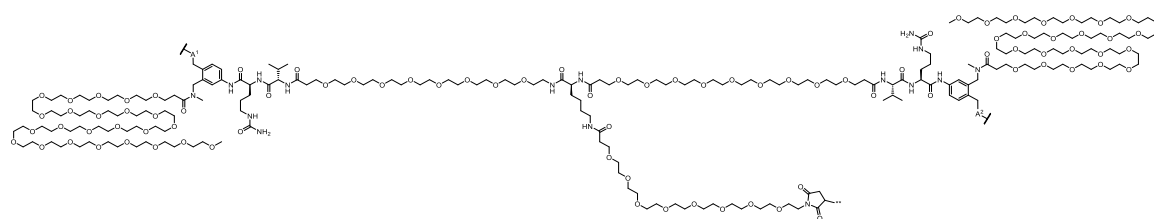


L6-A2);



(A1-

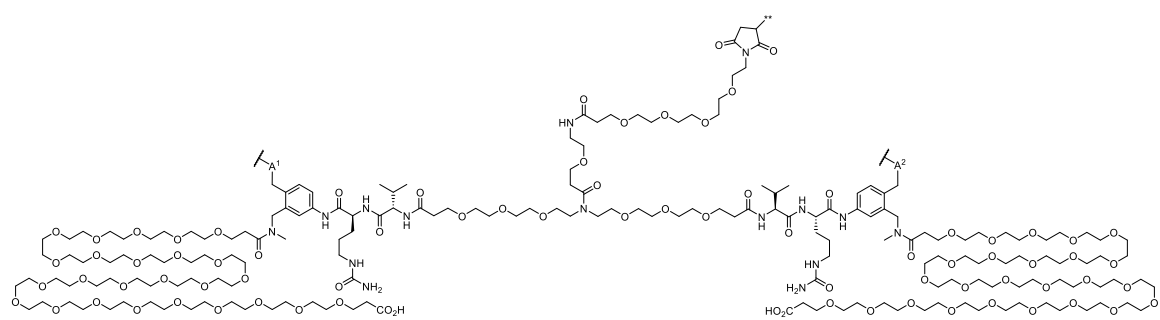
L7-A2);



(A1-

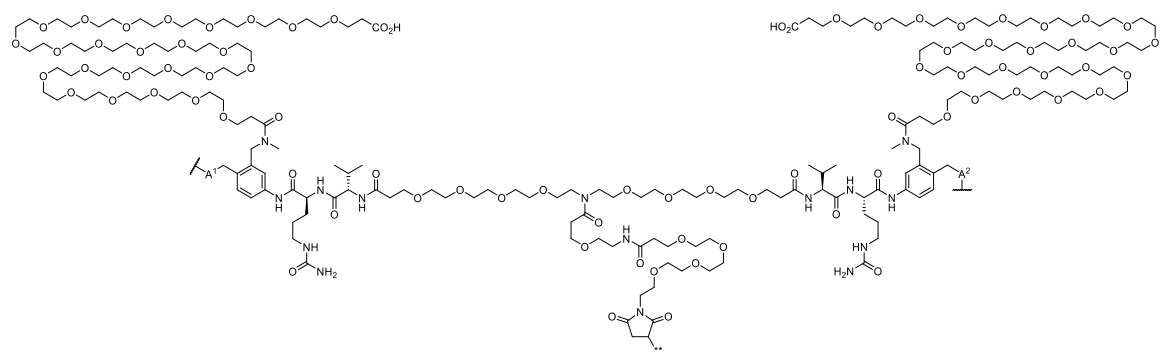
L8-A2);

5



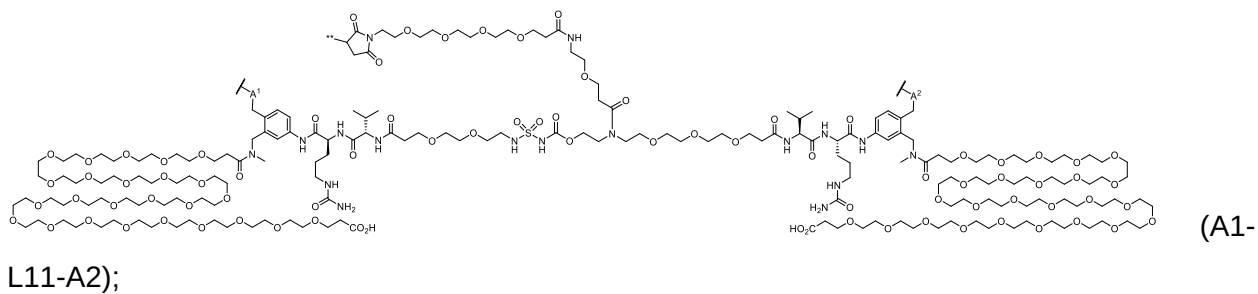
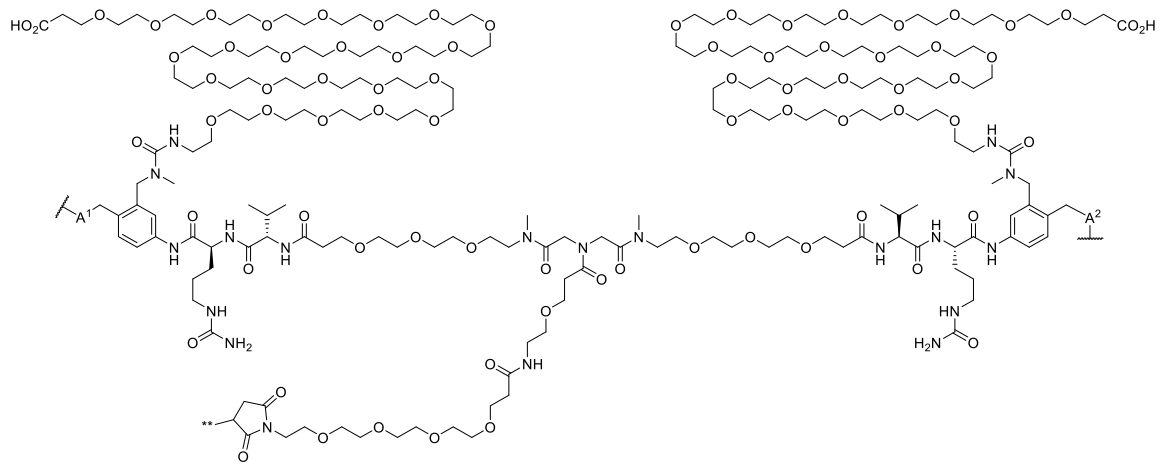
(A1-

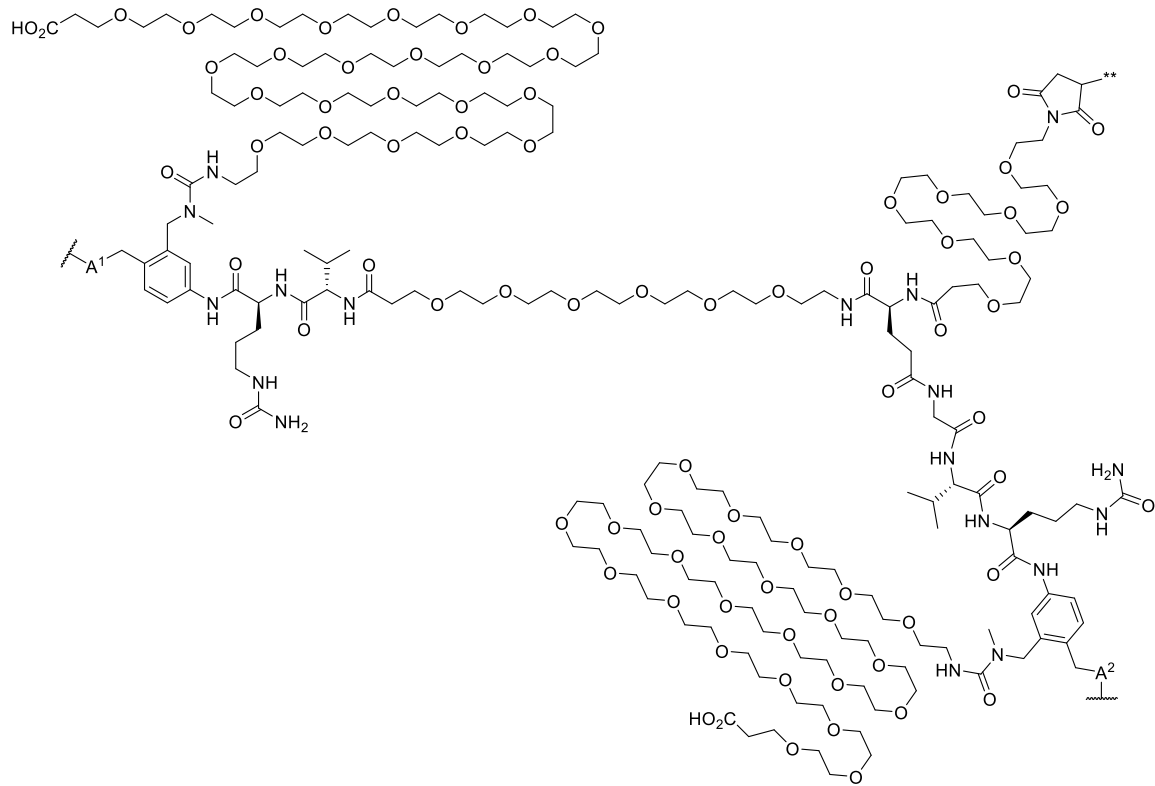
L9-A2);



(A1-

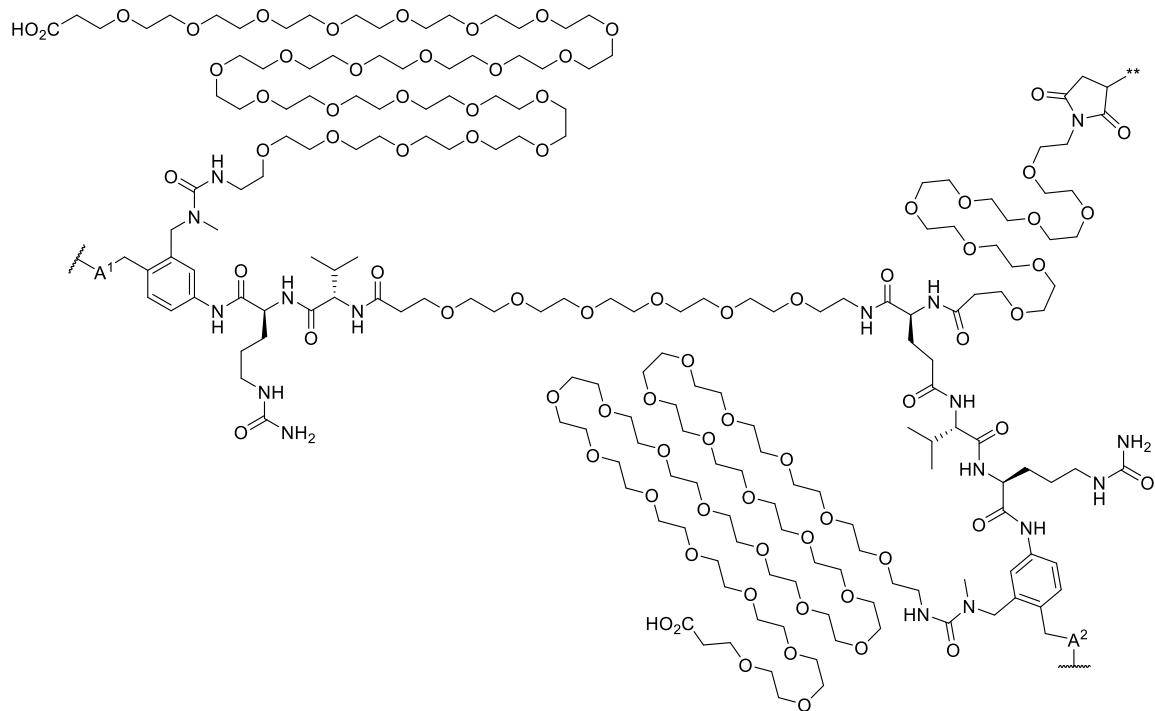
L10-A2);





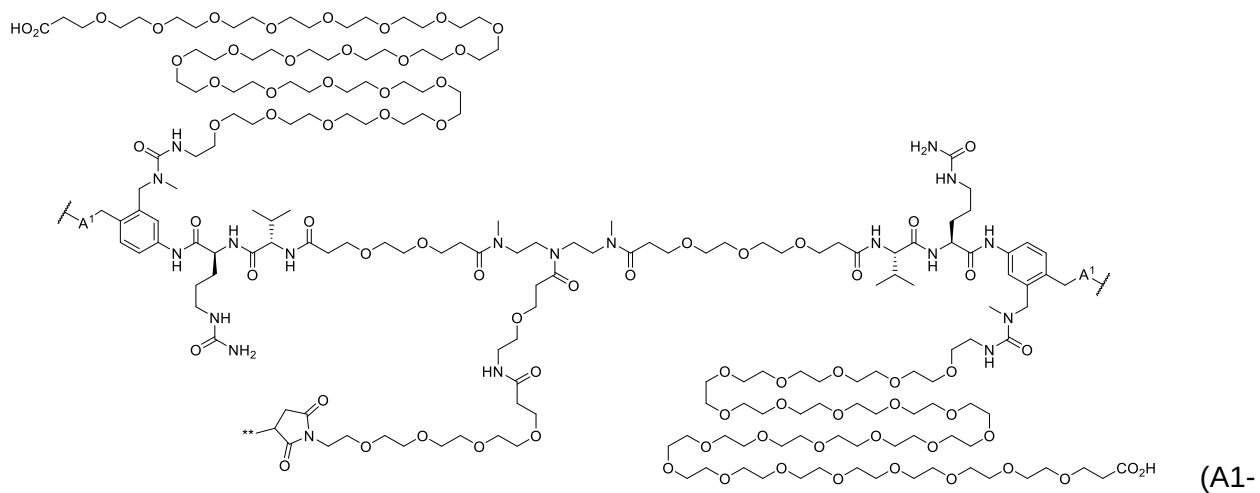
(A1-

L13-A2);

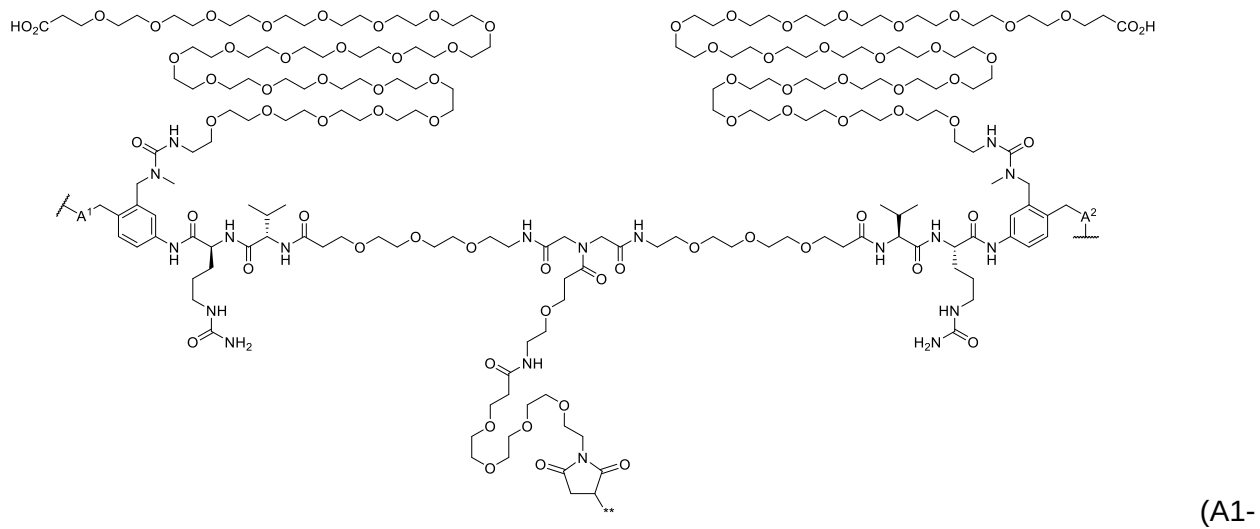


(A1-

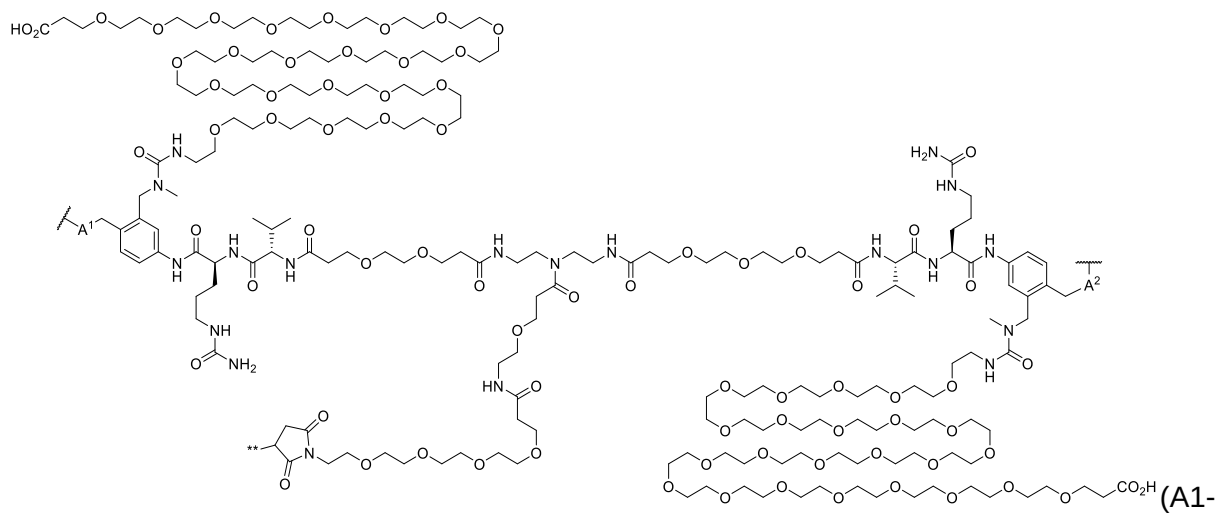
L14-A2);



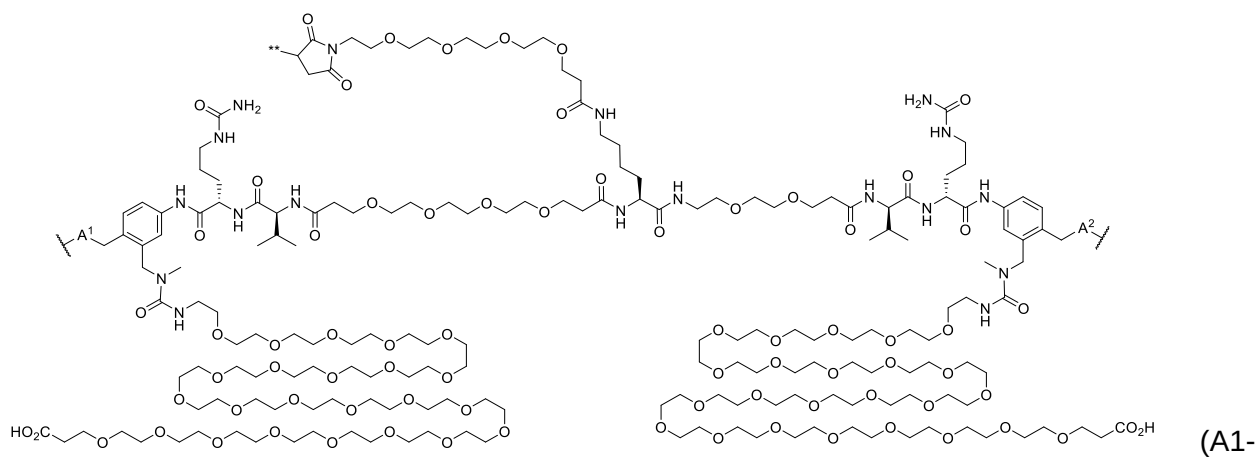
L15-A2);



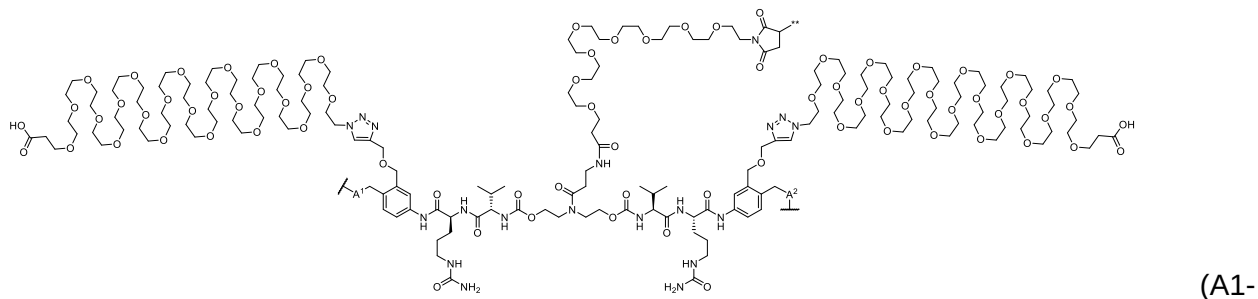
L16-A2);



L17-A2);

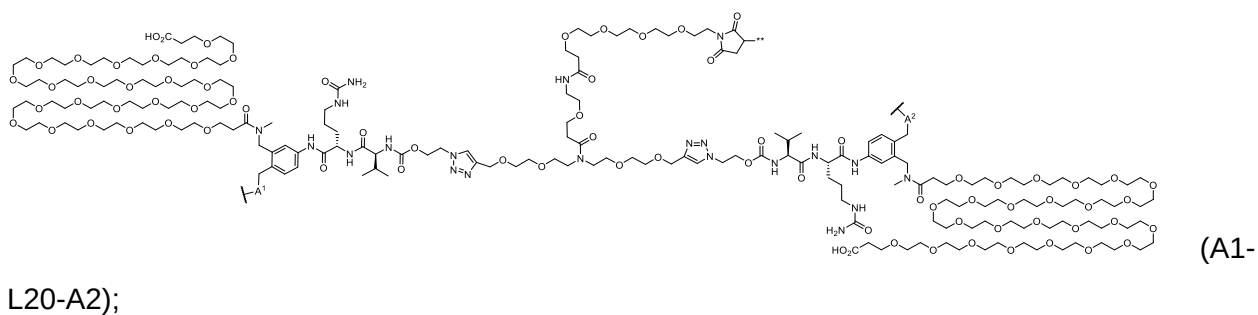
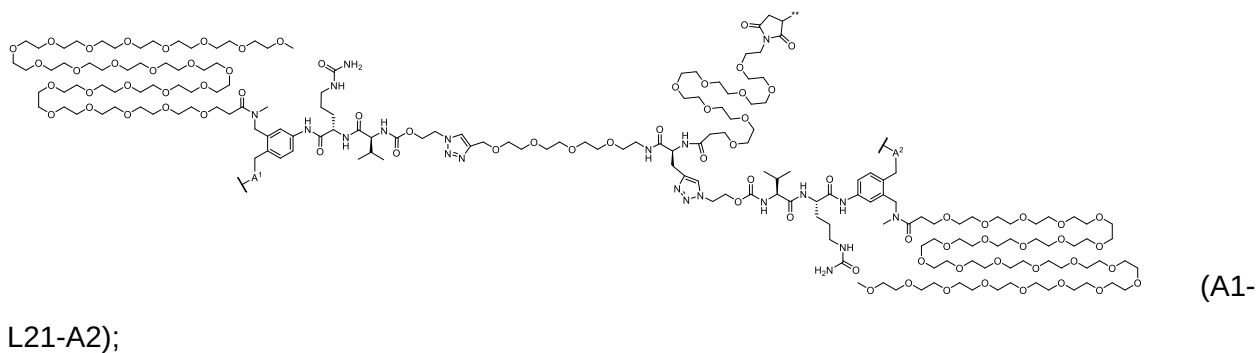
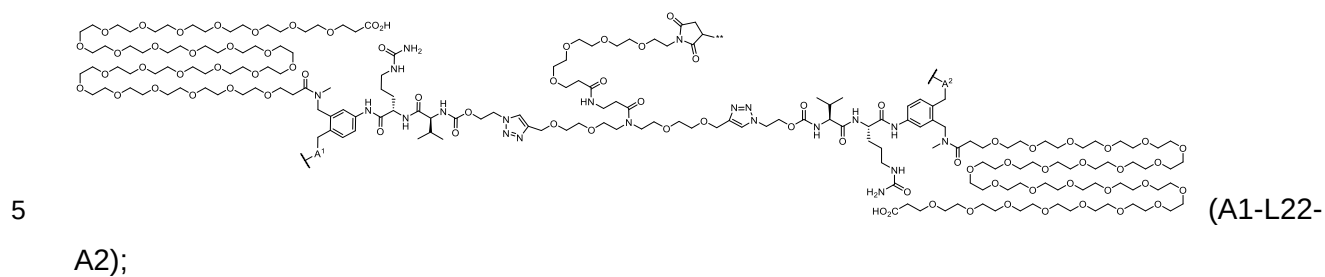
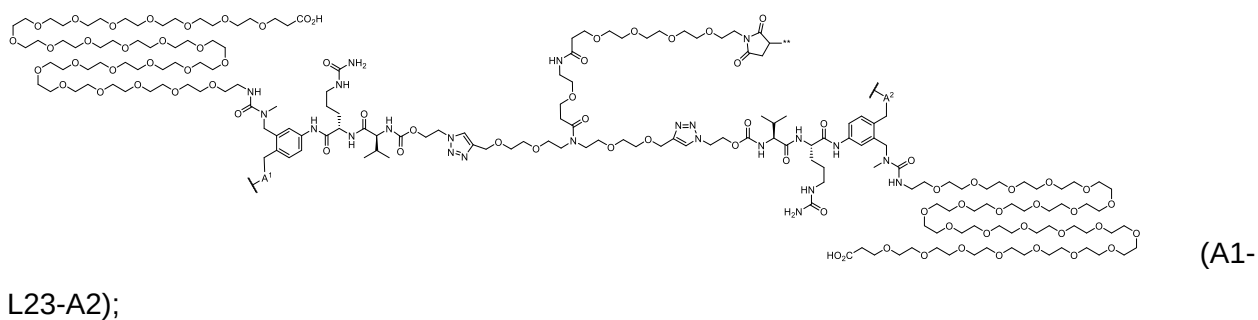
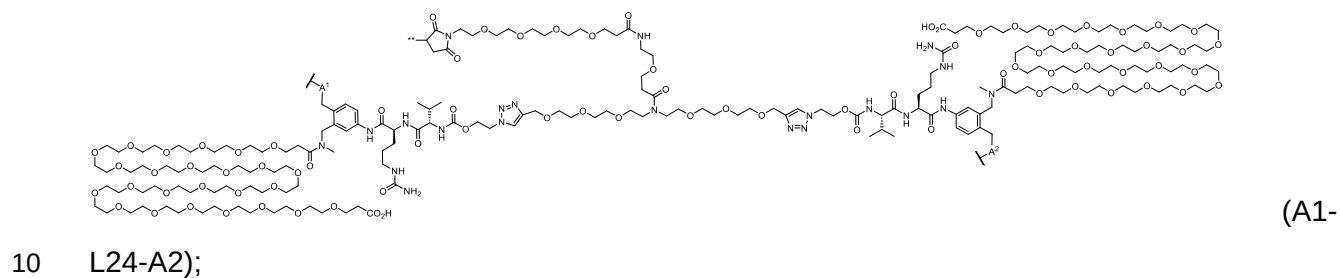


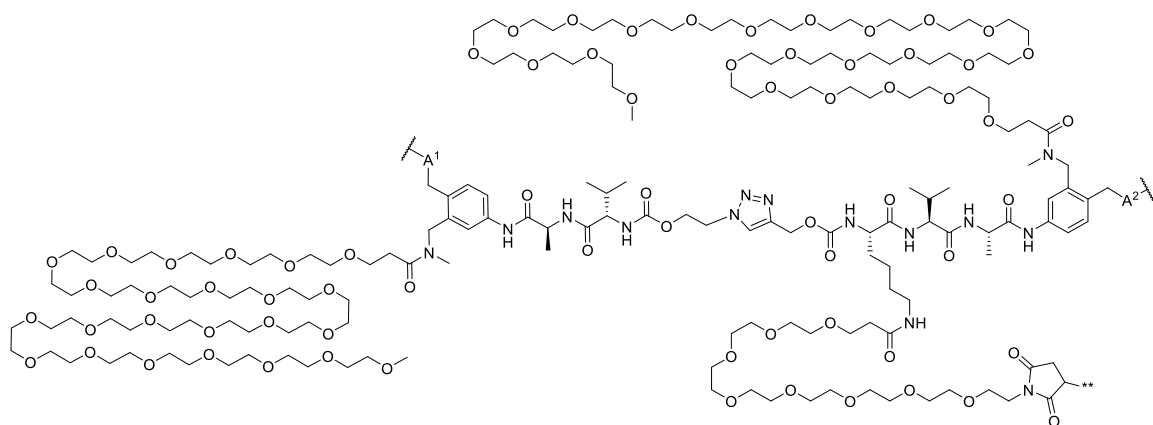
L18-A2);



5

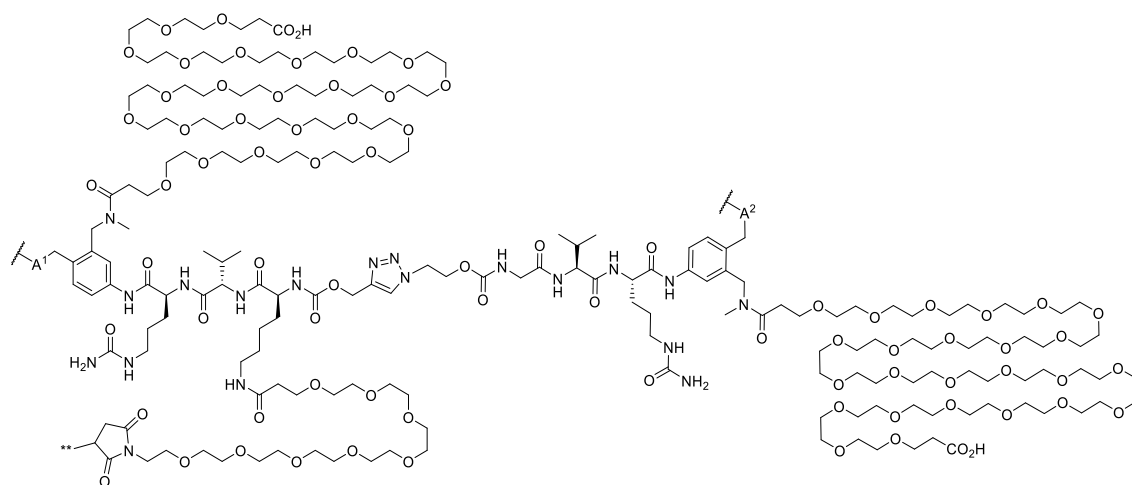
L19-A2);





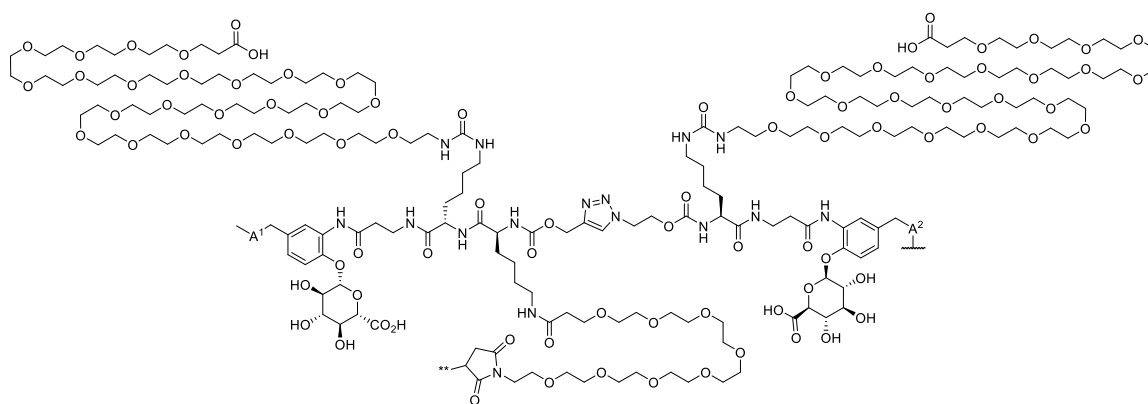
(A1-

L25-A2);



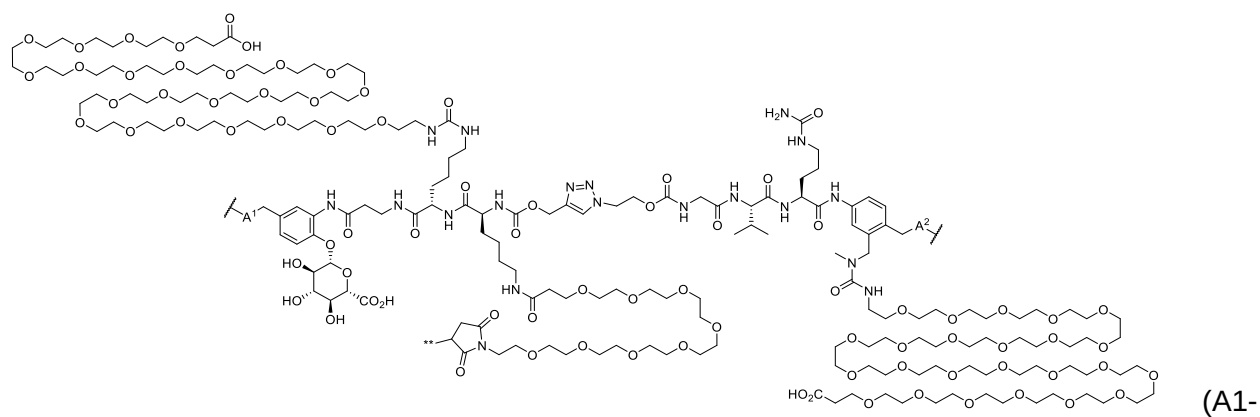
(A1-

L26-A2);

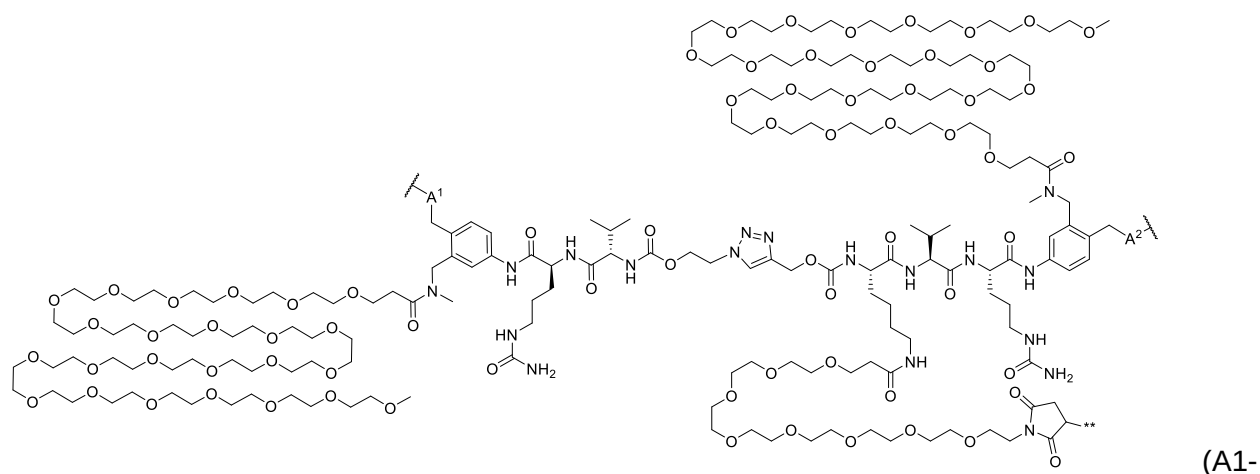


(A1-

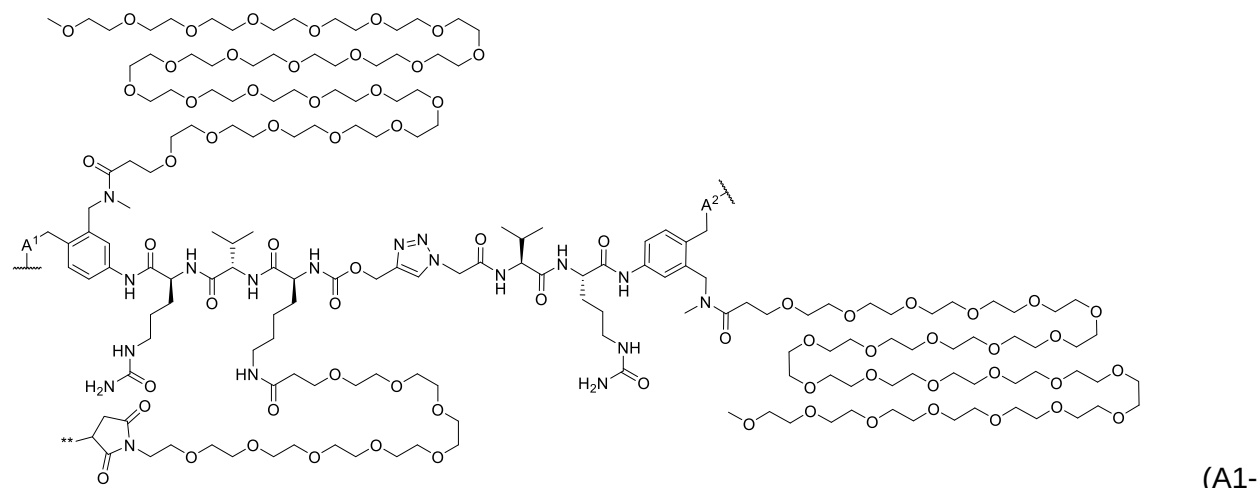
L27-A2);



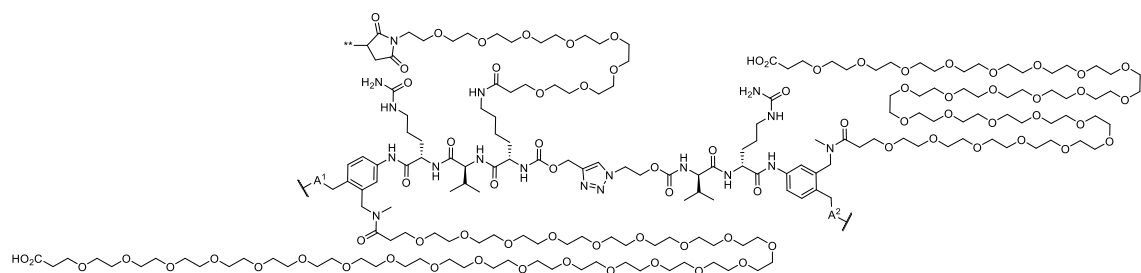
L28-A2);



L29-A2);

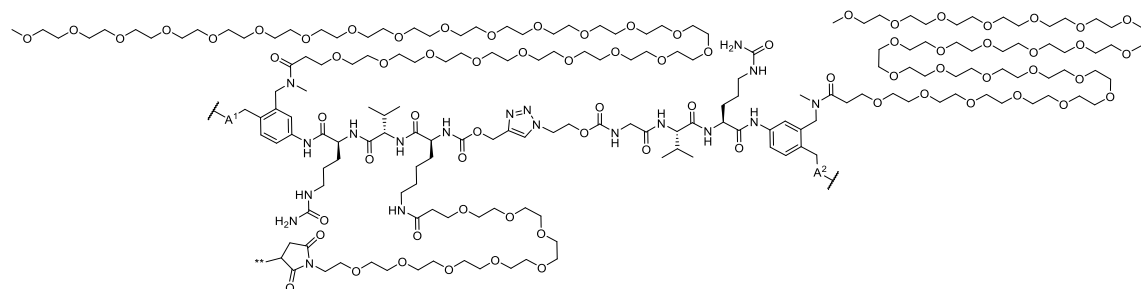


L30-A2);



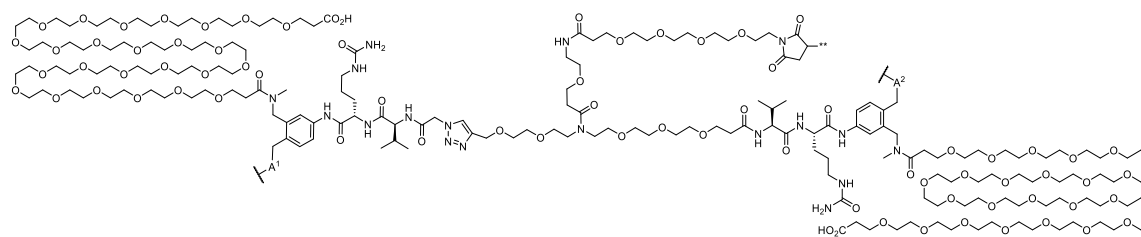
(A1-

L31-A2);



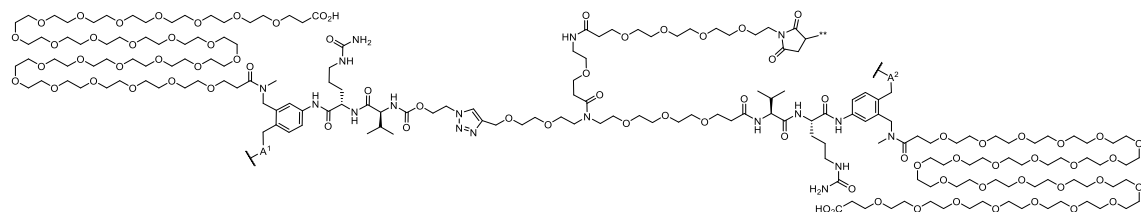
(A1-

L32-A2);



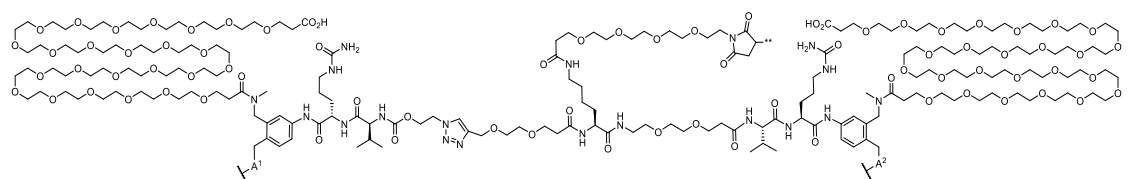
(A1-

L33-A2);



(A1-

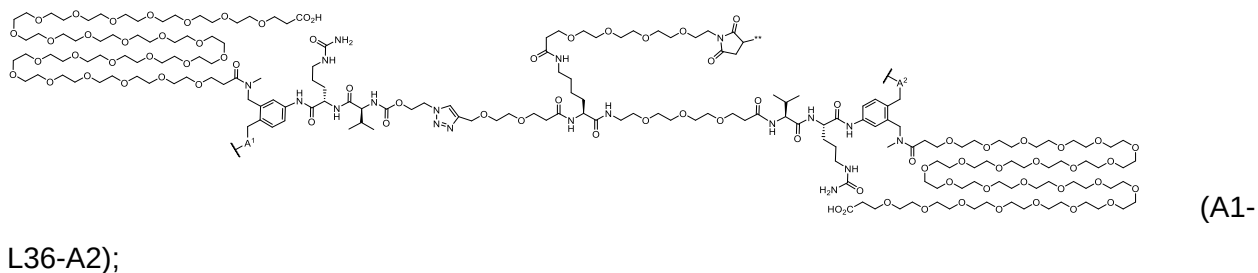
L34-A2);

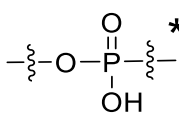


(A1-L35-

A2);

and



wherein A¹ or A² are each independently selected from a bond, , and -OC(=O)-*, wherein * indicates the point of attachment to D¹ or D²; **— indicates the point of attachment to the Ab; and  indicates the point of direct attachment to D¹ or D².

24. A pharmaceutical composition comprising the conjugate according to claim 18 or claim 23, and a pharmaceutically acceptable carrier.