Claims

1. ~~1.~~ A polypeptide, or a pharmaceutically acceptable salt thereof, comprising the amino acid sequence:

Xaa (-4) - Xaa (-3) - Xaa (-2) - Xaa (-1) - Xaa 1 - Cys 2 - Asn 3 - Xaa 4 - Ala 5 - Thr 6 - Cys 7 - Ala 8 - Thr 9 - Gln 10 - Arg 11 - Leu 12 - Ala 13 - Xaa 14 - Xaa 15 - Xaa 16 - Xaa 17 - His 18 - Ser 19 - Xaa 20 - Xaa 21 - Xaa 22 - Xaa 23 - Xaa 24 - Xaa 25 - Xaa 26 - Xaa 27 - Xaa 28 - Xaa 29 - Thr 30 - Xaa 31 - Xaa 32 - Xaa 33 - Xaa 34 - Xaa 35 - Xaa 36 - Xaa37 - amide [SEQ ID NO:2], wherein:

Xaa (-4) is Lys(albumin binding moiety) or is absent;

Xaa (-3) is Gly or is absent;

Xaa (-2) is Gly or is absent;

Xaa (-1) is Gly, (albumin binding moiety), Lys(albumin binding moiety) or is absent;

Xaa 1 is Lys, Lys(albumin binding moiety), (albumin binding moiety) or is absent;

Xaa 4 is Thr, Ile or Ala;

Xaa 14 is Asn, His, Glu, 2,4-diaminobutanoic acid (Dab), or an alpha methyl amino acid;

Xaa 15 is Phe or Trp;

Xaa 16 is Leu or *D*-Leu (dL);

Xaa 17 is Val, Ser, Glu, Arg, (2*S*,4*R*)-4-hydroxypyrrolidine-2-carboxylic acid (Hyp), Dab or an alpha methyl amino acid (*e.g.* 2-amino-2-methylpropanoic acid [Aib]);

Xaa 20 is Ser, Ile, Pro or an alpha methyl amino acid (*e.g. (S)*-2-amino-3-hydroxy-2-methylpropanoic acid [αMeSer]);

Xaa 21 is Asn, Dab, His, Pro, Ser, Arg, Lys, Gly or Glu, Ala, Hyp or an alpha methyl amino acid (*e.g.* Aib);

Xaa 22 is Asn, His, Hyp, Dab or an alpha methyl amino acid (*e.g.* Aib);

Xaa 23 is Phe, Hyp or an alpha methyl amino acid (*e.g. (S)*-2-amino-2-methyl-3-phenylpropanoic acid [αMePhe]);

Xaa 24 is Gly, Pro, Hyp or an alpha methyl amino acid (*e.g.* Aib);

Xaa 25 is Pro, Ala, Hyp or an alpha methyl amino acid (*e.g.* Aib);

Xaa 26 is Ile, *D*-Ile (dI), Arg, Hyp or an alpha methyl amino acid (*e.g.* Aib);

Xaa 27 is Leu, dL, Hyp or an alpha methyl amino acid (*e.g.* Aib);

Xaa 28 is Pro, *D*-Pro (dP), Ser, Hyp or an alpha methyl amino acid (*e.g.* Aib);

Xaa 29 is Pro, Hyp or an alpha methyl amino acid (*e.g.* Aib);

Xaa 31 is Asn, Glu, His, Arg, Pro, Dab or an alpha methyl amino acid (*e.g.* Aib);

Xaa 32 is Val, Hyp, Dab or an alpha methyl amino acid (*e.g.* Aib);

Xaa 33 is Gly, Pro, Hyp or an alpha methyl amino acid (*e.g.* Aib);

Xaa 34 is Ser, Pro, His, Hyp or an alpha methyl amino acid (*e.g.* Aib);

Xaa 35 is Asn, Pro, Arg, Glu, Dab, Hyp or an alpha methyl amino acid (*e.g.* Aib);

Xaa 36 is Thr, Hyp or an alpha methyl amino acid (*e.g.* Aib); and

Xaa 37 is Tyr, Pro, Hyp or an alpha methyl amino acid (*e.g.* Aib),

and wherein the polypeptide comprises at least one albumin binding moiety.

2. ~~2.~~ The polypeptide or pharmaceutically acceptable salt of claim 1, wherein the polypeptide comprises Dab, Hyp or an alpha methyl amino acid at least one of positions 14, 17 or 20-37, optionally wherein the alpha methyl amino acid is Aib, αMePhe or αMeSer.

3. ~~3.~~ The polypeptide or pharmaceutically acceptable salt of claim 1 or 2, wherein:

~~1.~~ (i) Xaa 14 is Dab~~.~~; and/or

~~4. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein Xaa 16 is dL.~~

~~5. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~

(ii) Xaa 16 is dL; and/or

(iii) Xaa 17 is an alpha methyl amino acid, optionally Aib~~.~~; and/or

~~6. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~(iv) Xaa 20 is an alpha methyl amino acid, optionally αMeS~~.~~; and/or

~~7. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~(v) Xaa 21 is: (a) an alpha methyl amino acid, optionally Aib~~.~~; or (b) Dab; and/or

~~8. The polypeptide or pharmaceutically acceptable salt of any one of claims 1 to 6, wherein Xaa 21 is Dab.~~

~~9. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~

(vi) Xaa 22 is an alpha methyl amino acid, optionally Aib~~.~~; and/or

~~10. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~(vii) Xaa 23 is an alpha methyl amino acid, optionally αMePhe~~.~~; and/or

~~11. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~(viii) Xaa 24 is: (a) an alpha methyl amino acid, optionally Aib~~.~~; or (b) Hyp; and/or

~~12. The polypeptide or pharmaceutically acceptable salt of any one of claims 1 to 10, wherein Xaa 24 is Hyp.~~

~~13. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~
(ix) Xaa 25 is an alpha methyl amino acid, optionally Aib~~.~~; and/or

~~14. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~(x) Xaa 26 is: (a) an alpha methyl amino acid, optionally Aib~~.~~; or (b) dI; and/or

~~15. The polypeptide or pharmaceutically acceptable salt of any one of claims 1 to 13, wherein Xaa 26 is dI.~~

~~16. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~
(xi) Xaa 27 is: (a) an alpha methyl amino acid, optionally Aib~~.~~; or (b) dL; and/or

~~17. The polypeptide or pharmaceutically acceptable salt of any one of claims 1 to 15, wherein Xaa 27 is dL.~~

~~18. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~
(xii) Xaa 28 is: (a) an alpha methyl amino acid, optionally Aib~~.~~; or (b) dP; and/or

~~19. The polypeptide or pharmaceutically acceptable salt of any one of claims 1 to 17, wherein Xaa 28 is dP.~~

~~20. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~

(xiii) Xaa 29 is an alpha methyl amino acid, optionally Aib~~.~~; and/or

~~21. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~(xiv) Xaa 31 is: (a) an alpha methyl amino acid, optionally Aib~~.~~; or (b) Dab; and/or

~~22. The polypeptide or pharmaceutically acceptable salt of any one of claims 1 to 20, wherein Xaa 31 is Dab.~~

~~23. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~

(xv) Xaa 32 is an alpha methyl amino acid, optionally Aib~~.~~; and/or

~~24. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~(xvi) Xaa 33 is an alpha methyl amino acid, optionally Aib~~.~~; and/or

~~25. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~(xvii) Xaa 34 is an alpha methyl amino acid, optionally Aib~~.~~; and/or

~~26. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~(xviii) Xaa 35 is: (a) an alpha methyl amino acid, optionally Aib~~.~~; or (b) Dab; and/or

~~27. The polypeptide or pharmaceutically acceptable salt of any one of claims 1 to 25, wherein Xaa 35 is Dab.~~

~~28. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~

(xix) Xaa 36 is an alpha methyl amino acid, optionally Aib~~.~~; and/or

~~29. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~(xx) Xaa 37 is an alpha methyl amino acid, optionally Aib.

4. ~~30.~~ The polypeptide or pharmaceutically acceptable salt of claim 1, wherein the polypeptide comprises any one of the following combinations of amino acid modifications:

-1G, -2G, 17Aib

4A, 15W, 21P, 24P, 25A, 28S

4I, 20I, 21A, 35R

4I, 21Dab, 35R

14Dab

14Dab, 17Aib, 31E

14Dab, 23αMePhe, ~~21~~31E

14Dab, 31E

14E, 17Aib

14E, 17Aib, 21H

14E, 17R

14E, 17R, 23αMePhe

14E, 21Aib

14H, 17Aib

14H, 17Aib, 21Aib, 31E

14H, 21Aib

14H, 21Aib, 35E

16dL, 21Aib

17Aib

17Aib, 37P

17Aib, 21Aib

17Aib, 21Aib, 37P

17Aib, 21G

17Aib, 21H

17Aib, 21K

17Aib, 21P

17Aib, 21P, 31E

17Aib, 21P, 35E

17Aib, 21R

17Aib, 21S

17Aib, 21Dab

17Aib, 21Dab, 31E

17Aib, 22H

17Aib, 22H, 35E

17Aib, 23αMePhe

17Aib, 26Aib

17Aib, 26R

17Aib, 27Aib

17Aib, 27dL

17Aib, 28Aib

17Aib, 29Aib

17Aib, 31Aib

17Aib, 31E

17Aib, 31H, 35E

17Aib, 31P

17Aib, 31R

17Aib, 32Aib

17Aib, 33Aib

17Aib, 34Aib

17Aib, 34H

17Aib, 34P

17Aib, 35Aib

17Aib, 35E

17Aib, 35R

17E, 21Aib

17R, 21Aib

17R, 21Aib, 31Aib

17R, 21Aib, 31E

17R, 21Aib, 31R

17R, 21Aib, 35Aib

17R, 23αMePhe

17R, 23αMePhe, 31E

17R, 26Aib

17S, 21Aib

17S, 21Aib, 31H

17S, 21Aib, 31P

17S, 21Aib, 31R

17S, 21Aib, 33P

17S, 21Aib, 35P

20αMeSer

20P, 21P, 24P, 25A, 28S

21Aib

21Aib, 24P, 25A, 28S

21Aib, 24P, 25A, 28S, 31Dab

21Aib, 24P, 25A, 28S, 35Dab

21Aib, 26dI

21Aib, 26Aib

21Aib, 27Aib

21Aib, 27dL

21Aib, 28Aib

21Aib, 28dP

21Aib, 31Aib

21Aib, 31E

21Aib, 31H

21Aib, 31R

21Aib, 33Aib

21Aib, 34Aib

21Aib, 35Aib

21Aib, 35E

21Aib, 35R

21Aib, 36Aib

21Aib, 37Aib

21Aib, 37P

21~~Dab~~Aib, 24Hyp, 25A, 28S

21Dab, 24P, 25A, 28S

21Dab, 25Aib

21Dab, 31E

21P, 24P, 25A, 28S

22Aib

22H, 35E

23αMePhe

23αMePhe, 31E

23αMePhe, 31R

23αMePhe, 35R

24Aib

26Aib

27Aib

27dL

28dP

35R

Δ1K, 4I, 21Dab, 35R

Δ1K, 14E, 17R, 23αMePhe.

5. ~~31.~~ The polypeptide or pharmaceutically acceptable salt of claim 1, wherein:

Xaa (-1) is (albumin binding moiety), Lys(albumin binding moiety) or is absent;

Xaa 4 is Thr;

Xaa 14 is Asn, Glu or Dab;

Xaa 15 is Phe;

Xaa 16 is Leu;

Xaa 17 is Val, Arg or Aib;

Xaa 20 is Ser;

Xaa 21 is Asn~~–~~;

Xaa 22 is Asn;

Xaa 23 is Phe or αMePhe;

Xaa 24 is Gly;

Xaa 25 is Pro;

Xaa 26 is Ile;

Xaa 27 is Leu;

Xaa 28 is Pro;

Xaa 29 is Pro;

Xaa 31 is Asn, Glu or Arg;

Xaa 32 is Val;

Xaa 33 is Gly;

Xaa 34 is Ser; ~~and~~

Xaa 35 is Asn or Arg;

Xaa 36 is Thr; and

Xaa 37 is Tyr~~.~~;

~~32. The polypeptide or pharmaceutically acceptable salt of claim 31, wherein~~

optionally wherein:

(i) Xaa 23 is αMePhe~~.~~; and/or

~~33. The polypeptide or pharmaceutically acceptable salt of claim 31 or 32, wherein~~(ii) Xaa 14 is Glu~~.~~ or Dab; and/or

~~34. The polypeptide or pharmaceutically acceptable salt of claim 31 or 32, wherein Xaa 14 is Dab.~~

~~35. The polypeptide or pharmaceutically acceptable salt of any one of claims 31 to 34, wherein~~

(iii) Xaa 17 is Arg~~.~~ or Aib; and/or

~~36. The polypeptide or pharmaceutically acceptable salt of any one of claims 31 to 34, wherein Xaa 17 is Aib.~~

~~37. The polypeptide or pharmaceutically acceptable salt of any one of claims 31 to 36, wherein~~

(iv) Xaa 31 is Glu~~.~~ or Arg; and/or

~~38. The polypeptide or pharmaceutically acceptable salt of any one of claims 31 to 36, wherein Xaa 31 is Arg.~~

~~39. The polypeptide or pharmaceutically acceptable salt of any one of claims 31 to 38, wherein~~

(v) Xaa 35 is Arg~~.~~; and/or

~~40. The lipidated polypeptide or pharmaceutically acceptable salt of any one of claims 31 to 39, wherein~~(vi) Xaa(1) is absent.

6. ~~41.~~ The polypeptide or pharmaceutically acceptable salt of claim 1, wherein:

Xaa (-1) is Gly, Lys(albumin binding moiety) or (albumin binding moiety);

Xaa 4 is Thr;

Xaa 14 is Asn or His;

Xaa 15 is Phe;

Xaa 16 is Leu;

Xaa 17 is Val, Arg or Aib;

Xaa 20 is Ser;

Xaa 21 is Asn, Dab or Aib;

Xaa 22 is Asn;

Xaa 23 is Phe or αMePhe;

Xaa 24 is Gly;

Xaa 25 is Pro;

Xaa 26 is Ile or Aib;

Xaa 27 is Leu or Aib;

Xaa 28 is Pro or Aib;

Xaa 29 is Pro or Aib;

Xaa 31 is Asn, Glu or Aib;

Xaa 32 is Val or Aib;

Xaa 33 is Gly or Aib;

Xaa 34 is Ser or Aib;

Xaa 35 is Asn or Aib;

Xaa 36 is Thr or Aib; and

Xaa 37 is Tyr, Pro or Aib,

wherein the polypeptide comprises at least 2 Aib residues~~.~~;

~~42. The polypeptide or pharmaceutically acceptable salt of claim 41, wherein~~

optionally wherein:

(i) (a) Xaa 17 is Aib~~.~~

~~43. The polypeptide or pharmaceutically acceptable salt of claim 42~~, optionally wherein at least one of Xaa 21, 26, 27, 28, 29, 31, 32, 33, 34 or 35 is Aib~~.~~

~~44. The polypeptide or pharmaceutically acceptable salt of any one of claims 41 to 43, wherein~~; and/or (b) Xaa 21 is Aib~~.~~

~~45. The polypeptide or pharmaceutically acceptable salt of any one of claims 41 to 44~~, optionally wherein at least one of Xaa 26, 27, 28, 31, 32, 33, 34, 35, 36, or 37 is Aib~~.~~; and/or

~~46. The polypeptide or pharmaceutically acceptable salt of any one of claims 41 to 45, wherein~~(ii) Xaa 14 is His~~.~~; and/or

~~47. The polypeptide or pharmaceutically acceptable salt of any one of claims 41 or 43 to 46, wherein~~(iii) Xaa 17 is Arg~~.~~; and/or

~~48. The polypeptide or pharmaceutically acceptable salt of any one of claims 41 to 47, wherein~~(iv) Xaa 31 is Glu~~.~~; and/or

~~49. The polypeptide or pharmaceutically acceptable salt of any one of claims 41 to 47, wherein~~(v) Xaa 31 is Aib~~.~~; and/or

~~50. The polypeptide or pharmaceutically acceptable salt of any one of claims 41 to 49, wherein~~(vi) Xaa 35 is Aib~~.~~; and/or

~~51. The polypeptide or pharmaceutically acceptable salt of any one of claims 41 to 50, wherein~~(vii) Xaa 37 is Pro.

7. ~~52.~~ The polypeptide or pharmaceutically acceptable salt of claim 1, wherein:

Xaa (-1) is Gly, Lys(albumin binding moiety), or (albumin binding moiety);

Xaa 14 is Asn, Glu or His;

Xaa 15 is Phe;

Xaa 17 is Val, Ser, Glu, Arg or Aib;

Xaa 20 is Ser;

Xaa 21 is Asn or Aib;

Xaa 22 is Asn;

Xaa 23 is Phe;

Xaa 24 is Gly, Hyp or Pro;

Xaa 25 is Pro or Ala;

Xaa 26 is Ile, dI, or Aib;

Xaa 27 is Leu, dL, or Aib;

Xaa 28 is Pro, dP, Ser, or Aib;

Xaa 29 is Pro;

Xaa 32 is Val;

Xaa 33 is Gly, Pro or Aib;

Xaa 34 is Ser or Aib;

Xaa 35 is Asn, Pro, Arg, Glu, Dab, or Aib;

Xaa 36 is Thr, or Aib; and

Xaa 37 is Tyr, Pro or Aib.;

~~53. The polypeptide or pharmaceutically acceptable salt of claim 52, wherein~~

optionally wherein:

(i) Xaa 21 is Aib.; and/or

~~54. The polypeptide or pharmaceutically acceptable salt of claim 52 or 53, wherein~~(ii) Xaa 17 is Aib. or Arg; and/or

~~55. The polypeptide or pharmaceutically acceptable salt of claim 52 or 53, wherein Xaa 17 is Arg.~~

~~56. The polypeptide or pharmaceutically acceptable salt of any one of claims 52 to 55, wherein~~

(iii) Xaa 24 is Pro.; and/or

~~57. The polypeptide or pharmaceutically acceptable salt of any one of claims 52 to 56, wherein~~(iv) Xaa 25 is Ala.; and/or

~~58. The polypeptide or pharmaceutically acceptable salt of any one of claims 52 to 57, wherein~~(v) Xaa 28 is Ser~~.~~; and/or

~~59. The polypeptide or pharmaceutically acceptable salt of any one of claims 52 to 58, wherein~~

(vi) Xaa 31 is Glu~~.~~

~~60. The polypeptide or pharmaceutically acceptable salt of any one of claims 52 to 58, wherein Xaa 31 is Arg.~~

~~61. The polypeptide or pharmaceutically acceptable salt of any one of claims 52 to 58, wherein Xaa 31 is His.~~

~~62. The polypeptide or pharmaceutically acceptable salt of any one of claims 52 to 58, wherein Xaa 31 is Aib.~~

~~63. The polypeptide or pharmaceutically acceptable salt of any one of claims 52 to 62, wherein~~, Arg, His, or Aib; and/or

(vii) Xaa 35 is Aib~~.~~

~~64. The polypeptide or pharmaceutically acceptable salt of any one of claims 52 to 62, wherein Xaa 35 is~~ or Arg.

8. ~~65.~~ The polypeptide or pharmaceutically acceptable salt of claim 1, wherein:

Xaa (-1) is (albumin binding moiety), Lys(albumin binding moiety), or is absent;

Xaa 4 is Thr;

Xaa 15 is Phe;

Xaa 16 is Leu;

Xaa 17 is Val or Aib;

Xaa 20 is Ser;

Xaa 21 is Asn, His, Pro, Ser, Arg, Dab, Lys or Gly;

Xaa 22 is Asn or His;

Xaa 23 is Phe;

Xaa 24 is Gly;

Xaa 25 is Pro;

Xaa 26 is Ile or Arg;

Xaa 27 is Leu or dL;

Xaa 28 is Pro;

Xaa 29 is Pro;

Xaa 31 is Asn, Glu, His, Arg or Pro;

Xaa 32 is Val;

Xaa 33 is Gly;

Xaa 34 is Ser, Pro or His;

Xaa 35 is Asn, Glu or Arg;Xaa 36 is Thr; and

Xaa 37 is Tyr~~.~~;

~~66. The polypeptide or pharmaceutically acceptable salt of claim 65, wherein~~

optionally wherein:

(i) Xaa 17 is Aib~~.~~; and/or

~~67. The polypeptide or pharmaceutically acceptable salt of claim 65 or 66, wherein~~(ii) Xaa 14 is His~~.~~; and/or

~~68. The polypeptide or pharmaceutically acceptable salt of any one of claims 65 to 67, wherein~~(iii) Xaa 21 is Dab~~.~~; and/or

~~69. The polypeptide or pharmaceutically acceptable salt of any one of claims 65 to 71, wherein~~(iv) Xaa 31 is Glu.

9. ~~70.~~ The polypeptide or pharmaceutically acceptable salt of any one of the preceding

claims, wherein:

~~2.~~ (a) Xaa (-4) is Lys(albumin binding moiety), Xaa (-1) is Lys(albumin binding moiety) or (albumin binding moiety), or Xaa 1 is Lys(albumin binding moiety)~~.~~

~~71. The polypeptide or pharmaceutically acceptable salt of claim 70,~~; optionally wherein the albumin binding moiety comprises a lipid, further optionally wherein the lipid is selected from C12diacid, C14diacid, C16diacid, C17diacid, C18diacid, C19diacid or C20diacid~~.~~; and/or

~~72. The polypeptide or pharmaceutically acceptable salt of claim 71, wherein the lipid is C18diacid or C20diacid.~~

~~73. The polypeptide or pharmaceutically acceptable salt of any one of the preceding claims, wherein~~
(b) the albumin binding moiety is attached to an amino acid residue of the polypeptide~~.~~

~~74. The polypeptide or pharmaceutically acceptable salt of claim 73,~~; optionally wherein the albumin binding moiety is attached to the amino acid residue by a linker~~.~~

~~75. The polypeptide or pharmaceutically acceptable salt of claim 74,~~; further optionally wherein the linker comprises a residue of γ-Glu, even further optionally wherein the linker comprises γGlu, γGlu-γGlu, γGlu-(O2Oc)-(O2Oc) or γGlu-(PEG2)-(PEG2).

10. ~~76.~~ A polypeptide selected from the group consisting of:

C18diacid-γE-K[CNTATC]ATQRLANFLVHSSNNFGPILPPTNVGSNTY-amide

C18diacid-γE-γE-GGG-K[CNTATC]ATQRLANFLVHSSNNFGPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSSNNFGPILPPTNVGSNTY-amide

K(O2Oc-O2Oc-γE-C18diacid)[CNTATC]ATQRLANFLVHSSNNFGPILPPTNVGSNTY-amide

K(O2Oc-O2Oc-γE-C18diacid)GGGK[CNTATC]ATQRLANFLVHSSNNFGPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Dab)NFPAILSPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFPAILSPTNVGSNTY-amide

C18diacid-γE-[CNTATC]ATQRLAEFLRHSSNN(αMePhe)GPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLAEFLRHSSNN(αMePhe)GPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLAEFLRHSSNN(αMePhe)GPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSSNN(αMePhe)GPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSSNN(αMePhe)GPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLRHSSNN(αMePhe)GPILPPTEVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLRHSSNN(αMePhe)GPILPPTEVGSNTY-amide

K(O2Oc-O2Oc-γE-C18diacid)[CNTATC]ATQRLANFLRHSSNN(αMePhe)GPILPPTEVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLRHSSNN(αMePhe)GPILPPTEVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLRHSSNN(αMePhe)GPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLRHSSNN(αMePhe)GPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSSNN(αMePhe)GPILPPTNVGSRTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHS(αMeSer)NNFGPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSSNN(αMePhe)GPILPPTEVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSSNN(αMePhe)GPILPPTRVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLVHSSNN(αMePhe)GPILPPTRVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFL(Aib)HSSNN(αMePhe)GPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNIATC]ATQRLANFLVHSS(Dab)NFGPILPPTNVGSRTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Dab)NFGPILPPTEVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Dab)NFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSS(Dab)NFGPILPPTEVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Dab)NFG(Aib)ILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLA(Dab)FLVHSSNN(αMePhe)GPILPPTEVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLA(Dab)FLVHSSNNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLA(Dab)FLVHSSNNFGPILPPTEVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLSHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLAEFLVHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLEHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTHVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTEVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGSETY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPTEVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPTEVGSNTY-amide

K(O2Oc-O2Oc-γE-C18diacid)[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPTEVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLAHFLVHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLAHFLVHSS(Aib)NFGPILPPTNVGSETY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTEVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPTEVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLSHSS(Aib)NFGPILPPTHVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLSHSS(Aib)NFGPILPPTRVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLSHSS(Aib)NFGPILPPTPVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLSHSS(Aib)NFGPILPPTNVPSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLSHSS(Aib)NFGPILPPTNVGSPTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGSNTP-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGPI(dL)PPTNVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGPIL(dP)PTNVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGP(dI)LPPTNVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANF(dL)VHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTRVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGSRTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)K[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTRVGSNTY-amide

(C18diacid-γE-[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTRVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTRVGSNTY-amide

K(γE-γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTRVGSNTY-amide

C18diacid-γE-K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTRVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGSRTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGSRTY-amide

K(γE-γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGSRTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPTNVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPTRVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPTRVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGP(Aib)LPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPI(Aib)PPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPT(Aib)VGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNV(Aib)SNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGS(Aib)TY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGSN(Aib)Y-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVG(Aib)NTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGSNT(Aib)-amide

K(γE-C18diacid)K[CNTATC]ATQRLAHFL(Aib)HSS(Aib)NFGPILPPTEVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSS(Aib)NFGPILPPTNVGSNTP-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPIL(Aib)PTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPT(Aib)VGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPT(Aib)VGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPTNVGS(Aib)TY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLRHSS(Aib)NFGPILPPTNVGS(Aib)TY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSS(Dab)NFG(Aib)ILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGP(Aib)LPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPI(Aib)PPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPIL(Aib)PTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILP(Aib)TNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPT(Aib)VGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTN(Aib)GSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNV(Aib)SNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNVG(Aib)NTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNVGS(Aib)TY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLVHSSNNFGPI(dL)PPTNVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFLVHSSNNFGPIL(dP)PTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLSHSS(Dab)NFG(Aib)ILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSSNNFGP(Aib)LPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLRHSSNNFGP(Aib)LPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSSNNFGPI(Aib)PPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSSN(Aib)FGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSSNNF(Aib)PILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFLVHSSNHFGPILPPTNVGSETY-amide

C20diacid-γE-K[CNTATC]ATQRLANFLVHSSNNFGPILPPTNVGSNTY-amide

C20diacid-γE-O2Oc-O2Oc-K[CNTATC]ATQRLANFLVHSSNNFGPILPPTNVGSNTY-amide

K(γE-γE-C20diacid)[CNTATC]ATQRLANFLVHSSNNFGPILPPTNVGSRTY-amide

K(γE-γE-C20diacid)[CNTATC]ATQRLANFLVHSSPNFPAILSPTNVGSNTY-amide

K(γE-γE-C20diacid)[CNTATC]ATQRLAEFLRHSSNNFGPILPPTNVGSNTY-amide

K(γE-γE-C20diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFPAILSPTNVGSNTY-amide

K(γE-γE-C20diacid)[CNIATC]ATQRLANFLVHSIANFGPILPPTNVGSRTY-amide

K(γE-γE-C20diacid)[CNTATC]ATQRLANFLVHSPPNFPAILSPTNVGSNTY-amide

K(γE-γE-C20diacid)[CNAATC]ATQRLANWLVHSSPNFPAILSPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Dab)NFPAILSPTNVGSNTY-amide

K(γE-γE-C20diacid)[CNTATC]ATQRLANFLVHSS(Aib)NF(Hyp)AILSPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFPAILSPT(Dab)VGSNTY-amide

K(γE-γE-C20diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFPAILSPT(Dab)VGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFPAILSPTNVGS(Dab)TY-amide

K(γE-γE-C20diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFPAILSPTNVGS(Dab)TY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSS(Dab)NFGPILPPTNVGSNTY-amide

K(γE-γE-C18diacid)[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLAEFL(Aib)HSSNNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLAEFL(Aib)HSSHNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSHNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSPNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSSNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTPVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNHFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNVGSNTP-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSRNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSPNFGPILPPTEVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSPNFGPILPPTNVGSETY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTEVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNVGSRTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNVGSETY-amide

K(γE-C18diacid)GGK[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLAHFL(Aib)HSSNNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNVGHNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTHVGSETY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNHFGPILPPTNVGSETY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNVGPNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFL(Aib)HSS(Dab)NFGPILPPTNVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFL(Aib)HSSNNFGPI(dL)PPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSNNFGPRLPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSKNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLANFL(Aib)HSSGNFGPILPPTNVGSNTY-amide

K(γE-C18diacid)[CNTATC]ATQRLANFL(Aib)HSSNNFGPILPPTRVGSNTY-amide

K(γE-C18diacid)K[CNTATC]ATQRLA(Dab)FL(Aib)HSSNNFGPILPPTEVGSNTY-amide

(C18diacid)K[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPT(Aib)VGSNTY-amide

K(C18diacid)[CNTATC]ATQRLANFLVHSS(Aib)NFGPILPPT(Aib)VGSNTY-amide

11. ~~77.~~ A pharmaceutical composition comprising the polypeptide or pharmaceutically acceptable salt of any one of the preceding claims and a pharmaceutically acceptable excipient.

12. ~~78. A method~~Use of the polypeptide or pharmaceutically acceptable salt of claims 1-10 or the pharmaceutical composition of claim 11 in the manufacture of a medicament for treating and/or preventing a disease or disorder in a subject~~ comprising administering,~~ wherein the polypeptide~~ or,~~ pharmaceutically acceptable salt ~~of any one of the preceding claims or the~~or pharmaceutical composition ~~of claim 77.~~

~~79. The method of claim 78,~~is to be administered; optionally wherein:
(a) the disease or disorder is obesity, metabolic disease, an obesity-related condition, eating disorder, Alzheimer's disease, hepatic steatosis ("fatty liver"), kidney failure, arteriosclerosis (e.g. atherosclerosis), cardiovascular disease, macrovascular disease, microvascular disease, diabetic heart (including diabetic cardiomyopathy and heart failure as a diabetic complication), coronary heart disease, peripheral artery disease or stroke, cancer, dumping syndrome, hypertension e.g. pulmonary hypertension, or dyslipidemia e.g. atherogenic dyslipidemia, cholescystitis, or short bowel syndrome~~.~~; further optionally:

~~80. The method according to claim 79,~~(i) wherein the obesity-related condition is overweight,

morbid obesity, obesity prior to surgery, obesity-linked inflammation, obesity-linked gallbladder disease, sleep apnea and respiratory problems, hyperlipidemia, degeneration of cartilage, osteoarthritis, or reproductive health complications of obesity or overweight such as infertility~~.~~; or

~~81. The method according to claim 79,~~(ii) wherein the metabolic disease is diabetes, type 1 diabetes, type 2 diabetes, gestational diabetes, pre-diabetes, insulin resistance, impaired glucose tolerance (IGI), disease states associated with elevated blood glucose levels, metabolic disease including metabolic syndrome, or hyperglycemia *e.g.* abnormal postprandial hyperglycemia~~.~~; and/or

~~82. The method of any one of claims 78 to 81, wherein~~(b) the polypeptide, pharmaceutically acceptable salt or pharmaceutical composition is to be administered to the subject by subcutaneous injection~~.~~

~~83. The method of any one of claims 78 to 82, wherein the polypeptide, pharmaceutically acceptable salt or pharmaceutical composition is administered to the subject~~ and/or by self-administration.

13. ~~84.~~ A method for the production of the polypeptide of any one of claims 1 to ~~76.~~

~~85. The~~10, optionally wherein the method ~~of claim 84, comprising~~comprises synthesizing the polypeptide by solid-phase or liquid-phase methodology, and optionally isolating and purifying the final product.

14. ~~86.~~ An article of manufacture comprising the polypeptide or pharmaceutically acceptable salt of any one of claims 1 to ~~76~~10 or the pharmaceutical composition of claim ~~77~~11.

15. ~~87.~~ A kit comprising the polypeptide or pharmaceutically acceptable salt of any one of claims 1 to ~~76~~10 or the pharmaceutical composition of claim ~~77~~11, optionally further comprising instructions for use.

16. The polypeptide or pharmaceutically acceptable salt of any one of claims 1-10 or the

pharmaceutical composition of claim 11 for use in therapy.