

SEQUENCE LISTING

<110> CARMOT THERAPEUTICS, INC.

<120> MODULATORS OF G-PROTEIN COUPLED RECEPTORS

<130> 41517-0007W01

<140> PCT/US2022/029305

<141> 2022-05-13

<150> 63/188,342

<151> 2021-05-13

<160> 68

<170> PatentIn version 3.5

<210> 1

<211> 44

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD_RES

<222> (4)..(43)

<223> Any amino acid

<220>

<221> SITE

<222> (4)..(43)

<223> This region may encompass 30-40 residues

<220>

<221> MOD_RES

<222> (44)..(44)

<223> Any amino acid, amino ester, or amino acid amide that is optionally substituted with from 1-2 modifying groups

<220>

<223> See specification as filed for detailed description of substitutions and preferred embodiments

<400> 1

Gly Thr Phe Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40

<210> 2

<211> 47

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD RES

<222> (1) .. (20)

<223> Any amino acid

<220>

<221> SITE

<222> (1)..(20)

<223> This region may encompass 10-20 residues

<220>

<221> MOD RES

$\langle 222 \rangle \quad (21) \dots (21)$

<223> Modified amino acid

<220>

<221> MOD RES

<222> (22) .. (46)

<223> Any amino acid

<220>

<221> SITE

<222> (22) .. (46)

<223> This region may encompass 15-25 residues

<220>

<221> MOD RES

<222> (47) .. (47)

<222> (22) .. (46)

<223> Any amino acid

<220>

<221> SITE

<222> (22) .. (46)

<223> This region may encompass 15-25 residues

<220>

<221> MOD RES

<222> (47) .. (47)

<223> Any amino acid, amino ester, or amino acid amide that is optionally substituted with from 1-2 modifying groups

<220>

<223> See specification as filed for detailed description of substitutions and preferred embodiments

<400> 3

Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
1				5					10					15	

Xaa Xaa Xaa Xaa Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45

$\langle 210 \rangle$ 4

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD RES

<222> (3)..⁻(3)

<223> Phe, alpha-methyl-2-fluorophenylalanine, alpha-methyl-phenylalanine, or 2-fluorophenylalanine

<220>

<221> MOD RES

<222> (4)..(4)
<223> Thr, Ala, or Val

<220>
<221> MOD_RES
<222> (7)..(7)
<223> Tyr or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>
<221> MOD_RES
<222> (10)..(10)
<223> Tyr, alpha-methyl-leucine, or 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (13)..(13)
<223> Lys, Ornithine, or Arg

<220>
<221> MOD_RES
<222> (14)..(14)
<223> Gln, Ile, or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ala or Gln

<220>
<221> MOD_RES
<222> (17)..(17)
<223> 2-aminoisobutyric acid or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> Ala or Glu

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Val or Ile

<220>

<221> MOD_RES
<222> (21)..(21)
<223> Asn, Gln, (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid, or D-Glutamic acid

<220>
<221> MOD_RES
<222> (22)..(22)
<223> Trp or Tyr

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ile or Leu

<220>
<221> MOD_RES
<222> (25)..(25)
<223> Ala or Glu

<220>
<221> MOD_RES
<222> (37)..(37)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid or absent

<220>
<223> See specification as filed for detailed description of
substitutions and preferred embodiments

<400> 4
Gly Thr Xaa Xaa Ser Asp Xaa Ser Ile Xaa Leu Asp Xaa Xaa Ala Xaa
1 5 10 15

Xaa Xaa Phe Xaa Xaa Xaa Leu Xaa Xaa Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser Xaa
35

<210> 5
<211> 37
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Phe, alpha-methyl-2-fluorophenylalaine, alpha-methyl-phenylalaine, or 2-fluorophenylalaine

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Thr, Ala, or Val

<220>

<221> MOD_RES

<222> (7)..(7)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>

<221> MOD_RES

<222> (10)..(10)

<223> Tyr, alpha-methyl-leucine, or 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (13)..(13)

<223> Lys, Ornithine, or Arg

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Gln, Ile, or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>

<221> MOD_RES

<222> (16)..(16)

<223> Ala or Gln

<220>

<221> MOD_RES

<222> (17)..(17)

<223> 2-aminoisobutyric acid or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>

<221> MOD_RES

<222> (18)..(18)

<223> Ala or Glu

<220>

<221> MOD_RES

<222> (20)..(20)

<223> Val or Ile

<220>

<221> MOD_RES

<222> (21)..(21)

<223> Asn, Gln, (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid, or D-Glutamic acid

<220>

<221> MOD_RES

<222> (22)..(22)

<223> Trp or Tyr

<220>

<221> MOD_RES

<222> (24)..(24)

<223> Ile or Leu

<220>

<221> MOD_RES

<222> (25)..(25)

<223> Ala or Glu

<220>

<221> MOD_RES

<222> (37)..(37)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid or absent

<220>

<223> See specification as filed for detailed description of substitutions and preferred embodiments

<400> 5

Gly Thr Xaa Xaa Ser Asp Xaa Ser Ile Xaa Leu Asp Xaa Xaa Ala Xaa

1

5

10

15

Xaa Xaa Phe Xaa Xaa Xaa Leu Xaa Xaa Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser Xaa
35

<210> 6

<211> 37

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Description of Artificial Sequence: Synthetic polypeptide

 $\langle 220 \rangle$

<221> MOD RES

<222> (3) . . (3)

<223> Phe, alpha-methyl-2-fluorophenylalaine, alpha-methyl-phenylalaine, or 2-fluorophenylalaine

 $\langle 220 \rangle$

<221> MOD RES

 $\langle 222 \rangle \quad (4) \dots (4)$

<223> Thr, Ala, or Val

<220>

<221> MOD RES

 $\langle 222 \rangle \quad (7) \cdot \cdot (7)$

<223> Tyr or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

$\langle 220 \rangle$

<221> MOD RES

<222> (10)..⁻(10)

<223> Tyr, alpha-methyl-leucine, or 2-aminoisobutyric acid

<220>

<221> MOD RES

<222> (13)..⁻(13)

<223> Lys, Ornithine, or Arg

<220>

<221> MOD_RES
<222> (14)..(14)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ala or Gln

<220>
<221> MOD_RES
<222> (17)..(17)
<223> 2-aminoisobutyric acid or (1S,28S)-1-amino-7,16,25,30-
tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-
1,28,45-tricarboxylic acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> Ala or Glu

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Val or Ile

<220>
<221> MOD_RES
<222> (21)..(21)
<223> Asn, Gln, (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid, or D-Glutamic acid

<220>
<221> MOD_RES
<222> (22)..(22)
<223> Trp or Tyr

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ile or Leu

<220>
<221> MOD_RES
<222> (25)..(25)
<223> Ala or Glu

<220>

<221> MOD_RES

<222> (37)..(37)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid or absent

<220>

<223> See specification as filed for detailed description of substitutions and preferred embodiments

<400> 6

Gly Thr Xaa Xaa Ser Asp Xaa Ser Ile Xaa Leu Asp Xaa Xaa Ala Xaa
1 5 10 15

Xaa Xaa Phe Xaa Xaa Xaa Leu Xaa Xaa Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser Xaa
35

<210> 7

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Phe, alpha-methyl-2-fluorophenylalaine, alpha-methyl-phenylalaine, or 2-fluorophenylalaine

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Thr, Ala, or Val

<220>

<221> MOD_RES

<222> (7)..(7)

<223> Tyr or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>

<221> MOD_RES

<222> (10)..(10)

<223> Tyr, alpha-methyl-leucine, or 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (13)..(13)

<223> Lys, Ornithine, or Arg

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Gln, Ile, or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>

<221> MOD_RES

<222> (16)..(16)

<223> Ala or Gln

<220>

<221> MOD_RES

<222> (17)..(17)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>

<221> MOD_RES

<222> (18)..(18)

<223> Ala or Glu

<220>

<221> MOD_RES

<222> (20)..(20)

<223> Val or Ile

<220>

<221> MOD_RES

<222> (21)..(21)

<223> Asn, Gln, (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid, or D-Glutamic acid

<220>
<221> MOD_RES
<222> (22)..(22)
<223> Trp or Tyr

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ile or Leu

<220>
<221> MOD_RES
<222> (25)..(25)
<223> Ala or Glu

<220>
<221> MOD_RES
<222> (37)..(37)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid or absent

<220>
<223> See specification as filed for detailed description of substitutions and preferred embodiments

<400> 7
Gly Thr Xaa Xaa Ser Asp Xaa Ser Ile Xaa Leu Asp Xaa Xaa Ala Xaa
1 5 10 15

Xaa Xaa Phe Xaa Xaa Xaa Leu Xaa Xaa Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser Xaa
35

<210> 8
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polypeptide

<220>
<221> MOD_RES
<222> (3)..(3)
<223> Phe, alpha-methyl-2-fluorophenylalaine, alpha-methyl-phenylalaine,
or 2-fluorophenylalaine

<220>
<221> MOD_RES
<222> (4)..(4)
<223> Thr, Ala, or Val

<220>
<221> MOD_RES
<222> (7)..(7)
<223> Tyr or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-
6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>
<221> MOD_RES
<222> (10)..(10)
<223> Tyr, alpha-methyl-leucine, or 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (13)..(13)
<223> Lys, Ornithine, or Arg

<220>
<221> MOD_RES
<222> (14)..(14)
<223> Gln, Ile, or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic
acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ala or Gln

<220>
<221> MOD_RES
<222> (17)..(17)
<223> 2-aminoisobutyric acid or (1S,28S)-1-amino-7,16,25,30-
tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-
1,28,45-tricarboxylic acid

<220>
<221> MOD_RES
<222> (18)..(18)

```
<220>  
<221> MOD_RES  
<222> (20)..(20)  
<223> Val or Ile
```

<220>
<221> MOD_RES
<222> (22)..(22)
<223> Trp or Tyr

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ile or Leu

<220>
<221> MOD_RES
<222> (25)..(25)
<223> Ala or Glu

<220>
<221> MOD_RES
<222> (37)..(37)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid or absent

<220>
<223> See specification as filed for detailed description of
substitutions and preferred embodiments

<400> 8
 Gly Thr Xaa Xaa Ser Asp Xaa Ser Ile Xaa Leu Asp Xaa Xaa Ala Xaa
 1 5 10 15

Xaa Xaa Phe Xaa Xaa Xaa Leu Xaa Xaa Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser Xaa
35

<210> 9
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (3)..(3)
<223> Phe, alpha-methyl-2-fluorophenylalaine, alpha-methyl-phenylalaine,
or 2-fluorophenylalaine

<220>
<221> MOD_RES
<222> (4)..(4)
<223> Thr, Ala, or Val

<220>
<221> MOD_RES
<222> (7)..(7)
<223> Tyr or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-
6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>
<221> MOD_RES
<222> (10)..(10)
<223> Tyr, alpha-methyl-leucine, or 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (13)..(13)
<223> Lys, Ornithine, or Arg

<220>
<221> MOD_RES
<222> (14)..(14)
<223> Gln, Ile, or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic
acid

<220>

<221> MOD_RES
<222> (16)..(16)
<223> Ala or Gln

<220>
<221> MOD_RES
<222> (17)..(17)
<223> 2-aminoisobutyric acid or (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> Ala or Glu

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Val or Ile

<220>
<221> MOD_RES
<222> (21)..(21)
<223> Asn, Gln, (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid, or D-Glutamic acid

<220>
<221> MOD_RES
<222> (22)..(22)
<223> Trp or Tyr

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ile or Leu

<220>
<221> MOD_RES
<222> (25)..(25)
<223> Ala or Glu

<220>
<221> MOD_RES
<222> (37)..(37)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 11
<211> 26
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<220>
<221> MOD_RES
<222> (3)..(3)
<223> Phe or alpha-methyl-2-fluorophenylalaine

<220>
<221> MOD_RES
<222> (10)..(10)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (17)..(17)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 11
Gly Thr Xaa Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly
20 25

<210> 12
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (10)..(10)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (17)..(17)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 12
Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Arg Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 13
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (3)..(3)
<223> alpha-methyl-2-fluorophenylalaine

<220>
<221> MOD_RES
<222> (10)..(10)
<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (17)..(17)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 13

Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Arg Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 14

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD_RES

<222> (3)..(3)

<223> alpha-methyl-phenylalaine

<220>

<221> MOD_RES

<222> (10)..(10)

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (17)..(17)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 14

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

<210> 15
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<221> MOD_RES
<222> (3)..(3)
<223> 2-fluorophenylalanine

<220>
<221> MOD_RES
<222> (10)..(10)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (17)..(17)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 15
Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Arg Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser

<210> 16

<211> 36

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Description of Artificial Sequence: Synthetic polypeptide

 $\langle 220 \rangle$

<221> MOD RES

$\langle 222 \rangle \quad (17) \dots (17)$

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 16

Gly Thr Phe Thr Ser Asp Tyr Ser Ile Tyr Leu Asp Lys Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser

35

<210> 17

<211> 36

<212> PRT

<213> Artificial Sequence

$\langle 220 \rangle$

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD RES

$\langle 222 \rangle \quad (10) \dots (10)$

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (17)..(17)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 17

Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Leu Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 18

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD_RES

<222> (10)..(10)

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (17)..(17)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 18

Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala Gln
1 5 10 15

Xaa Glu Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 19
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (10)..(10)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (17)..(17)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 19
Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Gln Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 20
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (17)..(17)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (37)..(37)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 20
Gly Thr Phe Thr Ser Asp Tyr Ser Ile Tyr Leu Asp Lys Gln Ala Ala
1 5 10 15

Xaa Glu Phe Val Asn Trp Leu Leu Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser Xaa
35

<210> 21
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (10)..(10)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (17)..(17)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 21

polypeptide

<220>

<221> MOD RES

$\langle 222 \rangle$ $(10)\bar{..}(10)$

<223> 2-aminoisobutyric acid

<220>

<221> MOD RES

<222> (17)..(17)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 23

Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala Gln

Xaa Ala Phe Val Asn Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala

20 25 30

Pro Pro Pro Ser

35

<210> 24

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

 $\langle 220 \rangle$

<221> MOD RES

<222> (10) .. (10)

<223> 2-aminoisobutyric acid

<220>

<221> MOD RES

$\langle 222 \rangle$ $(17) \dots (17)$

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 24

Gly Thr Phe Val Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 25

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>

<221> MOD_RES

<222> (10)..(10)

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (17)..(17)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 25

Gly Thr Phe Ala Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 26
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (7)..(7)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<220>
<221> MOD_RES
<222> (17)..(17)
<223> 2-aminoisobutyric acid

<400> 26
Gly Thr Phe Thr Ser Asp Xaa Ser Ile Tyr Leu Asp Lys Gln Ala Ala
1 5 10 15

Xaa Glu Phe Val Asn Trp Leu Leu Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 27
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (10)..(10)
<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (17)..(17)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 27

Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 28

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD_RES

<222> (3)..(3)

<223> alpha-methyl-2-fluorophenylalaine

<220>

<221> MOD_RES

<222> (17)..(17)

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (37)..(37)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 28

<210> 30

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>

<221> MOD_RES

<222> (10)..(10)

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (17)..(17)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 30

Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala Gln

1

5

10

15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly

20

25

<210> 31

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>

<221> MOD_RES

<222> (3)..(3)

<223> alpha-methyl-2-fluorophenylalaine

<220>
<221> MOD_RES
<222> (10)..(10)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (17)..(17)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 31
Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly
20 25

<210> 32
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polypeptide

<220>
<221> MOD_RES
<222> (10)..(10)
<223> alpha-methyl-leucine

<220>
<221> MOD_RES
<222> (13)..(13)
<223> Ornithine

<220>
<221> MOD_RES
<222> (14)..(14)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<220>

<221> MOD_RES
<222> (17)..(17)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (21)..(21)
<223> D-Glutamic acid

<400> 32
Gly Thr Phe Thr Ser Asp Tyr Ser Ile Leu Leu Asp Xaa Xaa Ala Gln
1 5 10 15

Xaa Glu Phe Ile Glu Tyr Leu Ile Glu Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 33
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (3)..(3)
<223> alpha-methyl-2-fluorophenylalaine

<220>
<221> MOD_RES
<222> (10)..(10)
<223> alpha-methyl-leucine

<220>
<221> MOD_RES
<222> (13)..(13)
<223> Ornithine

<220>
<221> MOD_RES

<222> (14)..(14)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<220>
<221> MOD_RES
<222> (17)..(17)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (21)..(21)
<223> D-Glutamic acid

<400> 33
Gly Thr Phe Thr Ser Asp Tyr Ser Ile Leu Leu Asp Xaa Xaa Ala Gln
1 5 10 15

Xaa Glu Phe Ile Glu Tyr Leu Ile Glu Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 34
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (10)..(10)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (17)..(17)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 34

Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 35

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>

<221> MOD_RES

<222> (10)..(10)

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (17)..(17)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 35

Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala Gln
1 5 10 15

Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<220>

<221> MOD_RES

<222> (21)..(21)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 37

Gly Thr Phe Thr Ser Asp Tyr Ser Ile Tyr Leu Asp Lys Gln Ala Ala
1 5 10 15

Xaa Glu Phe Val Xaa Trp Leu Leu Ala Gly Gly Pro Ser Ser Gly Ala
20 25 30

Pro Pro Pro Ser
35

<210> 38

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD_RES

<222> (11)..(11)

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (18)..(18)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 38

Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly

20

25

30

Ala Pro Pro Pro Ser
35

<210> 39

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>

<221> MOD_RES

<222> (11)..(11)

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (18)..(18)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 39

Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Arg Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 40

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

polypeptide

<220>

<221> MOD_RES

<222> (4)..(4)

<223> alpha-methyl-2-fluorophenylalaine

<220>

<221> MOD_RES

<222> (11)..(11)

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (18)..(18)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 40

Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Arg Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 41

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD_RES

<222> (4)..(4)

<223> alpha-methyl-phenylalaine

<220>

<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 41
Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Arg Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 42
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (4)..(4)
<223> 2-fluorophenylalanine

<220>
<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-

tricarboxylic acid

<400> 42

Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Arg Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
 20 25 30

Ala Pro Pro Pro Ser
 35

<210> 43

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>

<221> MOD_RES

<222> (18)..(18)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 43

Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Tyr Leu Asp Lys Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
 20 25 30

Ala Pro Pro Pro Ser
 35

<210> 44

<211> 37

<212> PRT

<213> Artificial Sequence

<210> 47

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

 $\langle 220 \rangle$

<221> MOD RES

<222> (18)..(18)

<223> 2-aminoisobutyric acid

<220>

<221> MOD RES

<222> (38)..(38)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 47

Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Tyr Leu Asp Lys Gln Ala

1

5

10

15

Ala Xaa Glu Phe Val Asn Trp Leu Leu Ala Gly Gly Pro Ser Ser Gly

20

25

30

Ala Pro Pro Pro Ser Xaa

35

<210> 48

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 48
Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala
1 5 10 15

Ala Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 49
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 49
Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Tyr Leu Asp Lys Gln Ala
1 5 10 15

Ala Xaa Glu Phe Val Asn Trp Leu Leu Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 50
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 50
Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Asn Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 51
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 51
Glu Gly Thr Phe Val Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 52
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 52

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 54
Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 55
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (4)..(4)
<223> alpha-methyl-2-fluorophenylalaine

<220>

<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 55
Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 56
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (4)..(4)
<223> alpha-methyl-2-fluorophenylalaine

<220>
<221> MOD_RES
<222> (18)..(18)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (38)..(38)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-

tricarboxylic acid

<400> 56

Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Tyr Leu Asp Lys Gln Ala
1 5 10 15

Ala Xaa Glu Phe Val Asn Trp Leu Leu Ala Gly Gly Pro Ser Ser Gly
 20 25 30

Ala Pro Pro Pro Ser Xaa
 35

<210> 57

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>

<221> MOD_RES

<222> (4)..(4)

<223> alpha-methyl-2-fluorophenylalaine

<220>

<221> MOD_RES

<222> (8)..(8)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<220>

<221> MOD_RES

<222> (18)..(18)

<223> 2-aminoisobutyric acid

<400> 57

Glu Gly Thr Phe Thr Ser Asp Xaa Ser Ile Tyr Leu Asp Lys Gln Ala
1 5 10 15

Ala Xaa Glu Phe Val Asn Trp Leu Leu Ala Gly Gly Pro Ser Ser Gly
 20 25 30

Ala Pro Pro Pro Ser
35

<210> 58
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<220>
<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 58
Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly
20 25

<210> 59
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<220>
<221> MOD_RES

<222> (4)..(4)

<223> alpha-methyl-2-fluorophenylalaine

<220>

<221> MOD_RES

<222> (11)..(11)

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (18)..(18)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<400> 59

Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala

1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly

20 25

<210> 60

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<220>

<221> MOD_RES

<222> (11)..(11)

<223> alpha-methyl-leucine

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Ornithine

<220>

<221> MOD_RES

<222> (15)..(15)

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-

tricarboxylic acid

<220>

<221> MOD_RES

<222> (18)..(18)

<223> 2-aminoisobutyric acid

<220>

<221> MOD_RES

<222> (22)..(22)

<223> D-Glutamic acid

<400> 60

Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Leu Leu Asp Xaa Xaa Ala

1

5

10

15

Gln Xaa Glu Phe Ile Glu Tyr Leu Ile Glu Gly Gly Pro Ser Ser Gly

20

25

30

Ala Pro Pro Pro Ser

35

<210> 61

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>

<221> MOD_RES

<222> (4)..(4)

<223> alpha-methyl-2-fluorophenylalaine

<220>

<221> MOD_RES

<222> (11)..(11)

<223> alpha-methyl-leucine

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Ornithine

<220>
<221> MOD_RES
<222> (15)..(15)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (22)..(22)
<223> D-Glutamic acid

<400> 61
Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Leu Leu Asp Xaa Xaa Ala
1 5 10 15

Gln Xaa Glu Phe Ile Glu Tyr Leu Ile Glu Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 62
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)

Ala Pro Pro Pro Ser
35

<210> 64
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
polypeptide

<220>
<221> MOD_RES
<222> (1)..(1)
<223> D-Aspartic acid

<220>
<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-
tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-
tricarboxylic acid

<400> 64
Asp Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 65
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polypeptide

<220>
<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<220>
<221> MOD_RES
<222> (18)..(18)
<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazaooctatetracontane-1,28,48-tricarboxylic acid

<400> 65
Asp Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<210> 66
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic polypeptide

<220>
<221> MOD_RES
<222> (1)..(1)
<223> D-Glutamic acid

<220>
<221> MOD_RES
<222> (11)..(11)
<223> 2-aminoisobutyric acid

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazaooctatetracontane-1,28,48-tricarboxylic acid

Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Xaa Leu Asp Lys Ile Ala
1 5 10 15

Gln Xaa Ala Phe Val Gln Trp Leu Ile Ala Gly Gly Pro Ser Ser Gly
20 25 30

Ala Pro Pro Pro Ser
35

<213> Artificial Sequence

<223> Description of Artificial Sequence: Synthetic polypeptide

<223> (1S,28S)-1-amino-7,16,25,30-tetraoxo-9,12,18,21-tetraoxa-6,15,24,29-tetraazapentatetracontane-1,28,45-tricarboxylic acid

<223> 2-aminoisobutyric acid

Glu Gly Thr Phe Thr Ser Asp Tyr Ser Ile Tyr Leu Asp Lys Xaa Ala
1 5 10 15

~~Ala Xaa Glu Phe Val Asn Trp Leu Leu Ala Gly Gly Pro Ser Ser Gly~~

