SEQUENCE LISTING

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<130> 29920-204749

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<160> 533

<170> PatentIn version 3.3

<210> 1
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<213> Homo sapiens

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

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

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<222> (16)..(16)
<223> Glu, Gln, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (17)..(17)
<223> Arg, Cys, Orn, homocysteine or acetyl phenylalanine

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<400> 2
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Xaa
1 5 10 15

Xaa Arg Ala Gln Asp Phe Val Gln Trp Leu Xaa Asn Thr
20 25

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<220>
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<223> Glu, Gln, homoglutamic acid or homocysteic acid

<220>
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<223> Asp, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
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<222> (27)..(27)
<223> Met, Leu or Nle

<400> 3
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Xaa
1 5 10 15

Arg Arg Ala Gln Xaa Phe Val Gln Trp Leu Xaa Asn Thr
20 25

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<223> Glu, Gln, homoglutamic acid or homocysteic acid

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<223> Gln, Cys, Orn, homocysteine or acetyl phenylalanine

<220>
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<222> (27)..(27)
<223> Met, Leu or Nle

<400> 4
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Xaa
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Xaa Trp Leu Xaa Asn Thr
20 25

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<223> Glu, Gln, homoglutamic acid or homocysteic acid

<220>
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<223> Asp, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
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<223> Gln, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
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<223> Met, Leu or Nle

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

Arg Arg Ala Gln Xaa Phe Val Xaa Trp Leu Xaa Asn Thr
20 25

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<223> Asp, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
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<222> (27)..(27)
<223> Met, Leu or Nle

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1 5 10 15

Arg Arg Ala Gln Xaa Phe Val Gln Trp Leu Xaa Asn Thr
20 25

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<223> Gln, Cys, Orn, homocysteine or acetyl phenylalanine

<220>
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<222> (27)..(27)
<223> Met, Leu or Nle

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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Xaa Trp Leu Xaa Asn Thr
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<220>
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<223> Glu, Gln, homoglutamic acid or homocysteic acid

<400> 8
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
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<223> Met, Leu or Nle

<400> 9
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Xaa Asn Thr

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<220>
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

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<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<223> c-term amidation

<400> 11
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<223> lactam ring between side chains at positions 12 and 16

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

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 13
<211> 29
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<223> lactam ring between side chains at positions 16 and 20

<400> 13
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 14
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<223> lactam ring between side chains at positions 20 and 24

<400> 14
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Glu Trp Leu Met Asn Thr
20 25

<210> 15
<211> 29
<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<223> lactam ring between side chains at positions 24 and 28

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

Arg Arg Ala Gln Asp Phe Val Glu Trp Leu Met Lys Thr
20 25

<210> 16
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<223> lactam ring between side chains at positions 12 and 16 as well as 20 and 24

<400> 16
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Glu Trp Leu Met Asn Thr
20 25

<210> 17
<211> 29
<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<223> lactam ring between side chains at positions 16 and 20 as well as 24 and 28

<400> 17
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Asp Asp Phe Val Glu Trp Leu Met Lys Thr
20 25

<210> 18
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<223> lactam ring between side chains at positions 16 and 20 as well as 24 and 28

<400> 18
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Glu Trp Leu Met Lys Thr
20 25

<210> 19
<211> 30
<212> PRT
<213> Artificial Sequence

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<220>
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<222> (30)..(30)
<223> Variable amino acid

<220>

<223> c-term amidation

<400> 19
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Xaa
20 25 30

<210> 20
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
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<223> Ser, Glu, Gln, homoglutamic acid or homocysteic acid

<220>
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<222> (20)..(20)
<223> Gln, Lys, Arg, Orn or Citrulline

<220>
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<222> (24)..(24)
<223> Gln or Glu

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Asp or Lys

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr or Gly

<400> 20
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1 5 10 15

Arg Arg Ala Xaa Asp Phe Val Xaa Trp Leu Met Xaa Xaa
20 25

<210> 21
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ser, Ala, Gly, N-methyl Ser or aminoisobutyric acid

<220>

<223> c-term amidation

<400> 21
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 22
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<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

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

<220>
<223> c-term amidation

<400> 22
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 23
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (17)..(17)
<223> Cys-PEG

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<220>
<223> c-term amidation

<400> 23
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Cys Arg Ala Gln Asp Phe Val Gln Trp Leu Xaa Asn Thr
20 25

<210> 24

<211> 29
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
glucagon analogue

<220>
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<222> (21)..(21)
<223> Cys-PEG

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<220>
<223> c-term amidation

<400> 24
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Cys Phe Val Gln Trp Leu Xaa Asn Thr
20 25

<210> 25
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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glucagon analogue

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<220>
<223> c-term amidation

<400> 25
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Xaa Asn Thr
20 25

<210> 26
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide
fragment representing the carboxy terminal 10 amino

acids of Exendin-4

<400> 26
Gly Pro Ser Ser Gly Ala Pro Pro Pro Ser
1 5 10

<210> 27
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide fragment representing the carboxy terminal 8 amino acids of oxyntomodulin

<400> 27
Lys Arg Asn Arg Asn Asn Ile Ala
1 5

<210> 28
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 28
Lys Arg Asn Arg
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<210> 29
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide fragment representing the carboxy terminal 10 amino acids of Exendin-4

<220>
<223> c-term amidation

<400> 29
Gly Pro Ser Ser Gly Ala Pro Pro Pro Ser
1 5 10

<210> 30
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<213> Artificial Sequence

<220>
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<222> (27)..(27)
<223> Met, Leu or Nle

<400> 30
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu

1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Xaa Asn Thr Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 31
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<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<400> 31
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Xaa Asn Thr Lys Arg Asn
20 25 30

Arg Asn Asn Ile Ala
35

<210> 32
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

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<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<400> 32
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Xaa Asn Thr Lys Arg Asn
20 25 30

Arg

<210> 33
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

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<220>
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<222> (16)..(16)
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<222> (20)..(20)
<223> Gln or Lys

<220>
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<222> (24)..(24)
<223> Gln or Glu

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Lys or an acidic amino acid

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr, Gly or an acidic amino acid

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

Arg Arg Ala Xaa Asp Phe Val Xaa Trp Leu Met Xaa Xaa
20 25

<210> 34
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

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<222> (15)..(15)
<223> Asp, Glu, cysteic acid, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ser, Glu, Gln, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Gln or Lys

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Gln or Glu

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Asp or Lys

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr or Gly

<400> 34
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Xaa
1 5 10 15

Arg Arg Ala Xaa Asp Phe Val Xaa Trp Leu Met Xaa Xaa
20 25

<210> 35
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<400> 35
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15

Cys Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 36
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<400> 36
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 37
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
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<222> (24)..(24)
<223> 2-butyrolactone bound through thiol group of Cys

<400> 37
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 38
<211> 29
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<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (24)..(24)
<223> carboxymethyl group bound through thiol group of Cys

<400> 38
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 39
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<400> 39
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Arg Tyr Leu Asp Ser
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 40
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<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Glu or Asp

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Glu or Asp

<220>
<223> c-term amidation

<400> 40
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Xaa Thr
20 25

<210> 41
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Glu or Asp

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Glu or Asp

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 41
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Xaa Thr
20 25

<210> 42
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES

<222> (15)..(15)
<223> Glu or Asp

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Glu or Asp

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 42
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Xaa Thr
20 25

<210> 43
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Glu or Asp

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Glu or Asp

<220>
<223> c-term amidation; lactam ring between side chains at positions 20 and 24

<400> 43
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Ser
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Glu Trp Leu Met Xaa Thr
20 25

<210> 44
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Glu or Asp

<220>
<221> MOD_RES

<222> (29)..(29)
<223> Glu or Thr

<220>
<223> c-term amidation; lactam ring between side chains at positions 24 and 28

<400> 44
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Ser
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Glu Trp Leu Met Lys Xaa
20 25

<210> 45
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<220>
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<220>
<221> MOD_RES
<222> (12)..(12)
<223> Lys or Glu

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Asp, Glu, homoglutamic acid, cysteic acid or homocysteic acid

<220>
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<222> (16)..(16)
<223> Ser, Gln, Glu, Lys, homoglutamic acid, cysteic acid or homocysteic acid

<220>
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<222> (20)..(20)
<223> Gln, Glu or Lys

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Gln, Lys or Glu

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Lys or an acidic amino acid

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr, Gly or an acidic amino acid

<400> 45
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Xaa Tyr Leu Xaa Xaa
1 5 10 15

Arg Arg Ala Xaa Asp Phe Val Xaa Trp Leu Met Xaa Xaa
20 25

<210> 46
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<220>
<223> Description of Artificial Sequence: Synthetic
glucagon analogue

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ser, Glu, Gln, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Gln or Lys

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Gln or Glu

<400> 46
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Xaa
1 5 10 15

Arg Arg Ala Xaa Asp Phe Val Xaa Trp Leu Met Asn Thr
20 25

<210> 47
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
glucagon analogue

<400> 47
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 48
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
glucagon analogue

<400> 48
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Glu Trp Leu Met Asn Thr
20 25

<210> 49
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

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

Arg Arg Ala Gln Asp Phe Val Glu Trp Leu Met Lys Thr
20 25

<210> 50
<211> 31
<212> PRT
<213> Homo sapiens

<400> 50
His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

<210> 51
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Asp, Glu, homoglutamic acid, cysteic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ser, Glu, Gln, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Gln, Lys, Arg, Orn, or Citrulline

<220>
<221> MOD_RES
<222> (21)..(21)
<223> Asp, Glu, homoglutamic acid, or homocysteic acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Gln or Glu

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Lys or an acidic amino acid

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr, Gly or an acidic amino acid

<400> 51
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Xaa
1 5 10 15

Arg Arg Ala Xaa Xaa Phe Val Xaa Trp Leu Met Xaa Xaa
20 25

<210> 52
<211> 30
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 52
His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
20 25 30

<210> 53
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (3)..(3)
<223> Glu, Orn or Nle

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Asp, Glu, homoglutamic acid, cysteic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ser, Glu, Gln, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Gln or Lys

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Gln or Glu

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Lys or an acidic amino acid

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr or an acidic amino acid

<400> 53
His Ser Xaa Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Xaa
1 5 10 15

Arg Arg Ala Xaa Asp Phe Val Xaa Trp Leu Met Xaa Xaa
20 25

<210> 54
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (17)..(17)
<223> Arg or Gln

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

<220>
<221> MOD_RES
<222> (21)..(21)
<223> Asp or Glu

<220>
<221> MOD_RES
<222> (23)..(23)
<223> Val or Ile

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Gln or Ala

<400> 54
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Xaa Xaa Ala Lys Xaa Phe Xaa Xaa Trp Leu Met Asn Thr
20 25

<210> 55

<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (1)..(1)
<223> His, D-His, (Des-amino)His, hydroxyl-His, acetyl-His, homo-His or alpha, alpha-dimethyl imidiazole acetic acid (DMIA), N-methyl His, alpha-methyl His, or imidazole acetic acid

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Ser, D-Ser, Ala, D-Ala, Val, Gly, N-methyl Ser, aminoisobutyric acid (Aib) or N-methyl Ala

<220>
<221> MOD_RES
<222> (3)..(3)
<223> Gln, Glu, Orn or Nle

<220>
<221> MOD_RES
<222> (10)..(10)
<223> Tyr or Trp

<220>
<221> MOD_RES
<222> (12)..(12)
<223> Lys, Citrulline, Orn or Arg

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Asp, Glu, cysteic acid, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ser, Glu, Gln, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (17)..(17)
<223> Arg, Gln, Lys, Cys, Orn, homocysteine or acetyl phenylalanine

<220>
<221> MOD_RES
<222> (18)..(18)
<223> Arg, Ala, Lys, Cys, Orn, homocysteine or acetyl phenylalanine

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Gln, Lys, Arg, Orn or Citrulline

<220>
<221> MOD_RES
<222> (21)..(21)
<223> Gln, Glu, Asp, Lys, Cys, Orn, homocysteine or acetyl

phenyalanine

<220>
<221> MOD_RES
<222> (23)..(23)
<223> Val or Ile

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ala, Gln, Glu, Lys, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Arg, Citrulline, Orn, Lys or Asp

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr, Gly, Lys, Cys, Orn, homocysteine or acetyl phenyalanine

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

Xaa Xaa Ala Xaa Xaa Phe Xaa Xaa Trp Leu Xaa Xaa Xaa
20 25

<210> 56
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (1)..(1)
<223> His, D-His, (Des-amino)His, hydroxyl-His, acetyl-His, homo-His, DMIA, N-methyl His, alpha-methyl His, or imidazole acetic acid

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Ser, D-Ser, Ala, D-Ala, Val, Gly, N-methyl Ser, Aib or N-methyl Ala

<220>
<221> MOD_RES
<222> (3)..(3)
<223> Gln, Glu, Orn or Nle

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Asp, Glu, cysteic acid, homoglutamic acid or

homocysteic acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ser, Glu, Gln, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Gln, Lys, Arg, Orn or Citrulline

<220>
<221> MOD_RES
<222> (21)..(21)
<223> Gln, Glu, Asp, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
<221> MOD_RES
<222> (23)..(23)
<223> Val or Ile

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ala, Gln, Glu, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Lys or Asp

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr, Gly, Lys, Cys, Orn, homocysteine or acetyl phenyalanine

<400> 56
Xaa Xaa Xaa Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Xaa
1 5 10 15

Arg Arg Ala Xaa Xaa Phe Xaa Xaa Trp Leu Xaa Xaa Xaa
20 25

<210> 57
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (1)..(1)
<223> His, D-His, (Des-amino)His, hydroxyl-His, acetyl-His, homo-His, DMIA, N-methyl His, alpha-methyl His, or imidazole acetic acid

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Ser, D-Ser, Ala, D-Ala, Val, Gly, N-methyl Ser, Aib
or N-methyl Ala

<220>
<221> MOD_RES
<222> (3)..(3)
<223> Gln, Glu, Orn or Nle

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Asp, Glu, cysteic acid, homoglutamic acid or
homocysteic acid

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Gln, Lys, Arg, Orn or Citrulline

<220>
<221> MOD_RES
<222> (21)..(21)
<223> Gln, Glu, Asp, Cys, Orn, homocysteine or
acetyl phenyalanine

<220>
<221> MOD_RES
<222> (23)..(23)
<223> Val or Ile

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ala, Gln, Glu, Cys, Orn, homocysteine or
acetyl phenyalanine

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Lys or Asp

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr, Gly, Cys, Orn, homocysteine or acetyl
phenyalanine

<220>
<223> lactam ring between side chains at positions 12 and 16

<400> 57
Xaa Xaa Xaa Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Glu
1 5 10 15

Arg Arg Ala Xaa Xaa Phe Xaa Xaa Trp Leu Xaa Xaa Xaa
20 25

<210> 58

<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (1)..(1)
<223> His, D-His, (Des-amino)His, hydroxyl-His, acetyl-His, homo-His, DMIA, N-methyl His, alpha-methyl His, or imidazole acetic acid

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Ser, D-Ser, Ala, D-Ala, Val, Gly, N-methyl Ser, Aib or N-methyl Ala

<220>
<221> MOD_RES
<222> (3)..(3)
<223> Gln, Glu, Orn or Nle

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Asp, Glu, cysteic acid, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (21)..(21)
<223> Gln, Glu, Asp, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
<221> MOD_RES
<222> (23)..(23)
<223> Val or Ile

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ala, Gln, Glu, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Lys or Asp

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr, Gly, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
<223> lactam ring between side chains at positions 16 and 20

<400> 58

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

Arg Arg Ala Lys Xaa Phe Xaa Xaa Trp Leu Xaa Xaa Xaa
20 25

<210> 59
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (1)..(1)
<223> His, D-His, (Des-amino)His, hydroxyl-His, acetyl-His, homo-His, DMIA, N-methyl His, alpha-methyl His or imidazole acetic acid

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Ser, D-Ser, Ala, D-Ala, Val, Gly, N-methyl Ser, Aib or N-methyl Ala

<220>
<221> MOD_RES
<222> (3)..(3)
<223> Gln, Glu, Orn or Nle

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Asp, Glu, cysteic acid, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ser, Glu, Gln, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (21)..(21)
<223> Gln, Glu, Asp, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
<221> MOD_RES
<222> (23)..(23)
<223> Val or Ile

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Lys or Asp

<220>
<221> MOD_RES

<222> (29)..(29)
<223> Thr, Gly, Cys, Orn, homocysteine or acetyl
phenyalanine

<220>
<223> lactam ring between side chains at positions 20 and 24

<400> 59
Xaa Xaa Xaa Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Xaa
1 5 10 15

Arg Arg Ala Lys Xaa Phe Xaa Glu Trp Leu Xaa Xaa Xaa
20 25

<210> 60
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
glucagon analogue

<220>
<221> MOD_RES
<222> (1)..(1)
<223> His, D-His, (Des-amino)His, hydroxyl-His, acetyl-His,
homo-His, DMIA, N-methyl His, alpha-methyl His, or
imidazole acetic acid

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Ser, D-Ser, Ala, D-Ala, Val, Gly, N-methyl Ser, Aib
or N-methyl Ala

<220>
<221> MOD_RES
<222> (3)..(3)
<223> Gln, Glu, Orn or Nle

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Asp, Glu, cysteic acid, homoglutamic acid or
homocysteic acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ser, Glu, Gln, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Gln, Lys, Arg, Orn or Citrulline

<220>
<221> MOD_RES
<222> (21)..(21)
<223> Gln, Glu, Asp, Cys, Orn, homocysteine or
acetyl phenyalanine

<220>
<221> MOD_RES
<222> (23)..(23)
<223> Val or Ile

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr, Gly, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
<223> lactam ring between side chains at positions 24 and 28

<400> 60
Xaa Xaa Xaa Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Xaa Xaa
1 5 10 15

Arg Arg Ala Xaa Xaa Phe Xaa Glu Trp Leu Xaa Lys Xaa
20 25

<210> 61
<211> 40
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (1)..(1)
<223> His, D-His, (Des-amino)His, hydroxyl-His, acetyl-His, homo-His, DMIA, N-methyl His, alpha-methyl His, or imidazole acetic acid

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Ser, D-Ser, Ala, Val, Gly, N-methyl Ser, Aib, N-methyl Ala or D-Ala

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

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ala, Gln or Cys-PEG

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr-CONH2, Cys-PEG, or Gly

<220>
<221> MOD_RES
<222> (40)..(40)
<223> Cys-PEG or not present

<220>
<223> positions 30 to 40 are present only if position 29 is Gly; see specification as filed for detailed

description of substitutions and preferred embodiments

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

Arg Xaa Ala Lys Asp Phe Val Xaa Trp Leu Met Asn Xaa Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser Cys
35 40

<210> 62
<211> 40
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (1)..(1)
<223> His, D-His, (Des-amino)His, hydroxyl-His, acetyl-His, homo-His, DMIA, N-methyl His, alpha-methyl His, or imidazole acetic acid

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Ser, D-Ser, Ala, Val, Gly, N-methyl Ser, Aib, N-methyl Ala or D-Ala

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

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Ala, Gln or Cys-PEG

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr-CONH2, Cys-PEG, or Gly

<220>
<221> MOD_RES
<222> (40)..(40)
<223> Cys-PEG or not present

<220>
<223> positions 30 to 40 are present only if position 29 is Gly; see specification as filed for detailed description of substitutions and preferred embodiments

<400> 62
Xaa Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Xaa Ala Lys Glu Phe Ile Xaa Trp Leu Met Asn Xaa Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser Cys
35 40

<210> 63
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ser, Glu, Gln, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Gln or Lys

<220>
<221> MOD_RES
<222> (21)..(21)
<223> Asp, Lys, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Gln, Lys, Cys, Orn, homocysteine or acetyl phenyalanine

<220>
<221> MOD_RES
<222> (27)..(27)
<223> Met, Leu or Nle

<400> 63
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Xaa

1 5 10 15

Arg Arg Ala Xaa Xaa Phe Val Xaa Trp Leu Xaa Asn Thr
20 25

<210> 64
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (15)..(15)
<223> Asp, Glu, homoglutamic acid, cysteic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Ser, Glu, Gln, homoglutamic acid or homocysteic acid

<220>
<221> MOD_RES
<222> (20)..(20)
<223> Gln or Lys

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Gln or Glu

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asn, Lys or Asp

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

Arg Arg Ala Xaa Asp Phe Val Xaa Trp Leu Met Xaa Gly Gly Pro Ser
20 25 30

Ser Gly Pro Pro Pro Ser
35

<210> 65
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide fragment representing the carboxy terminal 10 amino acids of Exendin-4

<220>
<221> MOD_RES
<222> (11)..(11)
<223> Cys-PEG

<400> 65
Gly Pro Ser Ser Gly Ala Pro Pro Pro Ser Cys
1 5 10

<210> 66
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asp or Asn

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr or Gly

<220>
<223> lactam ring between side chains at positions 12 and 16

<400> 66
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Xaa Xaa
20 25

<210> 67
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asp or Asn

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr or Gly

<220>
<223> lactam ring between side chains at positions 16 and 20

<400> 67
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Xaa Xaa
20 25

<210> 68
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (28)..(28)
<223> Asp or Asn

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr or Gly

<220>
<223> lactam ring between side chains at positions 20 and 24

<400> 68
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Glu Trp Leu Met Xaa Xaa

20 25

<210> 69
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic glucagon analogue

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Thr or Gly

<220>
<223> lactam ring between side chains at positions 24 and 28

<400> 69
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Glu Trp Leu Met Lys Xaa
20 25

<210> 70
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 70
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 71
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 71
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 72
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 72
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 73
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 73
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 74
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 74
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 75
<211> 29
<212> PRT
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<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>
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<400> 75
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 76
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 76
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 77
<211> 29
<212> PRT
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<220>
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 77
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 78
<211> 29
<212> PRT
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<220>
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<220>
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<400> 78

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

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 79
<211> 29
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<220>
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<220>
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1 5 10 15

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20 25

<210> 80
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<212> PRT
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<400> 80
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1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 81
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<220>
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 82
<211> 29
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<220>
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 83
<211> 29
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 84
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<220>
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 85
<211> 29
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<220>

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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 86
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 87
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<220>
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 88
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<223> (Des-amino)His

<220>
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 89
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<223> (Des-amino)His

<220>
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Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 90
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<223> (Des-amino)His

<220>
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 91
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 92
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<220>
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Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
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<223> (Des-amino)His

<220>
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<220>
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Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
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<210> 103
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<220>
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
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<210> 104
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
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<210> 105
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<223> Aminoisobutyric acid

<220>
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<210> 106
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<220>
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<220>
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
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<210> 108
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Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
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<220>
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1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 110
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1 5 10 15

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20 25

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Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

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20 25

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20 25

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<220>
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1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 115
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<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

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1 5 10 15

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20 25

<210> 116
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<220>
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 117
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 118
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<223> Aminoisobutyric acid

<220>
<223> c-term amidation

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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 119
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 119
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 120
<211> 29
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 120
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 121
<211> 29
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<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<400> 121
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 122
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<220>
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<400> 122
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 123
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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 124
<211> 29
<212> PRT
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<220>
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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at
positions 12 and 16

<400> 124
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 125
<211> 29
<212> PRT
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<220>
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<220>
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<220>
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positions 12 and 16

<400> 125
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 126
<211> 29
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<220>
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<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 126
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 127
<211> 29
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<220>
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<223> D-Ala

<220>
<223> c-term amidation

<400> 127
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 128
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 128
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at

positions 12 and 16

<400> 129
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1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

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<220>
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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 131
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1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 132
<211> 29
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<213> Artificial Sequence

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<400> 132
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 133
<211> 29
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<220>
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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 133
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
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<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 134

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

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 135
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<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<400> 135
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 136
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 136
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 137
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<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 137
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 138
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<212> PRT
<213> Artificial Sequence

<220>
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<220>
<223> c-term amidation

<400> 138
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 139
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 140
<211> 29
<212> PRT
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<220>
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<220>
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positions 16 and 20

<400> 140
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 141
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<400> 141
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 142
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 142
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 143
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 143
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1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 144
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<223> c-term amidation

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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 145
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 145
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 146
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
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<210> 147
<211> 29

<212> PRT
<213> Artificial Sequence

<220>
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 147
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 148
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 148
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1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 149
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 149
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 150
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>

<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 150
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 151
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 151
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 152
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<223> c-term amidation

<400> 152
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 153
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 153
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 154
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 154
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
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<210> 155
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 155
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 156
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 156
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 157
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 157
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 158
<211> 29
<212> PRT
<213> Artificial Sequence

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<223> (Des-amino)His

<220>
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

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<223> (Des-amino)His

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<400> 159
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 160
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<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 160
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 161
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 162
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<212> PRT
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<220>
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<220>
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<400> 162
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

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<223> (Des-amino)His

<220>
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<400> 163
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1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 164
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<220>
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<400> 164
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 165
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1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 166
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<213> Artificial Sequence

<220>
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<220>
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<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 166
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 167
<211> 29
<212> PRT
<213> Artificial Sequence

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<220>
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<400> 167
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 168
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Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

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<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 169
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1   5   10   15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
            20   25

<210> 170
<211> 29
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<220>
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<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at
      positions 12 and 16

<400> 170
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
            20   25

<210> 171
<211> 29
<212> PRT
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<220>
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<220>
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<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at
      positions 16 and 20

<400> 171
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
            20   25

<210> 172
<211> 29
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<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 172
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 173
<211> 29
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<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 173
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1 5 10 15

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20 25

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<220>
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<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 174
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 175
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 176
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
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1 5 10 15

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20 25

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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr

20 25

<210> 180
<211> 29
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<220>
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<220>
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<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 180
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 181
<211> 29
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<213> Artificial Sequence

<220>
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<220>
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<400> 181
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 182
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<220>
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<220>
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<222> (2)..(2)

<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 182
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 183
<211> 29
<212> PRT
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<220>
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<220>
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<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 183
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 184
<211> 29
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<220>
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<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at
positions 12 and 16

<400> 184
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 185

<211> 29
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<220>
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 185
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 186
<211> 29
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<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 186
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 187
<211> 29
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<213> Artificial Sequence

<220>
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<222> (2)..(2)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 187
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1   5   10   15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
            20   25

<210> 188
<211> 29
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<220>
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<223> Aminoisobutyric acid

<220>
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      positions 16 and 20

<400> 188
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1   5   10   15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
            20   25

<210> 189
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<400> 189
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1   5   10   15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
            20   25

<210> 190
<211> 29
<212> PRT
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<223> D-Ala

<220>
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 191
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<213> Artificial Sequence

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 191
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 192
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<212> PRT
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<220>
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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 192
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
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<210> 193
<211> 29
<212> PRT
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<220>
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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 193
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 194
<211> 29
<212> PRT
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<220>
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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 194
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1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 195
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>

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<220>
<223> c-term amidation

<400> 195
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 196
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 196
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 197
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<212> PRT
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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 197
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1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 198
<211> 29
<212> PRT
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<220>
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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 198
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 199
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<220>
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<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 199
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1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 200
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<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<400> 200
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
            20   25

<210> 201
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at
      positions 12 and 16

<400> 201
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
            20   25

<210> 202
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at
      positions 16 and 20

<400> 202
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
            20   25

<210> 203
<211> 29
<212> PRT

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<220>
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<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<400> 203
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 204
<211> 29
<212> PRT
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<220>
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<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 204
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 205
<211> 29
<212> PRT
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<220>
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<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 205

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

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 206
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 206
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 207
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 207
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 208
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (24)..(24)

<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 208
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 209
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 209
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

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<220>
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<220>
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<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 210
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 211
<211> 29

<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 211
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 212
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 212
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 213
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<220>
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 213
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 214
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 214
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 215
<211> 29
<212> PRT
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<220>
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<220>
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 215
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 216
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (24)..(24)

<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 216
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 217
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 217
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 218
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 12 and 16

<400> 218
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 219
<211> 29
<212> PRT

<213> Artificial Sequence

<220>
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<220>
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<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 219
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 220
<211> 29
<212> PRT
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<220>
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<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 220
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 221
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 221
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 222
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 222
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 223
<211> 29
<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic peptide

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 223
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 224
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (Des-amino)His

<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 224
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 225
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 225
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 226
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 226
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 227
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 227
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 228
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (Des-amino)His

<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 228
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 229
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (Des-amino)His

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<220>
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<400> 229
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 230
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<220>
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<223> (Des-amino)His

<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 230

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

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

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<223> (Des-amino)His

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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 231
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 232
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr

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<220>
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<400> 233
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1 5 10 15

Arg Ala Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 234
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<223> (Des-amino)His

<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 234
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 235
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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 235
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
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<220>
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<400> 236
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

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Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
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<220>
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<400> 238
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

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<220>
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<400> 239
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
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<210> 240
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<213> Artificial Sequence

<220>
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<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 240
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 241
<211> 29
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<220>
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<223> Aminoisobutyric acid

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<222> (24)..(24)
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<220>

<223> c-term amidation

<400> 241
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1   5   10   15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
            20   25

<210> 242
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<223> Aminoisobutyric acid

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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
      positions 16 and 20

<400> 242
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
            20   25

<210> 243
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<220>
<223> c-term amidation; lactam ring between side chains at
      positions 12 and 16

<400> 243
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu

1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
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<210> 244
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<222> (24)..(24)
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<220>
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<400> 244
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
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<210> 245
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<220>
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<400> 245
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr

20 25

<210> 246
<211> 29
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<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 246
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 247
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<220>
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<223> Aminoisobutyric acid

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<220>
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<400> 247
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 248
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<212> PRT
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<220>
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<220>
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<400> 248
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1 5 10 15

Arg Ala Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
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<220>
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<400> 249
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<210> 250
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<220>
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<220>
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<400> 250
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20 25

<210> 251
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<212> PRT
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<220>
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<222> (24)..(24)
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<220>
<223> c-term amidation

<400> 251
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 252
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<212> PRT
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<220>
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<400> 252
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Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

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<220>
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<400> 253
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

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<222> (24)..(24)
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<220>
<223> c-term amidation

<400> 254
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 255
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<223> Aminoisobutyric acid

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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 255
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 256
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<213> Artificial Sequence

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<223> Aminoisobutyric acid

<220>
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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 256
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 257
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<220>
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<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 257
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 258
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<220>
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<223> D-Ala

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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 258
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 259
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<212> PRT
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<220>
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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 259
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 260
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<220>
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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 261
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 262
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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 262
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1 5 10 15

Arg Arg Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 263
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<220>
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<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 263
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1 5 10 15

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20 25

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<220>
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<220>
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<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 264
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 265
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<220>
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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 265
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1 5 10 15

Arg Ala Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 266
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<212> PRT
<213> Artificial Sequence

<220>
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<223> D-Ala

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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 266
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Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

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<220>
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<223> D-Ala

<220>
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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 267
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1 5 10 15

Arg Ala Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

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<220>
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<220>
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<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 268
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 269
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<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 269
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 270
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<220>
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<400> 270
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20 25

<210> 271
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<223> D-Ala

<220>
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<222> (24)..(24)
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<220>
<223> c-term amidation

<400> 271

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

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 272
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 272
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 273
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 273
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 274
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 274
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 275
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 275
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 276
<211> 29
<212> PRT
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<220>
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<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at

positions 16 and 20

<400> 276
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 277
<211> 29
<212> PRT
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<220>
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<221> MOD_RES
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<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 277
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 278
<211> 29
<212> PRT
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<220>
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<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 278
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 279
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 279
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 280
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 280
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 281
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 281
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 282
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 282
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 283
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<212> PRT
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<220>
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<220>
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<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 283
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 284
<211> 29
<212> PRT
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<220>
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<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 284
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 285
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 285
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 286
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 12 and 16

<400> 286
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 287
<211> 29
<212> PRT

<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 287
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 288
<211> 29
<212> PRT
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<220>
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<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 288
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 289
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 12 and 16

<400> 289
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 290
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<212> PRT
<213> Artificial Sequence

<220>
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<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 290
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 291
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 291
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 292
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 292
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 293
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<212> PRT
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<223> (Des-amino)His

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<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 293
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 294
<211> 29
<212> PRT
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<220>
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<223> (Des-amino)His

<220>
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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 294
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 295
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 295
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 296
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>

<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 296
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 297
<211> 29
<212> PRT
<213> Artificial Sequence

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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 297
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
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<210> 298
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>

<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 298
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

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<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 299
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 300
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<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 300

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

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 301
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 301
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 302
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 302
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr

20 25

<210> 303
<211> 29
<212> PRT
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<220>
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<223> (Des-amino)His

<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 303
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 304
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 304
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 305

<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 305
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 306
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 306
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 307
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 307
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 308
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 308
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 309
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 309
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 310
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<213> Artificial Sequence

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<223> Aminoisobutyric acid

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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 310
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 311
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<220>
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<223> Aminoisobutyric acid

<220>
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<222> (24)..(24)

<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 311
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 312
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<212> PRT
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<220>
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<223> Aminoisobutyric acid

<220>
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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 312
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 313
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> Aminoisobutyric acid

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<222> (24)..(24)
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 313
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1   5   10   15

Arg Arg Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
            20   25

<210> 314
<211> 29
<212> PRT
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<220>
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<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 314
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
            20   25

<210> 315
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<222> (2)..(2)
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<220>
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<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
      positions 16 and 20

<400> 315
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 316
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 316
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 317
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 317
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 318
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 318
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 319
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 319
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 320
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 320
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 321
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 321
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 322
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 322
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 323
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 12 and 16

<400> 323
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 324
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 324
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 325
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<400> 325
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 326
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 326
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
            20   25

<210> 327
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
      positions 16 and 20

<400> 327
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
            20   25

<210> 328
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
      positions 12 and 16

<400> 328

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

Arg Arg Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 329
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 329
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 330
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 330
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 331
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 331
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 332
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 332
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 333

<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 333
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 334
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 334
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 335
<211> 29
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 335
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 336
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 336
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 337
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES

<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 337
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 338
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 338
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 339
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>

<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 339
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 340
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 340
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 341
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at

positions 16 and 20

<400> 341
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Val Lys Gly
20 25

<210> 342
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 342
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 343
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 343
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 344
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 344
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 345
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 345
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 346
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 346
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 347
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 347
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 348
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 348
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 349
<211> 29

<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 349
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 350
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 350
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 351
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 351
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 352
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 352
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 353
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES

<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 353
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 354
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 354
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 355
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 355

His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 356
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 356
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 357
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 357
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 358
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 358
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 359
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 359
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 360
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 360
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys

1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 361
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 361
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 362
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 362
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 363
<211> 29
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>
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<223> (Des-amino)His

<220>
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<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 363
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 364
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 364
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 365
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<223> (Des-amino)His

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 365
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 366
<211> 29
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<213> Artificial Sequence

<220>
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<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 366
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 367
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>

<223> c-term amidation

<400> 367
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 368
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 368
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 369
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 369
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 370
<211> 29
<212> PRT
<213> Artificial Sequence

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

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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 370
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 371
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> D-Ala

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 371
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Thr
20 25

<210> 372
<211> 29
<212> PRT

<213> Artificial Sequence

<220>
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<223> D-Ala

<220>
<221> MOD_RES
<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 372
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Thr
20 25

<210> 373
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<222> (2)..(2)
<223> D-Ala

<220>
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<222> (16)..(16)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 373
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Cys
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly
20 25

<210> 374
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 374
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 375
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 375
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 376
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 376
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 377
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 377
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 378
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 378
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 379
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 379
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 380
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<223> c-term amidation

<400> 380
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 381
<211> 29

<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 381
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 382
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 382
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 383
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 383
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 384
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 384
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 385
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 385
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 386
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 386
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 387
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 387
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 388
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 388
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 389
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 389
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 390
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 390
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 391
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 391
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 392
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 392
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 393
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 393
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 394
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 394
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 395
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>

<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 395
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 396
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 396
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 397
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 397
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr

20 25

<210> 398
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 398
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 399
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 399
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 400
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)

<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

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

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 401
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 401
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 402
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 402
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 403
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 403
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 404
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 404
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 405
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
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<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>

<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 405
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 406
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 406
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 407
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 407
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 408
<211> 29

<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 408
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 409
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 409
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 410
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 410
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 411
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 411
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 412
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 412
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 413
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
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<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 413
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 414
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 414
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 415
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 415

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

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 416
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<400> 416
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 417
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<400> 417
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 418
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 418
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 419
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 419
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 420
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 420
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 421
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 421
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 422
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<400> 422
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 423
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES

<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 423
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 424
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 424
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 425
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 425
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 426
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 426
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 427
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<400> 427
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 428
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 428
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 429
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 429
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 430
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 430
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 431
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 431
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
            20   25

<210> 432
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at
      positions 16 and 20

<400> 432
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
            20   25

<210> 433
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at
      positions 12 and 16

<400> 433
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
            20   25

<210> 434
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at
      positions 12 and 16

<400> 434

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

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 435
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 435
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 436
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 436
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 437
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 437
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr

20 25

<210> 438
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 438
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 439
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 439
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 440
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 440
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 441
<211> 29

<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 441
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 442
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 442
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 443
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 443
His Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 444
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 444
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 445
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 445
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 446
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 446
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr

20 25

<210> 447
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 447
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 448
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 448
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 449
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)

<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 449
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 450
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 450
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 451
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 451
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 452
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 452
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 453
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 453
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 454
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

<400> 454
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 455
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation

<400> 455
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 456
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at
positions 12 and 16

<400> 456
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 457
<211> 29

<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> (Des-amino)His

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 457
Xaa Ser Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 458
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 458
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 459
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 459
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 460
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 460
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 461
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 461
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 462
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 462
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 463
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 463
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Lys
1 5 10 15

Arg Arg Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 464
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 464
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu

1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 465
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 465
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 466
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 466
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 467
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 467
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 468
<211> 29
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<220>
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 468
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1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 469
<211> 29
<212> PRT
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<220>
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<223> Aminoisobutyric acid

<220>
<223> c-term amidation

<400> 469
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 470
<211> 29
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<220>
<223> c-term amidation; lactam ring between side chains at positions 12 and 16

<400> 470
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 471
<211> 29
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<223> Aminoisobutyric acid

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 471
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 472
<211> 29
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<220>
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<220>
<221> MOD_RES
<222> (2)..(2)
<223> D-Ala

<220>
<223> c-term amidation

<400> 472
His Xaa Glu Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
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<210> 473
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<223> D-Ala

<220>
<223> c-term amidation

<400> 473
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 474
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<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 474
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1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 475
<211> 29
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<220>
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1 5 10 15

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

<210> 476
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<212> PRT
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<220>
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1 5 10 15

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<220>
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positions 16 and 20

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1 5 10 15

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20 25

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<220>
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1 5 10 15

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20 25

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<220>
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positions 16 and 20

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1 5 10 15

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<210> 480
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<220>
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1 5 10 15

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<210> 481
<211> 29
<212> PRT
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<220>
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1 5 10 15

Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asp Thr
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<210> 482
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<212> PRT
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<223> D-Ala

<220>

<223> c-term amidation; lactam ring between side chains at
positions 16 and 20

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1 5 10 15

Arg Ala Ala Glu Asp Phe Val Gln Trp Leu Met Asp Thr
20 25

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<220>
<223> c-term amidation

<400> 483
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
20 25

<210> 484
<211> 29
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<220>
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positions 12 and 16

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Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
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<220>
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asp Thr
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<220>
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1 5 10 15

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<210> 487
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<220>
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Cys
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<210> 488
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<212> PRT
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<220>
<223> c-term amidation

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1 5 10 15

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20 25 30

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35 40

<210> 489
<211> 40
<212> PRT
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<220>
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<220>
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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser Cys
35 40

<210> 490
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<223> c-term amidation

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20 25 30

Ser Gly Ala Pro Pro Pro Ser
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20 25 30

Ser Gly Ala Pro Pro Pro Ser
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<223> c-term amidation

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1 5 10 15

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20 25

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1 5 10 15

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<223> c-term amidation

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1 5 10 15

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20 25 30

Ser Gly Ala Pro Pro Pro Ser Cys
35 40

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Arg Ala Ala Lys Asp Phe Val Gln Trp Leu Met Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser Cys
        35   40

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            20   25   30

Ser Gly Ala Pro Pro Pro Ser
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Ser Gly Ala Pro Pro Pro Ser
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20 25 30

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<222> (29)..(29)
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1   5   10   15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Cys
            20   25

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<220>
<223> c-term amidation

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            20   25   30

Ser Gly Ala Pro Pro Pro Ser Cys
        35   40

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            20   25   30

Ser Gly Ala Pro Pro Pro Ser Cys
        35   40

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            20   25   30

Ser Gly Ala Pro Pro Pro Ser
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            20   25   30

Ser Gly Ala Pro Pro Pro Ser
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1   5   10   15

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positions 16 and 20

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20 25

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1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Cys
20 25

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20 25 30

Ser Gly Ala Pro Pro Pro Ser Cys
35 40

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20 25 30

Ser Gly Ala Pro Pro Pro Ser Cys
35 40

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20 25 30

Ser Gly Ala Pro Pro Pro Ser
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Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 511
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> ALPHA, ALPHA-DIMETHYL IMIDIAZOLE ACETIC ACID

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 511
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu

1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 512
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> ALPHA, ALPHA-DIMETHYL IMIDIAZOLE ACETIC ACID

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 512
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asn Cys
20 25

<210> 513
<211> 39
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> ALPHA, ALPHA-DIMETHYL IMIDIAZOLE ACETIC ACID

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 513
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 514
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 514
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 515
<211> 11
<212> PRT
<213> Artificial Sequence

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

<400> 515
Gly Gly Pro Ser Ser Gly Ala Pro Pro Pro Ser
1 5 10

<210> 516
<211> 12
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (12)..(12)
<223> Cys-PEG

<400> 516
Gly Gly Pro Ser Ser Gly Ala Pro Pro Pro Ser Cys
1 5 10

<210> 517
<211> 29
<212> PRT
<213> Artificial Sequence

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

peptide

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 517
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp
1 5 10 15

Glu Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 518
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 518
His Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 519
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> ALPHA, ALPHA-DIMETHYL IMIDIAZOLE ACETIC ACID

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 519
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Thr
20 25

<210> 520
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> ALPHA, ALPHA-DIMETHYL IMIDIAZOLE ACETIC ACID

<220>
<221> MOD_RES
<222> (29)..(29)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 520
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Cys
20 25

<210> 521
<211> 39
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 521

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

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 522
<211> 39
<212> PRT

<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 522

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

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 523
<211> 39
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 523

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

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Lys Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 524
<211> 39
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 524

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

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Val Lys Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 525
<211> 39
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 525

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

Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asp Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 526
<211> 39
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 526

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

Arg Arg Ala Lys Asp Phe Val Gln Trp Leu Met Asp Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 527
<211> 30
<212> PRT
<213> Artificial Sequence

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

<220>
<223> c-term amidation

<400> 527

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Gly
20 25 30

<210> 528
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation; lactam ring between side chains at positions 16 and 20

<400> 528

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

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 529
<211> 39
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> ALPHA, ALPHA-DIMETHYL IMIDIAZOLE ACETIC ACID

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 529
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 530
<211> 29
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (1)..(1)
<223> ALPHA, ALPHA-DIMETHYL IMIDIAZOLE ACETIC ACID

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 530
Xaa Ser Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15

Arg Arg Ala Lys Asp Phe Val Cys Trp Leu Met Asn Thr
20 25

<210> 531
<211> 40
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<221> MOD_RES
<222> (40)..(40)
<223> Cys-PEG

<220>

<223> c-term amidation

<400> 531
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Arg Arg Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser Cys
        35   40

<210> 532
<211> 41
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (40)..(40)
<223> Cys-PEG

<220>
<221> MOD_RES
<222> (41)..(41)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 532
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Met Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser Cys Cys
        35   40

<210> 533
<211> 39
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Aminoisobutyric acid

<220>
<221> MOD_RES
<222> (24)..(24)
<223> Cys-PEG

<220>
<223> c-term amidation

<400> 533
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1   5   10   15

Gln Ala Ala Lys Glu Phe Ile Cys Trp Leu Met Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35