SEQUENCE LISTING

<110> Bianchi, Elisabetta
Carrington, Paul E.
Eiermann, George J.
Ingallinella, Paolo
Marsh, Donald J.
Metzger, Joseph M.
Pessi, Antonello
Pocai, Alessandro
Sinha Roy, Ranabir
Dimarchi, Richard
Ward, Brian

<120> OXYNTOMODULIN ANALOGS

<130> MRL-DOB-22547X

<150> PCT/US2009/034448
<151> 2009-02-19

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Arg Asn Asn Ile Ala
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<223> C-terminal amidation

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<223> C-terminal amidation

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Arg Asn Asn Ile Ala Xaa
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<221> MOD_RES
<222> 38
<223> Xaa=Cys(mPEG)20kDa

<221> AMIDATION
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<223> C-terminal amidation

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20 25 30
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<223> Xaa=Cys(mPEG)2 40kDa

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<221> MOD_RES
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3-oxopropyl]thio}acetate)

<221> AMIDATION
<222> 38
<223> C-terminal amidation

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20 25 30
Arg Asn Asn Ile Ala Xaa
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            20   25   30
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<221> MOD_RES
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Arg Arg Ala Xaa Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn
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Arg Asn Asn Ile Ala
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<223> Xaa=Cys(mPEG)240kDa

<221> MOD_RES
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<223> Xaa=metionine sulfoxide

<221> AMIDATION
<222> 37
<223> C-terminal amidation

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<223> Xaa=Aib

<221> MOD_RES
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<223> Xaa=Cys(mPEG)240kDa

<221> AMIDATION
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<223> C-terminal amidation

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            20   25   30
Arg Asn Asn Ile Ala
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<223> Xaa=Lys(palmitoyl)

<221> AMIDATION
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<223> C-terminal amidation

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<223> Xaa=Aib

<221> MOD_RES
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<223> Xaa=mrtionine sulfoxide

<221> MOD_RES
<222> 38
<223> Xaa=Cys(mPEG)240kDa

<221> AMIDATION
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<223> C-terminal amidation

<400> 20

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 1               5                  10                  15
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            20                  25                  30
Arg Asn Asn Ile Ala Xaa
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<221> MOD_RES
<222> 38
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1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol))

<221> AMIDATION
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<223> C-terminal amidation

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<223> Xaa=Cys(mPEG)240kDa

<221> MOD_RES
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<223> Xaa=methionine sulfoxide

<221> AMIDATION
<222> 37
<223> C-terminal amidation

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Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Xaa Asn Thr Lys Arg Asn
20 25 30
Arg Asn Asn Ile Ala
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<223> Xaa=Cys(mPEG)240kDa

<221> MOD_RES
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<223> Xaa=Methionine sulfoxide

<221> AMIDATION
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<223> C-terminal amidation

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His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Xaa Tyr Leu Asp Ser
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20 25 30
Arg Asn Asn Ile Ala
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<223> Xaa=Aib

<221> MOD_RES
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<223> Xaa=Lys(palmitoyl)

<221> AMIDATION
<222> 38
<223> C-terminal amidation

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20 25 30
Arg Asn Asn Ile Ala Xaa
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<221> MOD_RES
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<223> Xaa=Nle

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<223> C-terminal amidation

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<223> Xaa=O-methyl-L-homoserine

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            20   25   30
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<223> Xaa=Nle

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            20   25   30
Arg Asn Asn Ile Ala Xaa
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<221> MOD_RES
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<223> Xaa=O-methyl-L-homoserine

<221> AMIDATION
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<223> C-terminal amidation

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His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
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            20   25   30
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1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol))

<221> AMIDATION
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<223> C-terminal amidation

<400> 29
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
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Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala Xaa
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            20   25   30
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<223> Xaa=D-serine

<221> MOD_RES
<222> 27
<223> Xaa=metionine sulfoxide

<221> MOD_RES
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<223> Xaa=Cys(cholest-5-en-3-yl
1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol))

<221> AMIDATION
<222> 38
<223> C-terminal amidation

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            20   25   30
Arg Asn Asn Ile Ala Xaa
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<221> MOD_RES
<222> 27
<223> Xaa=methionine sulfoxide

<221> MOD_RES
<222> 38

<223> Xaa=Cys(CH2CONH2)

<221> AMIDATION
<222> 38
<223> C-terminal amidation

<400> 32
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
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Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Xaa Asn Thr Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala Xaa
        35

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<221> AMIDATION
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<223> C-terminal amidation

<400> 33
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Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala
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<223> Xaa=Abu

<221> AMIDATION
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<223> C-terminal amidation

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His Xaa 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 Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala
        35

<210> 35
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<221> MOD_RES
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<223> Xaa=D-abu

<221> AMIDATION
<222> 37
<223> C-terminal amidation

<400> 35
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 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala
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<223> C-terminal amidation

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 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala
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<223> Xaa= beta-cyclopropyl-alanine

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

Arg Asn Asn Ile Ala
35

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<223> Xaa=propargylglycine

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Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn
20 25 30
Arg Asn Asn Ile Ala
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<210> 39
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<212> PRT
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<221> MOD_RES
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<223> Xaa=Allylglycine

<221> AMIDATION
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<400> 39
His Xaa 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 Lys Arg Asn
20 25 30
Arg Asn Asn Ile Ala
35

<210> 40
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=2-Amino-2-cyclohexyl-propanoic acid

<221> AMIDATION
<222> 37

<223> C-terminal amidation

<400> 40
His Xaa 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 Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala
        35

<210> 41
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-tertbutylglycine

<221> AMIDATION
<222> 37
<223> C-terminal amidation

<400> 41
His Xaa 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 Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala
        35

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

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=Vinylglycine

<221> AMIDATION
<222> 37
<223> C-terminal amidation

<400> 42
His Xaa 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 Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala
        35

<210> 43
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=1-Amino-1-cyclopropane carboxylic acid

<221> AMIDATION
<222> 37
<223> C-terminal amidation

<400> 43
His Xaa 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 Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala
        35

<210> 44
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=1-Amino-1-cyclobutane carboxylic acid

<221> AMIDATION
<222> 37
<223> C-terminal amidation

<400> 44
His Xaa 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 Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala
        35

<210> 45
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=1-Amino-1-cyclopentane carboxylic acid

<221> AMIDATION
<222> 37
<223> C-terminal amidation

<400> 45
His Xaa 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 Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala
        35

<210> 46
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> AMIDATION
<222> 38
<223> C-terminal amidation

<400> 46
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
 1   5   10   15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala Cys
        35

<210> 47
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 47
His Xaa 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 Lys Cys
            20   25   30

<210> 48
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 48
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
 1   5   10   15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Cys

20 25 30

<210> 49
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 49
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Glu Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Cys
20 25 30

<210> 50
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 50
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Cys
20 25 30

<210> 51
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 38
<223> Xaa=Cys(cholest-5-en-3-yl
1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol))

<221> AMIDATION
<222> 38
<223> C-terminal amidation

<400> 51
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
 1   5   10   15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala Xaa
        35

<210> 52
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=Cys(cholest-5-en-3-yl
      1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
      -6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
      Cys(Oxa4-cholesterol))

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 52
His Xaa 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 Lys Xaa
            20   25   30

<210> 53
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> X=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=Cys(cholest-5-en-3-yl
      1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
      -6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
      Cys(Oxa4-cholesterol))

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 53
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser

1 5 10 15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
20 25 30

<210> 54
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=Cys(cholest-5-en-3-yl
1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol))

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 54
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Glu Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
20 25 30

<210> 55
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=Cys(cholest-5-en-3-yl
1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol))

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 55
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
20 25 30

<210> 56
<211> 31
<212> PRT

<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=Lys(Palmitoyl)

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 56
His Xaa 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 Lys Xaa
            20   25   30

<210> 57
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=Lys(palmitoyl)

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 57
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
 1   5   10   15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
            20   25   30

<210> 58
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=Ttds

<221> MOD_RES

<222> 32
<223> Xaa=Lys(Palmitoyl)

<221> AMIDATION
<222> 32
<223> C-terminal amidation

<400> 58
His Xaa 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 Lys Xaa Xaa
            20   25   30

<210> 59
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=Ttds

<221> MOD_RES
<222> 32
<223> Xaa=Lys(Palmitoyl)

<221> AMIDATION
<222> 32
<223> C-terminal amidation

<400> 59
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
 1   5   10   15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa Xaa
            20   25   30

<210> 60
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 32
<223> Xaa=Cys(cholest-5-en-3-yl{[(2R)-3-amino-2-(amino)-
3-oxopropyl]thio}acetate)

<221> AMIDATION
<222> 32

<223> C-terminal amidation

<400> 60
His Xaa 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 Lys Xaa Xaa
            20   25   30

<210> 61
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 32
<223> Xaa=Cys(cholest-5-en-3-yl{[(2R)-3-amino-2-(amino)-
      3-oxopropyl]thio}acetate)

<221> AMIDATION
<222> 32
<223> C-terminal amidation

<400> 61
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
 1   5   10   15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa Xaa
            20   25   30

<210> 62
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=Aib

<221> MOD_RES
<222> 31
<223> Xaa= Cys(cholest-5-en-3-yl
      1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
      -6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
      Cys(Oxa4-cholesterol))

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 62
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
 1   5   10   15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa

20 25 30

<210> 63
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 38
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 39
<223> Xaa=Cys(cholest-5-en-3-yl{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}acetate)

<221> AMIDATION
<222> 39
<223> C-terminal amidation

<400> 63
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn
20 25 30
Arg Asn Asn Ile Ala Xaa Xaa
35

<210> 64
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 32
<223> Xaa=Cys(cholest-5-en-3-yl 1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or Cys(Oxa4-cholesterol))

<221> AMIDATION
<222> 32
<223> C-terminal amidation

<400> 64
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Xaa
20 25 30

<210> 65

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

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 38
<223> Xaa=Cys(cholest-5-en-3-yl
1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol))

<400> 65
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn
20 25 30
Arg Asn Asn Ile Ala Xaa
35

<210> 66
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=Aib

<221> MOD_RES
<222> 31
<223> Xaa=Cys(cholest-5-en-3-yl
1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol))

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 66
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Glu Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
20 25 30

<210> 67
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=Aib

<221> MOD_RES
<222> 31
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 32
<223> Xaa=Cys(cholest-5-en-3-yl{[(2R)-3-amino-2-(amino)-
3-oxopropyl]thio}acetate)

<400> 67
His Xaa 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 Lys Xaa Xaa
            20   25   30

<210> 68
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 38
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 39
<223> Xaa=Lys(Palmitoyl)

<221> AMIDATION
<222> 39
<223> C-terminal amidation

<400> 68
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
 1   5   10   15
Glu Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala Xaa Xaa
        35

<210> 69
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33

<223> Xaa=Cys(cholest-5-en-3-yl{[(2R)-3-amino-2-(amino)-
3-oxopropyl]thio}acetate)

<400> 69
His Xaa 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 Lys Xaa Xaa
            20   25   30
Xaa

<210> 70
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 32
<223> Xaa=Cys(cholest-5-en-3-yl
1{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}acetate
)

<400> 70
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Ser Tyr Leu Asp Ser
 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa Xaa
            20   25   30

<210> 71
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 32
<223> Xaa=Cys(cholest-5-en-3-yl
1{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}acetate
);

<400> 71
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
 1   5   10   15
Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa Xaa
            20   25   30

<210> 72
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 32
<223> Xaa=Cys(cholest-5-en-3-yl
1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol)

<400> 72
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Ser Tyr Leu Asp Ser
1 5 10 15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa Xaa
20 25 30

<210> 73
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 32
<223> Xaa=Cys(cholest-5-en-3-yl
1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol)

<400> 73
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa Xaa
20 25 30

<210> 74
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 32
<223> Xaa=Cys(cholest-5-en-3-yl
1{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}acetate
)

<400> 74
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 Lys Xaa Xaa
20 25 30

<210> 75
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 31
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 32
<223> Xaa=Cys(cholest-5-en-3-yl
1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol)

<400> 75
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 Lys Xaa Xaa
20 25 30

<210> 76
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=Cys(cholest-5-en-3-yl
1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol)

<400> 76
His Xaa 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 Lys Xaa Xaa
20 25 30
Xaa

<210> 77
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=S-{1-[46-(cholest-5-en-3-yloxy)-3,43,46-trioxo
-7,10,13,16,19,22,25,28,31,34,37,40-dodecaoxa-4,44
-diazahexatetracont-1-yl]-2,5-dioxopyrrolidin-3-yl
}-L-cysteine or Cys (mal-oxa12-cholesterol)

<400> 77
His Xaa 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 Lys Xaa Xaa
20 25 30
Xaa

<210> 78
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=Aib

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa== Cys(cholest-5-en-3-yl

1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol)

<400> 78
His Xaa 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 Lys Xaa Xaa
            20   25   30
Xaa

<210> 79
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=1-Amino-1-cyclobutane carboxylic acid

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=Cys(cholest-5-en-3-yl
1-{[(2R)-3-amino-2-(amino)-3-oxopropyl]thio}-2-oxo
-6,9,12,15-tetraoxa-3-azaoctadecan-18-oate]) or
Cys(Oxa4-cholesterol)

<400> 79
His Xaa 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 Lys Xaa Xaa
            20   25   30
Xaa

<210> 80
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=S-[42-(cholest-5-en-3-yloxy)-2,42-dioxo-6,9,12
,15,18,21,24,27,30,33,36,39-dodecaoxa-3-azadotetra
cont-1-yl]-L-cysteine or Cys (oxa12-cholesterol)

<223> Lactam bridge between side chains at positions 16

and 20

<400> 80
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 Lys Xaa Xaa
20 25 30
Xaa

<210> 81
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=Aib

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=S-[42-(cholest-5-en-3-yloxy)-2,42-dioxo-6,9,12
,15,18,21,24,27,30,33,36,39-dodecaoxa-3-azadotetra
cont-1-yl]-L-cysteine or Cys (oxa12-cholesterol)

<223> Lactam bridge between the side chains at positions
16 and 20

<400> 81
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 Lys Xaa Xaa
20 25 30
Xaa

<210> 82
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=1-Amino-1-cyclobutane carboxylic acid

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=S-[42-(cholest-5-en-3-yloxy)-2,42-dioxo-6,9,12
,15,18,21,24,27,30,33,36,39-dodecaoxa-3-azadotetra
cont-1-yl]-L-cysteine or Cys (oxa12-cholesterol)

<223> Lactam bridge bewteen the side chains at positions

16 and 20

<400> 82
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 Lys Xaa Xaa
20 25 30
Xaa

<210> 83
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=S-[42-(cholest-5-en-3-yloxy)-2,42-dioxo-6,9,12
,15,18,21,24,27,30,33,36,39-dodecaoxa-3-azadotetra
cont-1-yl]-L-cysteine or Cys (oxa12-cholesterol)

<400> 83
His Xaa 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 Lys Xaa Xaa
20 25 30
Xaa

<210> 84
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=Aib

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=S-[42-(cholest-5-en-3-yloxy)-2,42-dioxo-6,9,12
,15,18,21,24,27,30,33,36,39-dodecaoxa-3-azadotetra
cont-1-yl]-L-cysteine or Cys (oxa12-cholesterol)

<400> 84
His Xaa 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 Lys Xaa Xaa

20 25 30
Xaa

<210> 85
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=1-Amino-1-cyclobutane carboxylic acid

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=S-[42-(cholest-5-en-3-yloxy)-2,42-dioxo-6,9,12
,15,18,21,24,27,30,33,36,39-dodecaoxa-3-azadotetra
cont-1-yl]-L-cysteine or Cys (oxa12-cholesterol)

<400> 85
His Xaa 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 Lys Xaa Xaa
20 25 30
Xaa

<210> 86
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=Lys(gamma-glutamic acid-palmitoyl)

<221> AMIDATION
<222> 33
<223> C-terminal amidation

<400> 86
His Xaa 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 Lys Xaa Xaa
20 25 30
Xaa

<210> 87
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=S-[42-(cholest-5-en-3-yloxy)-2,42-dioxo-6,9,12
,15,18,21,24,27,30,33,36,39-dodecaoxa-3-azadotetra
cont-1-yl]-L-cysteine or Cys (oxa12-cholesterol)

<221> AMIDATION
<222> 33
<223> C-terminal amidation

<400> 87
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 Lys Xaa Xaa
20 25 30
Xaa

<210> 88
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 20
<223> Xaa=Lys(gamma-glutamic acid-palmitoyl)

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> AMIDATION
<222> 32
<223> C-terminal amidation

<400> 88
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Arg Arg Ala Xaa Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa Xaa
20 25 30

<210> 89

<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 20
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic
acid-palmitoyl)

<221> MOD_RES
<222> 31
<223> Xaa=gamma glutamic acid

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 89
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Arg Arg Ala Xaa Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
20 25 30

<210> 90
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic
acid-palmitoyl)

<221> AMIDATION
<222> 30
<223> C-terminal amidation

<400> 90
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Ser
1 5 10 15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys
20 25 30

<210> 91
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES

<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 20
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic
acid-palmitoyl)

<221> AMIDATION
<222> 30
<223> C-terminal amidation

<400> 91
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Glu
1 5 10 15
Arg Arg Ala Xaa Asp Phe Val Gln Trp Leu Met Asn Thr Lys
20 25 30

<210> 92
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic
acid-palmitoyl)

<221> AMIDATION
<222> 30
<223> C-terminal amidation

<400> 92
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Glu
1 5 10 15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys
20 25 30

<210> 93
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=S-[78-(cholest-5-en-3-yloxy)-2,78-dioxo-6,9,12
,15,18,21,24,27,30,33,36,39,42,45,48,51,54,57,60,6
3,66,69,72,75-tetracosaoxa-3-azaoctaheptacont-1-yl

]-L-cysteine or Cys (oxa24-cholesterol)

<400> 93
His Xaa 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 Lys Xaa Xaa
            20   25   30
Xaa

<210> 94
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=Aib

<221> MOD_RES
<222> 24
<223> Xaa=Lys(DOTA)

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=S-[42-(cholest-5-en-3-yloxy)-2,42-dioxo-6,9,12
,15,18,21,24,27,30,33,36,39-dodecaoxa-3-azadotetra
cont-1-yl]-L-cysteine or Cys (oxa12-cholesterol)

<221> AMIDATION
<222> 33
<223> C-terminal amidation

<221> MOD_RES
<222> (27)...(27)
<223> Xaa=methionine sulfoxide

<400> 94
His Xaa Asp Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Xaa Trp Leu Xaa Asn Thr Lys Xaa Xaa
            20   25   30
Xaa

<210> 95
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 10

<223> Xaa=Lys(gamma glutamic acid-palmitoyl)

<221> MOD_RES
<222> 31
<223> Xaa=gamma glutamic acid

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 95
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Glu
 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
            20   25   30

<210> 96
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(palmitoyl)

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> AMIDATION
<222> 32
<223> C-terminal amidation

<400> 96
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Glu
 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa Xaa
            20   25   30

<210> 97
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=aib

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma glutamic
      acid-palmitoyl)

<221> AMIDATION
<222> 30
<223> C-terminal amidation

<400> 97
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Glu
 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys
            20   25   30

<210> 98
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=acb

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic
      acid-palmitoyl

<221> AMIDATION
<222> 30
<223> C-terminal amidation

<400> 98
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Glu
 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys
            20   25   30

<210> 99
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> VARIANT
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic
      acid-palmitoyl

<221> MOD_RES
<222> 16
<223> Xaa=Aib

<221> MOD_RES
<222> 31
<223> Xaa=gamma-glutamic acid

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 99
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Xaa
 1   5   10   15

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

<210> 100
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=aib

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=Lys(gamma glutamic acid-palmitoyl)

<221> AMIDATION
<222> 33
<223> C-terminal amidation

<400> 100
His Xaa 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 Lys Xaa Xaa
20 25 30
Xaa

<210> 101
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=acb

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=Lys(gamma glutamic acid-palmitoyl)

<221> AMIDATION
<222> 33
<223> C-terminal amidation

<400> 101
His Xaa 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 Lys Xaa Xaa
20 25 30
Xaa

<210> 102
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> (31)...(32)
<223> Xaa=gamma glutamic acid

<221> MOD_RES
<222> 33
<223> Xaa=S-[38-(cholest-5-en-3-yloxy)-2-oxo-6,9,12,15,18,21,24,27,30,33,36-undecaoxa-3-azaoctatriacont-1-yl]-L-cysteine or Cys (oxa12-O-cholesterol)

<400> 102
His Xaa 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 Lys Xaa Xaa
20 25 30
Xaa

<210> 103
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> VARIANT
<222> 2
<223> Xaa=D-serine or Aib;

<221> VARIANT
<222> 17
<223> Xaa=Arg or Glu

<221> VARIANT
<222> 18
<223> Xaa=Arg or Ala

<221> VARIANT
<222> 27
<223> Xaa=methionine, norleucine, or O-methyl-L-homoserine

<400> 103
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
1 5 10 15
Xaa Xaa Ala Gln Asp Phe Val Gln Trp Leu Xaa Asn Thr Lys
20 25 30

<210> 104
<211> 7
<212> PRT

<213> Artificial Sequence

<220>
<223> OXM peptide

<400> 104
Arg Asn Arg Asn Asn Ile Ala
 1   5

<210> 105
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> VARIANT
<222> 2
<223> Xaa=D-serine; Aib; Acb; 1-Amino-1-cyclohexane carboxylic acid (Acx); alpha-aminobutyric acid(Abu); D- alpha-aminobutyric acid (D-Abu); Aminovaleric acid Nva); beta-cyclopropyl-alanine (Cpa); propargylglycine (Prg); Allylglycine (Alg); 2-Amino-2-cyclohexyl-propanoic acid (2-Cha); D-tertbutylglycine (D-tbg); Vinylglycine (Vg); 1-Amino-1-cyclopropane carboxylic acid (Acp); or 1-Amino-1-cyclopentane carboxylic acid (Acpe)

<221> VARIANT
<222> 17
<223> Xaa=Arg or Glu

<221> VARIANT
<222> 18
<223> Xaa=Arg or Ala

<221> VARIANT
<222> 27
<223> Xaa=methionine (M), norleucine (Nle), methionine sulfoxide (m) or O-methyl-L-homoserine (o)

<400> 105
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Lys Tyr Leu Asp Ser
 1   5   10   15
Xaa Xaa Ala Gln Asp Phe Val Gln Trp Leu Xaa Asn Thr Lys Arg Asn
            20   25   30
Arg Asn Asn Ile Ala
        35

<210> 106
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> VARIANT
<222> 2
<223> Xaa=D-serine, alpha-aminoisobutyric acid (aib), 1-Amino-1-cyclobutane carboxylic acid (Acb) residue, 1-Amino-1-cyclohexane carboxylic acid (Acx); alpha-aminobutyric acid(Abu); D-alpha-aminobutyric acid (D-Abu); Aminovaleric acid Nva); beta-cyclopropyl-alanine (Cpa);

propargylglycine (Prg); Allylglycine (Alg);
2-Amino-2-cyclohexyl-propanoic acid (2-Cha);
D-tertbutylglycine (D-tbg); Vinylglycine (Vg);
1-Amino-1-cyclopropane carboxylic acid (Acp); or
1-Amino-1-cyclopentane carboxylic acid (Acpe)

<221> VARIANT
<222> 12
<223> Xaa=Ser or Lys

<221> VARIANT
<222> 16
<223> Xaa=Ser or Glu

<221> VARIANT
<222> 17
<223> Xaa=Arg or Glu

<221> VARIANT
<222> 18
<223> Xaa=Arg or Ala

<221> VARIANT
<222> (20)...(20)
<223> Xaa=Gln or Lys

<221> VARIANT
<222> (27)...(27)
<223> Xaa=a methionine, norleucine, methionine
sulfoxide, or O-methyl-L-homoserine

<400> 106
His Xaa Gln Gly Thr Phe Thr Ser Asp Tyr Ser Xaa Tyr Leu Asp Xaa
1 5 10 15
Xaa Xaa Ala Xaa Asp Phe Val Gln Trp Leu Xaa Asn Thr Lys Arg Asn
20 25 30
Arg Asn Asn Ile Ala
35

<210> 107
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> VARIANT
<222> 2
<223> Xaa=D-serine, alpha-aminoisobutyric acid (aib),
1-Amino-1-cyclobutane carboxylic acid (Acb)
residue, 1-Amino-1-cyclohexane carboxylic acid
(Acx); alpha-aminobutyric acid(Abu); D-
alpha-aminobutyric acid (D-Abu); Aminovaleric acid
Nva); beta-cyclopropyl-alanine (Cpa);
propargylglycine (Prg); Allylglycine (Alg);
2-Amino-2-cyclohexyl-propanoic acid (2-Cha);
D-tertbutylglycine (D-tbg); Vinylglycine (Vg);
1-Amino-1-cyclopropane carboxylic acid (Acp); or
1-Amino-1-cyclopentane carboxylic acid (Acpe)

<221> VARIANT
<222> 10
<223> Xaa=Tyr or Lys

<221> VARIANT
<222> 12

<223> Xaa=Ser or Lys

<221> VARIANT
<222> 16
<223> Xaa=Ser or Glu

<221> VARIANT
<222> 17
<223> Xaa=Arg or Glu

<221> VARIANT
<222> (18)...(18)
<223> Xaa=Arg or Ala

<221> VARIANT
<222> (20)...(20)
<223> Xaa=Gln or Lys

<221> VARIANT
<222> (27)...(27)
<223> Xaa=methionine, norleucine, methionine sulfoxide, or O-methyl-L-homoserine

<221> VARIANT
<222> (31)...(31)
<223> Xaa=optional, but when present is one or more gamma glutamic acid residues

<400> 107
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Xaa Tyr Leu Asp Xaa
 1   5   10   15
Xaa Xaa Ala Xaa Asp Phe Val Gln Trp Leu Xaa Asn Thr Lys Xaa
            20   25   30

<210> 108
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine, alpha-aminoisobutyric acid (aib), 1-Amino-1-cyclobutane carboxylic acid (Acb) residue, 1-Amino-1-cyclohexane carboxylic acid (Acx); alpha-aminobutyric acid(Abu); D-alpha-aminobutyric acid (D-Abu); Aminovaleric acid Nva); beta-cyclopropyl-alanine (Cpa); propargylglycine (Prg); Allylglycine (Alg); 2-Amino-2-cyclohexyl-propanoic acid (2-Cha); D-tertbutylglycine (D-tbg); Vinylglycine (Vg); 1-Amino-1-cyclopropane carboxylic acid (Acp); or 1-Amino-1-cyclopentane carboxylic acid (Acpe)

<221> MOD_RES
<222> 10
<223> Xaa=Tyr or Lys

<221> MOD_RES
<222> 12
<223> Xaa=Ser or Lys

<221> MOD_RES
<222> 16
<223> Xaa=Ser or Lys

<221> MOD_RES
<222> 17
<223> Xaa=Arg or Glu

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

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

<221> MOD_RES
<222> (27)...(27)
<223> Xaa=methionine, norleucine, methionine sulfoxide, or O-methyl-L-homoserine

<221> MOD_RES
<222> (31)...(31)
<223> optional, but when present one or more gamma glutamic acid residues

<400> 108
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Xaa Tyr Leu Asp Xaa
1 5 10 15
Xaa Xaa Ala Xaa Asp Phe Val Gln Trp Leu Xaa Asn Thr Lys Xaa
20 25 30

<210> 109
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<400> 109
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 Lys
20 25 30

<210> 110
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine, ?-aminoisobutyric acid (aib), 1-Amino-1-cyclobutane carboxylic acid (Acb) residue, 1-Amino-1-cyclohexane carboxylic acid (Acx); alpha-aminobutyric acid(Abu); D-alpha-aminobutyric acid (D-Abu); Aminovaleric acid Nva); beta-cyclopropyl-alanine (Cpa); propargylglycine (Prg); Allylglycine (Alg); 2-Amino-2-cyclohexyl-propanoic acid (2-Cha); D-tertbutylglycine (D-tbg); Vinylglycine (Vg); 1-Amino-1-cyclopropane carboxylic acid (Acp); or 1-Amino-1-cyclopentane carboxylic acid (Acpe) residue

<221> MOD_RES
<222> 10
<223> Xaa=Tyr or Lys

<221> MOD_RES
<222> 12
<223> Xaa=Ser or Lys

<221> MOD_RES
<222> 16
<223> Xaa=Ser, aib, or Glu

<221> MOD_RES
<222> 17
<223> Xaa=Arg or Glu

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

<221> MOD_RES
<222> (20)...(20)
<223> Xaa=Glu or Lys

<221> MOD_RES
<222> (27)...(27)
<223> Xaa=Met, norleucine, methionine sulfoxide, or
O-methyl-L-homoserine

<221> MOD_RES
<222> (31)...(31)
<223> Xaa=gamma-glutamic acid

<221> MOD_RES
<222> (32)...(32)
<223> Xaa=is optional but when present, it is
gamma-glutamic acid

<400> 110
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Xaa Tyr Leu Asp Xaa
1 5 10 15
Xaa Xaa Ala Xaa Asp Phe Val Gln Trp Leu Xaa Asn Thr Lys Xaa Xaa
20 25 30

<210> 111
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic
acid-palmitoyl)

<221> MOD_RES
<222> 16
<223> Xaa=Aib

<221> MOD_RES
<222> 31

<223> Xaa=gamma-glutamic acid

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 111
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Xaa
 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Glu Xaa
            20   25   30

<210> 112
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic
      acid-palmitoyl)

<221> MOD_RES
<222> 16
<223> Xaa=aib

<221> MOD_RES
<222> 30
<223> Xaa=D-Lys

<221> MOD_RES
<222> 31
<223> Xaa=gamma-glutamic acid

<221> AMIDATION
<222> (31)...(31)
<223> C-terminal amidation

<400> 112
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Xaa
 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Xaa Xaa
            20   25   30

<210> 113
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic

acid-palmitoyl)

<221> MOD_RES
<222> 31
<223> Xaa=gamma-glutamic acid

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 113
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Glu
1 5 10 15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
20 25 30

<210> 114
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic
acid-palmitoyl)

<221> MOD_RES
<222> 16
<223> Xaa=aib

<221> MOD_RES
<222> 31
<223> Xaa=gamma-D-glutamic acid

<400> 114
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Xaa
1 5 10 15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Glu Xaa
20 25 30

<210> 115
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(glutamic acid-glutamic acid-palmitoyl)

<221> MOD_RES
<222> 31
<223> Xaa=gamma-glutamic acid

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 115
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Glu
1 5 10 15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
20 25 30

<210> 116
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(Arg-Arg-palmitoyl)

<221> MOD_RES
<222> 31
<223> Xaa=gamma-glutamic acid

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 116
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Glu
1 5 10 15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
20 25 30

<210> 117
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-Serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(homocysteic acid-homocysteic
acid-palmitoyl)

<221> MOD_RES
<222> 31
<223> Xaa=gamma-glutamic acid

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 117
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Glu
 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
            20   25   30

<210> 118
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-Serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(D-glutamic acid-D-glutamic acid-palmitoyl)

<221> MOD_RES
<222> 31
<223> Xaa=gamma-glutamic acid

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 118
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Glu
 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
            20   25   30

<210> 119
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-Serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic
acid-myristoyl)

<221> MOD_RES
<222> 16
<223> Xaa=aib

<221> MOD_RES
<222> 31
<223> Xaa=gamma-glutamic acid

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 119

His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Xaa
1 5 10 15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
20 25 30

<210> 120
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-Serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic acid-palmitoyl)

<221> MOD_RES
<222> 16
<223> Xaa=aib

<221> MOD_RES
<222> 31
<223> Xaa=gamma-glutamic acid

<221> AMIDATION
<222> 31
<223> C-terminal amidation

<400> 120
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Xaa
1 5 10 15
Arg Ala Ala Gln Asp Phe Val Gln Trp Leu Met Asp Thr Lys Xaa
20 25 30

<210> 121
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> OXM analog

<221> MOD_RES
<222> 2
<223> Xaa=D-Serine

<221> MOD_RES
<222> 10
<223> Xaa=Lys(gamma-glutamic acid-gamma-glutamic acid-stearoyl)

<221> MOD_RES
<222> 16
<223> Xaa=aib

<221> MOD_RES
<222> 31
<223> Xaa=gamma-glutamic acid

<221> AMIDATION

<222> 31
<223> C-terminal amidation

<400> 121
His Xaa Gln Gly Thr Phe Thr Ser Asp Xaa Ser Lys Tyr Leu Asp Xaa
 1   5   10   15
Arg Arg Ala Gln Asp Phe Val Gln Trp Leu Met Asn Thr Lys Xaa
            20   25   30