

12-0308-PCT_Sequence_listing.txt
SEQUENCE LISTING

<110> Boehringer Ingelheim International GmbH
<120> BISPECIFIC BINDING MOLECULES FOR ANTI-ANGIOGENESIS THERAPY
<130> 12-0308-PCT
<160> 102
<170> PatentIn version 3.3
<210> 1
<211> 14
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Xaa may be Arg, Ala or Glu

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Xaa may be Leu or Glu

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> Xaa may be Tyr or His

<400> 1

Arg Ala Pro Asp Thr Arg Leu Xaa Pro Tyr Xaa Tyr Asp Xaa
1 5 10

<210> 2
<211> 18
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Xaa may be Gln, Ala or Tyr

<400> 2

Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala Tyr Xaa
1 5 10 15

Asp Tyr

<210> 3
<211> 17
<212> PRT

<213> Lama glama

<220>

<221> MISC_FEATURE

<222> (16)..(16)

<223> Xaa may be Asp or Glu

<400> 3

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

Tyr

<210> 4

<211> 124

<212> PRT

<213> Lama glama

<400> 4

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ile Ser Gly Phe Thr Leu Asp Leu His
20 25 30

Val Ile Gly Trp Leu Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val
35 40 45

Ser Cys Ile Ser Ser Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Pro Trp Asp Ser Trp Tyr Cys Gly Ile Gly Asn Asp Tyr Asp
100 105 110

Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 5

<211> 123

<212> PRT

<213> Lama glama

<400> 5

Glu Val Gln Leu Val Glu Ser Glu Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ser Thr Phe Ser Ser Tyr
Seite 2

20

25

30

Ala Met Gly Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg Glu Leu Val
 35 40 45

Ala Val Ile Ser Asn Gly Gly Ile Thr Asn Tyr Pro Asn Ser Val Lys
 50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Phe
 85 90 95

Tyr Ser Gly Ser Tyr Tyr Tyr Pro Thr Asp Val His Glu Tyr Asp Tyr
 100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 6
 <211> 123
 <212> PRT
 <213> Lama glama

<400> 6

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ser Thr Phe Asn Ser Tyr
 20 25 30

Ala Met Gly Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg Glu Trp Val
 35 40 45

Ala Ala Phe Ser Thr Gly Gly Ser Thr Asn Tyr Ala Asp Ser Val Lys
 50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Phe
 85 90 95

Tyr Ser Gly Ser Tyr Tyr Tyr Pro Thr Asp Val Phe Glu Tyr Asp Tyr
 100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 7
 <211> 130
 <212> PRT

<213> Lama glama

<400> 7

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ala Leu Asp Tyr Tyr
 20 25 30

Ala Val Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val
 35 40 45

Ser Cys Ile Ser Ser Arg Gly Gly Ser Thr Phe Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Thr Ser Arg Asn Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala His Pro Leu Gln Asn Cys Cys Gly Gly Ser Ala Tyr Ala Ser
 100 105 110

Pro Glu Ala Val Tyr Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val
 115 120 125

Ser Ser
 130

<210> 8

<211> 125

<212> PRT

<213> Lama glama

<400> 8

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Tyr Tyr
 20 25 30

Asn Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val
 35 40 45

Ser Cys Ile Asn Ser Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

12-0308-PCT_Sequence_listing.txt

Ala Ala Pro Phe Ala Tyr Tyr Ser Asn Leu Cys Gly Val Asn Gly Tyr
100 105 110

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 9
<211> 124
<212> PRT
<213> Lama glama

<400> 9

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val
35 40 45

Ser Cys Ile Ser Ser His Asp Arg Thr Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Asp Pro Leu Val Cys Gly Tyr Asn Asp Pro Arg Leu Ala Asp
100 105 110

Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 10
<211> 123
<212> PRT
<213> Lama glama

<400> 10

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
Seite 5

50

55

60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Asn Arg Ala Ala Asp Thr Arg Leu Gly Pro Tyr Glu Tyr Asp Tyr
 100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 11
 <211> 123
 <212> PRT
 <213> Lama glama

<400> 11

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val
 35 40 45

Ser Cys Ile Ser Ser Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Thr Ala Trp Cys Asp Ser Ser Trp Tyr Arg Ser Phe Val Gly Tyr
 100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 12
 <211> 128
 <212> PRT
 <213> Lama glama

<400> 12

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

12-0308-PCT_Sequence_listing.txt

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Ser Tyr
20 25 30

Asp Met Ser Trp Val Arg Arg Ser Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Ser Ser Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Phe Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Tyr Ile Arg Ala Arg Gln Gly Asp Tyr Trp Gly Ala
100 105 110

Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 13
<211> 117
<212> PRT
<213> Lama glama
<400> 13

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Glu Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ser Thr Phe Ser Thr Tyr
20 25 30

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg Glu Leu Val
35 40 45

Ala Gly Ile Ser Phe Asp Gly Ser Thr His Tyr Ala Glu Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asp Ala Lys Asn Thr Val Ser Leu
65 70 75 80

Gln Met Asn Ser Leu Lys Pro Glu Asp Ala Ala Val Tyr Tyr Cys Tyr
85 90 95

Ser Val His Pro Ser Thr Gly Phe Gly Ser Trp Gly Gln Gly Thr Gln
100 105 110

Val Thr Val Ser Ser
115

<210> 14
<211> 120

12-0308-PCT_Sequence_listing.txt

<212> PRT
<213> Lama glama

<400> 14

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Pro Glu Gly Ile
35 40 45

Ser Cys Ile Ser Ser Ser Gly Gly Ile Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Thr Pro Gly Ile Ala Ala Cys Arg Gly Ile His Tyr Thr Gly Gln
100 105 110

Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 15
<211> 120
<212> PRT
<213> Lama glama

<400> 15

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Pro Glu Gly Ile
35 40 45

Ser Cys Ile Ser Ser Ser Gly Gly Ile Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Thr Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Thr Pro Gly Ile Ala Ala Cys Arg Gly Ile His Tyr Thr Gly Gln
Seite 8

100

105

110

Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 16
 <211> 120
 <212> PRT
 <213> Lama glama
 <400> 16

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Asp Val Tyr
 20 25 30

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Pro Glu Gly Ile
 35 40 45

Ser Cys Ile Ser Ser Ser Gly Ser Ile Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Thr Ser Arg Asp Ser Ala Lys Asn Thr Val Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Thr Pro Gly Ile Ala Ala Cys Arg Gly Ile His Tyr Trp Gly Gln
 100 105 110

Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 17
 <211> 120
 <212> PRT
 <213> Lama glama
 <400> 17

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Pro Glu Glu Ile
 35 40 45

Ser Cys Ile Ser Ser Ser Gly Gly Ile Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

12-0308-PCT_Sequence_listing.txt

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Thr Pro Gly Ile Ala Ala Cys Arg Gly Ile His Tyr Thr Gly Gln
100 105 110

Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 18
<211> 116
<212> PRT
<213> Lama glama
<400> 18

Glu Val Gln Leu Met Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Val Ala Ala Gly Phe Thr Phe Ser Asn Tyr
20 25 30

Tyr Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Val Ile Ser Pro Asp Gly Ser Asn Thr Tyr Tyr Ala Asp Thr Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Gly Asn Ala Lys Asn Thr Leu Phe
65 70 75 80

Leu Gln Met Thr Gly Leu Lys Ser Glu Asp Ala Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Ser Gly Ser Trp Gly Val His Gly Gln Gly Thr Gln Val
100 105 110

Thr Val Ser Ser
115

<210> 19
<211> 123
<212> PRT
<213> Lama glama
<400> 19

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asn Tyr
20 25 30

12-0308-PCT_Sequence_listing.txt

Asp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Ser Ala Ile Asn Ser Gly Gly Gly Asp Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Thr Pro Arg Gly Trp Gly Pro Thr Gly Pro His Glu Tyr Gly Tyr
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 20
<211> 120
<212> PRT
<213> Lama glama

<400> 20

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Pro Glu Gly Ile
35 40 45

Ser Cys Ile Ser Ser Ser Gly Ser Ile Thr Tyr Asp Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Thr Pro Gly Ile Ala Ala Cys Arg Gly Ile His Tyr Trp Gly Gln
100 105 110

Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 21
<211> 123
<212> PRT
<213> Artificial

12-0308-PCT_Sequence_listing.txt

<220>

<223> Mutated sequence from lama glama.

<400> 21

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Asn Arg Ala Pro Asp Thr Arg Leu Arg Pro Tyr Leu Tyr Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 22

<211> 123

<212> PRT

<213> Artificial

<220>

<223> Mutated sequence from lama glama.

<400> 22

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

12-0308-PCT_Sequence_listing.txt

Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr Asp His
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 23
<211> 123
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<400> 23

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Asn Arg Ala Pro Asp Thr Arg Leu Glu Pro Tyr Leu Tyr Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 24
<211> 123
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<400> 24

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

12-0308-PCT_Sequence_listing.txt

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Asn Arg Ala Pro Asp Thr Arg Leu Arg Pro Tyr Leu Tyr Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 25
<211> 123
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<400> 25

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Asn Arg Ala Pro Asp Thr Arg Leu Glu Pro Tyr Glu Tyr Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 26
<211> 123

12-0308-PCT_Sequence_listing.txt

<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<400> 26

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Leu Tyr Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 27
<211> 123
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<400> 27

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

12-0308-PCT_Sequence_listing.txt

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 28
<211> 123
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.
<400> 28

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 29
<211> 128
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.
<400> 29

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

12-0308-PCT_Sequence_listing.txt

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Ser Tyr
20 25 30

Asp Met Ser Trp Val Arg Arg Ser Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Ser Ala Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
100 105 110

Tyr Ala Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 30

<211> 128

<212> PRT

<213> Artificial

<220>

<223> Mutated sequence from lama glama.

<400> 30

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Ser Tyr
20 25 30

Asp Met Ser Trp Val Arg Arg Ser Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Ser Ala Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Thr Asp Tyr Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
100 105 110

Tyr Ala Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

12-0308-PCT_Sequence_listing.txt

<210> 31
 <211> 128
 <212> PRT
 <213> Artificial

<220>
 <223> Mutated sequence from lama glama.

<400> 31

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Ile Gly Ser Tyr
 20 25 30

Asp Met Ser Trp Val Arg Arg Ser Pro Gly Lys Gly Pro Glu Trp Val
 35 40 45

Ser Ser Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Thr Asp Tyr Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
 100 105 110

Tyr Ala Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120 125

<210> 32
 <211> 128
 <212> PRT
 <213> Artificial

<220>
 <223> Mutated sequence from lama glama.

<400> 32

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Ser Tyr
 20 25 30

Asp Met Ser Trp Val Arg Arg Ser Pro Gly Lys Gly Pro Glu Trp Val
 35 40 45

Ser Ser Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
 50 55 60

12-0308-PCT_Sequence_listing.txt

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
100 105 110

Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 33
<211> 128
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<400> 33

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Ile Gly Ser Tyr
20 25 30

Asp Met Ser Trp Val Arg Arg Ser Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Ser Ala Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
100 105 110

Tyr Ala Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 34
<211> 123
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<400> 34

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
Seite 19

1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30
 Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
 35 40 45
 Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
 50 55 60
 Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr Asp His
 100 105 110
 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120
 <210> 35
 <211> 123
 <212> PRT
 <213> Artificial
 <220>
 <223> Mutated sequence from lama glama.
 <400> 35
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30
 Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
 35 40 45
 Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr Asp His
 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 36
 <211> 128
 <212> PRT
 <213> Artificial

<220>
 <223> Mutated sequence from lama glama.

<400> 36

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Ser Tyr
 20 25 30

Asp Met Ser Trp Val Arg Arg Ser Pro Gly Lys Gly Pro Glu Trp Val
 35 40 45

Ser Ser Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
 100 105 110

Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 37
 <211> 128
 <212> PRT
 <213> Artificial

<220>
 <223> Mutated sequence from lama glama.

<400> 37

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Ser Tyr
 20 25 30

Asp Met Ser Trp Val Arg Gln Ser Pro Gly Lys Gly Pro Glu Trp Val
 35 40 45

Ser Ser Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
 Seite 21

50

55

60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
100 105 110

Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 38

<211> 128

<212> PRT

<213> Artificial

<220>

<223> Mutated sequence from lama glama.

<400> 38

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Ser Tyr
20 25 30

Asp Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Ser Ser Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
100 105 110

Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 39

<211> 128

<212> PRT

<213> Artificial

<220>

<223> Mutated sequence from lama glama.

12-0308-PCT_Sequence_listing.txt

<400> 39

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Ser Tyr
20 25 30

Asp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Ser Ser Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
100 105 110

Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 40

<211> 128

<212> PRT

<213> Artificial

<220>

<223> Mutated sequence from lama glama.

<400> 40

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Ser Tyr
20 25 30

Asp Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Ser Ser Ile Ser Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
Seite 23

100

105

110

Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 41
 <211> 128
 <212> PRT
 <213> Artificial

<220>
 <223> Mutated sequence from lama glama.

<400> 41

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Ile Gly Ser Tyr
 20 25 30

Asp Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Pro Glu Trp Val
 35 40 45

Ser Ser Ile Ser Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
 100 105 110

Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 42
 <211> 125
 <212> PRT
 <213> Lama glama

<400> 42

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asp
 1 5 10 15

Ser Leu Lys Leu Ser Cys Ala Phe Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
 35 40 45

Val Ala Ile Ser Ser Gly Gly Phe Ile Tyr Asp Ala Val Ser Leu Glu
 Seite 24

50

55

60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Thr Pro Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ala Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 43

<211> 125

<212> PRT

<213> Lama glama

<400> 43

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 44

<211> 125

<212> PRT

<213> Lama glama

<400> 44

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asp
1 5 10 15

12-0308-PCT_Sequence_listing.txt

Ser Leu Lys Leu Ser Cys Val Ala Ser Gly Arg Thr Ser Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Ser Gly Gly Tyr Ile Tyr Asp Ser Val Ser Leu Gln
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Thr Pro Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ala Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 45
<211> 113
<212> PRT
<213> Lama glama

<400> 45

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Ile Arg Phe Met Ser Met
20 25 30

Ala Trp Tyr Arg Gln Ala Pro Gly Lys His Arg Glu Leu Val Ala Arg
35 40 45

Ile Ser Ser Gly Gly Thr Thr Ala Tyr Val Asp Ser Val Lys Gly Arg
50 55 60

Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr Leu Gln Met
65 70 75 80

Asn Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys Asn Thr Phe
85 90 95

Ser Ser Arg Pro Asn Pro Trp Gly Ala Gly Thr Gln Val Thr Val Ser
100 105 110

Ser

<210> 46
<211> 124

12-0308-PCT_Sequence_listing.txt

<212> PRT
<213> Lama glama

<400> 46

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Asn Tyr
20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Val Leu Val
35 40 45

Ala Asp Ile Ser Ser Ser Gly Ile Asn Thr Tyr Val Ala Asp Ala Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Ser Ala Trp Trp Tyr Ser Gln Met Ala Arg Asp Asn Tyr Arg
100 105 110

Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 47
<211> 123
<212> PRT
<213> Lama glama

<400> 47

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Ser Ala Phe Lys Ser Tyr
20 25 30

Arg Met Gly Trp Phe Arg Arg Thr Pro Gly Lys Glu Asp Glu Phe Val
35 40 45

Ala Ser Ile Ser Trp Thr Tyr Gly Ser Thr Phe Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Met Ser Arg Asp Lys Ala Lys Asn Ala Gly Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95

Ala Ala Gly Ala Gln Ser Asp Arg Tyr Asn Ile Arg Ser Tyr Asp Tyr
Seite 27

100

105

110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 48
 <211> 285
 <212> PRT
 <213> Artificial

<220>
 <223> Artificial polypeptide comprising lama glama sequences.

<400> 48

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
 1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
 35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
 50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
 100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 145 150 155 160

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
 165 170 175

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
 180 185 190

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
 195 200 205

12-0308-PCT_Sequence_listing.txt

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
210 215 220

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
225 230 235 240

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
245 250 255

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
260 265 270

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
275 280 285

<210> 49

<211> 247

<212> PRT

<213> Artificial

<220>

<223> Artificial polypeptide comprising lama glamasequences

<400> 49

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
130 135 140

Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Val Ala Ser Gly
145 150 155 160

12-0308-PCT_Sequence_listing.txt

Ile Arg Phe Met Ser Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys His
165 170 175

Arg Glu Leu Val Ala Arg Ile Ser Ser Gly Gly Thr Thr Ala Tyr Val
180 185 190

Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
195 200 205

Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Ala Glu Asp Thr Ala Val
210 215 220

Tyr Tyr Cys Asn Thr Phe Ser Ser Arg Pro Asn Pro Trp Gly Ala Gly
225 230 235 240

Thr Gln Val Thr Val Ser Ser
245

<210> 50
<211> 278
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising lama glama sequences.
<400> 50

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

12-0308-PCT_Sequence_listing.txt

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
165 170 175

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Ile
180 185 190

Arg Phe Met Ser Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys His Arg
195 200 205

Glu Leu Val Ala Arg Ile Ser Ser Gly Gly Thr Thr Ala Tyr Val Asp
210 215 220

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr
225 230 235 240

Val Tyr Leu Gln Met Asn Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr
245 250 255

Tyr Cys Asn Thr Phe Ser Ser Arg Pro Asn Pro Trp Gly Ala Gly Thr
260 265 270

Gln Val Thr Val Ser Ser
275

<210> 51
<211> 289
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising lama glama sequences.
<400> 51

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
Seite 31

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
 100 105 110
 Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 130 135 140
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 145 150 155 160
 Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 165 170 175
 Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg
 180 185 190
 Thr Phe Ser Asn Tyr Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys
 195 200 205
 Glu Arg Val Leu Val Ala Asp Ile Ser Ser Ser Gly Ile Asn Thr Tyr
 210 215 220
 Val Ala Asp Ala Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 225 230 235 240
 Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr
 245 250 255
 Ala Val Tyr Tyr Cys Ala Ala Ser Ala Trp Trp Tyr Ser Gln Met Ala
 260 265 270
 Arg Asp Asn Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser
 275 280 285

Ser

<210> 52
 <211> 288
 <212> PRT
 <213> Artificial

<220>
 <223> Artificial polypeptide comprising lama glama sequences.
 <400> 52

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
 1 5 10 15

12-0308-PCT_Sequence_listing.txt

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
165 170 175

Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Ser
180 185 190

Ala Phe Lys Ser Tyr Arg Met Gly Trp Phe Arg Arg Thr Pro Gly Lys
195 200 205

Glu Asp Glu Phe Val Ala Ser Ile Ser Trp Thr Tyr Gly Ser Thr Phe
210 215 220

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Met Ser Arg Asp Lys Ala
225 230 235 240

Lys Asn Ala Gly Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr
245 250 255

Ala Leu Tyr Tyr Cys Ala Ala Gly Ala Gln Ser Asp Arg Tyr Asn Ile
260 265 270

Arg Ser Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
275 280 285

<210> 53

12-0308-PCT_Sequence_listing.txt

<211> 289
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising lama glama sequences.

<400> 53

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Asn Tyr
20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Val Leu Val
35 40 45

Ala Asp Ile Ser Ser Ser Gly Ile Asn Thr Tyr Val Ala Asp Ala Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Ser Ala Trp Trp Tyr Ser Gln Met Ala Arg Asp Asn Tyr Arg
100 105 110

Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
145 150 155 160

Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
165 170 175

Gln Thr Gly Asp Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr
180 185 190

Phe Ser Ser Tyr Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu
195 200 205

Arg Glu Phe Val Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser
210 215 220

Val Ser Leu Glu Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn
225 230 235 240

12-0308-PCT_Sequence_listing.txt

Thr Val Tyr Leu Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val
245 250 255

Tyr Tyr Cys Ala Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu
260 265 270

Ala Asp Thr Tyr Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser
275 280 285

Ser

<210> 54
<211> 125
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<400> 54

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 55
<211> 125
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<400> 55

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
Seite 35

1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30
 Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80
 Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
 100 105 110
 Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125
 <210> 56
 <211> 125
 <212> PRT
 <213> Artificial
 <220>
 <223> Mutated sequence from lama glama.
 <400> 56
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30
 Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80
 Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
 100 105 110

Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 57
 <211> 125
 <212> PRT
 <213> Artificial

<220>
 <223> Mutated sequence from lama glama.

<400> 57

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
 50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
 100 105 110

Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 58
 <211> 125
 <212> PRT
 <213> Artificial

<220>
 <223> Mutated sequence from lama glama.

<400> 58

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
 1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
 35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
 Seite 37

50

55

60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 59

<211> 125

<212> PRT

<213> Artificial

<220>

<223> Mutated sequence from lama glama.

<400> 59

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asp
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 60

<211> 125

<212> PRT

<213> Artificial

<220>

<223> Mutated sequence from lama glama.

12-0308-PCT_Sequence_listing.txt

<400> 60

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 61

<211> 125

<212> PRT

<213> Artificial

<220>

<223> Mutated sequence from lama glama.

<400> 61

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
Seite 39

100

105

110

Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 62
 <211> 125
 <212> PRT
 <213> Artificial

<220>
 <223> Mutated sequence from lama glama.

<400> 62

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
 1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
 35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val Ser Leu Glu
 50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
 100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120 125

<210> 63
 <211> 125
 <212> PRT
 <213> Artificial

<220>
 <223> Mutated sequence from lama glama.

<400> 63

Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

12-0308-PCT_Sequence_listing.txt

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 64
<211> 125
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<400> 64

Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 65
<211> 113
<212> PRT
<213> Artificial

12-0308-PCT_Sequence_listing.txt

<220>

<223> Mutated sequence from lama glama.

<400> 65

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Arg Phe Met Ser Met
20 25 30

Ala Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg Glu Leu Val Ala Arg
35 40 45

Ile Ser Ser Gly Gly Thr Thr Ala Tyr Ala Asp Ser Val Lys Gly Arg
50 55 60

Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr Leu Gln Met
65 70 75 80

Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Asn Thr Phe
85 90 95

Ser Ser Arg Pro Asn Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser
100 105 110

Ser

<210> 66

<211> 113

<212> PRT

<213> Artificial

<220>

<223> Mutated sequence from lama glama.

<400> 66

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Ile Arg Phe Ile Ser Met
20 25 30

Ala Trp Tyr Arg Gln Ala Pro Gly Lys His Arg Glu Leu Val Ala Arg
35 40 45

Ile Ser Ser Gly Gly Thr Thr Ala Tyr Val Asp Ser Val Lys Gly Arg
50 55 60

Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr Leu Gln Met
65 70 75 80

Asn Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys Asn Thr Phe
85 90 95

12-0308-PCT_Sequence_listing.txt

Ser Ser Arg Pro Asn Pro Trp Gly Ala Gly Thr Gln Val Thr Val Ser
100 105 110

Ser

<210> 67
<211> 113
<212> PRT
<213> Artificial

<220>
<223> Mutated sequence from lama glama.

<400> 67

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Arg Phe Ile Ser Met
20 25 30

Ala Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg Glu Leu Val Ala Arg
35 40 45

Ile Ser Ser Gly Gly Thr Thr Ala Tyr Ala Asp Ser Val Lys Gly Arg
50 55 60

Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr Leu Gln Met
65 70 75 80

Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Asn Thr Phe
85 90 95

Ser Ser Arg Pro Asn Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser
100 105 110

Ser

<210> 68
<211> 283
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising lama glama sequences.

<400> 68

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

12-0308-PCT_Sequence_listing.txt

Ala Met Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Asn Arg Ala Ala Asp Thr Arg Leu Gly Pro Tyr Glu Tyr Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Cys Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val
145 150 155 160

Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp Ser Leu
165 170 175

Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr Ser Met
180 185 190

Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val Val Ala
195 200 205

Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu Gly Arg
210 215 220

Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Ile
225 230 235 240

Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser Ser
245 250 255

Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr Glu Tyr
260 265 270

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
275 280

<210> 69
<211> 283
<212> PRT
<213> Artificial

12-0308-PCT_Sequence_listing.txt

<220>

<223> Artificial polypeptide comprising lama glama sequences.

<400> 69

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Cys Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
165 170 175

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
180 185 190

Ala Met Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
195 200 205

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
210 215 220

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
225 230 235 240

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
245 250 255

12-0308-PCT_Sequence_listing.txt

Ala Asn Arg Ala Ala Asp Thr Arg Leu Gly Pro Tyr Glu Tyr Asp Tyr
260 265 270

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
275 280

<210> 70
<211> 402
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising lama glama sequences.

<400> 70

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val
145 150 155 160

Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser
165 170 175

Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr Ala Met Ala Trp Phe
180 185 190

Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Ile Arg Trp
195 200 205

12-0308-PCT_Sequence_listing.txt

Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val Gln Gly Arg Phe Thr
210 215 220

Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser
225 230 235 240

Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Asn Arg Ala Ala
245 250 255

Asp Thr Arg Leu Gly Pro Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr
260 265 270

Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu
275 280 285

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn Ser
290 295 300

Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly
305 310 315 320

Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
325 330 335

Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val Lys
340 345 350

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu
355 360 365

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Thr
370 375 380

Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val
385 390 395 400

Ser Ser

<210> 71
<211> 381
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising lama glama sequences.

<400> 71

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
Seite 47

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
 35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
 50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
 100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 130 135 140

Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 145 150 155 160

Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly
 165 170 175

Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr
 180 185 190

Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn
 195 200 205

Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp
 210 215 220

Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser
 225 230 235 240

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
 245 250 255

Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala
 260 265 270

Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser
 275 280 285

Ser Tyr Ala Met Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
 290 295 300

12-0308-PCT_Sequence_listing.txt

Phe Val Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp
305 310 315 320

Ser Val Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr
325 330 335

Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr
340 345 350

Tyr Cys Ala Asn Arg Ala Ala Asp Thr Arg Leu Gly Pro Tyr Glu Tyr
355 360 365

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
370 375 380

<210> 72
<211> 402
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising lama glama sequences.

<400> 72

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Asn Arg Ala Ala Asp Thr Arg Leu Gly Pro Tyr Glu Tyr Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser

145															150															155															160
Gly	Gly	Gly	Leu	Val 165	Gln	Thr	Gly	Asp	Ser 170	Leu	Arg	Leu	Ser	Cys 175	Glu																														
Val	Ser	Gly	Arg 180	Thr	Phe	Ser	Ser	Tyr 185	Ser	Met	Gly	Trp	Phe 190	Arg	Gln																														
Ala	Gln	Gly 195	Lys	Glu	Arg	Glu	Phe 200	Val	Val	Ala	Ile	Ser 205	Lys	Gly	Gly																														
Tyr	Lys 210	Tyr	Asp	Ser	Val	Ser 215	Leu	Glu	Gly	Arg	Phe 220	Thr	Ile	Ser	Lys																														
Asp 225	Asn	Ala	Lys	Asn	Thr 230	Val	Tyr	Leu	Gln	Ile 235	Asn	Ser	Leu	Lys	Pro 240																														
Glu	Asp	Thr	Ala	Val 245	Tyr	Tyr	Cys	Ala	Ser 250	Ser	Arg	Ala	Tyr	Gly 255	Ser																														
Ser	Arg	Leu	Arg 260	Leu	Ala	Asp	Thr	Tyr 265	Glu	Tyr	Trp	Gly	Gln 270	Gly	Thr																														
Gln	Val	Thr 275	Val	Ser	Ser	Gly	Gly 280	Gly	Gly	Ser	Gly	Gly 285	Gly	Ser	Glu																														
Val	Gln 290	Leu	Val	Glu	Ser	Gly 295	Gly	Gly	Leu	Val	Gln 300	Pro	Gly	Asn	Ser																														
Leu 305	Arg	Leu	Ser	Cys	Ala 310	Ala	Ser	Gly	Phe	Thr 315	Phe	Ser	Ser	Phe	Gly 320																														
Met	Ser	Trp	Val	Arg 325	Gln	Ala	Pro	Gly	Lys 330	Gly	Leu	Glu	Trp	Val 335	Ser																														
Ser	Ile	Ser	Gly 340	Ser	Gly	Ser	Asp	Thr 345	Leu	Tyr	Ala	Asp	Ser 350	Val	Lys																														
Gly	Arg	Phe 355	Thr	Ile	Ser	Arg	Asp 360	Asn	Ala	Lys	Thr	Thr 365	Leu	Tyr	Leu																														
Gln	Met 370	Asn	Ser	Leu	Arg	Pro 375	Glu	Asp	Thr	Ala	Val 380	Tyr	Tyr	Cys	Thr																														
Ile 385	Gly	Gly	Ser	Leu	Ser 390	Arg	Ser	Ser	Gln	Gly 395	Thr	Leu	Val	Thr	Val 400																														
Ser	Ser																																												

$\langle 210 \rangle$	73
$\langle 211 \rangle$	381

12-0308-PCT_Sequence_listing.txt

<212> PRT
<213> Artificial

<220>

<223> Artificial polypeptide comprising lama glama sequences.

<400> 73

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ala Met Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
50 55 60

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Asn Arg Ala Ala Asp Thr Arg Leu Gly Pro Tyr Glu Tyr Asp Tyr
100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
130 135 140

Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr
145 150 155 160

Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly
165 170 175

Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr
180 185 190

Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
195 200 205

Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
210 215 220

Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly
225 230 235 240

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
Seite 51

245

250

255

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
 260 265 270

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
 275 280 285

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
 290 295 300

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
 305 310 315 320

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
 325 330 335

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 340 345 350

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
 355 360 365

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 370 375 380

<210> 74
 <211> 381
 <212> PRT
 <213> Artificial

<220>
 <223> Artificial polypeptide comprising lama glama sequences.

<400> 74

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
 1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
 35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
 50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

12-0308-PCT_Sequence_listing.txt

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
130 135 140

Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
145 150 155 160

Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly
165 170 175

Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr
180 185 190

Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn
195 200 205

Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp
210 215 220

Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser
225 230 235 240

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
245 250 255

Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala
260 265 270

Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser
275 280 285

Ser Tyr Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu
290 295 300

Tyr Val Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp
305 310 315 320

Ser Val Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr
325 330 335

Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr
340 345 350

Tyr Cys Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr
355 360 365

Asp His Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser

370

375

380

<210> 75

<211> 386

<212> PRT

<213> Artificial

<220>

<223> Artificial polypeptide comprising lama glama sequences.

<400> 75

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
 1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
 35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
 50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
 100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 130 135 140

Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 145 150 155 160

Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly
 165 170 175

Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr
 180 185 190

Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn
 195 200 205

Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp
 210 215 220

12-0308-PCT_Sequence_listing.txt

Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser
225 230 235 240

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
245 250 255

Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro
260 265 270

Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly
275 280 285

Ser Tyr Asp Met Ser Trp Val Arg Arg Ser Pro Gly Lys Gly Pro Glu
290 295 300

Trp Val Ser Ser Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp
305 310 315 320

Tyr Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr
325 330 335

Leu Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr
340 345 350

Tyr Cys Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp
355 360 365

Gly Ala Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val
370 375 380

Ser Ser
385

<210> 76
<211> 288
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising lama glama sequences.
<400> 76

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

12-0308-PCT_Sequence_listing.txt

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Cys Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
165 170 175

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Ser Tyr
180 185 190

Asp Met Ser Trp Val Arg Arg Ser Pro Gly Lys Gly Pro Glu Trp Val
195 200 205

Ser Ser Ile Asn Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
210 215 220

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
225 230 235 240

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
245 250 255

Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
260 265 270

Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
275 280 285

<210> 77
<211> 283
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising lama glama sequences.

<400> 77

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1 5 10 15

12-0308-PCT_Sequence_listing.txt

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Cys Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
165 170 175

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
180 185 190

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
195 200 205

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
210 215 220

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
225 230 235 240

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
245 250 255

Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr Asp His
260 265 270

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
275 280

12-0308-PCT_Sequence_listing.txt

<210> 78
 <211> 405
 <212> PRT
 <213> Artificial

<220>
 <223> Artificial polypeptide comprising lama glama sequences.

<400> 78

```

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1          5          10          15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
          20          25          30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
          35          40          45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
          50          55          60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65          70          75          80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
          85          90          95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
          100          105          110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
          115          120          125

Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
130          135          140

Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Val Ala Ser Gly
145          150          155          160

Ile Arg Phe Met Ser Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys His
          165          170          175

Arg Glu Leu Val Ala Arg Ile Ser Ser Gly Gly Thr Thr Ala Tyr Val
          180          185          190

Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
195          200          205

Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Ala Glu Asp Thr Ala Val
210          215          220

Tyr Tyr Cys Asn Thr Phe Ser Ser Arg Pro Asn Pro Trp Gly Ala Gly
225          230          235          240
    
```

12-0308-PCT_Sequence_listing.txt

Thr Gln Val Thr Val₂₄₅ Ser Ser Gly Gly Gly₂₅₀ Gly Ser Gly Gly Gly₂₅₅ Gly
 Ser Gly Gly Gly₂₆₀ Gly Cys Gly Gly Gly₂₆₅ Gly Ser Gly Gly Gly₂₇₀ Gly Ser
 Gly Gly Gly₂₇₅ Gly Ser Gly Gly Gly₂₈₀ Gly Ser Glu Val Gln₂₈₅ Leu Val Glu
 Ser Gly₂₉₀ Gly Gly Leu Val Gln₂₉₅ Ala Gly Gly Ser Leu₃₀₀ Arg Leu Ser Cys
 Ala₃₀₅ Ala Ser Gly Arg Thr₃₁₀ Phe Ser Ser Tyr Ala₃₁₅ Met Ala Trp Tyr Arg₃₂₀
 Gln Ala Pro Gly Lys₃₂₅ Glu Arg Glu Tyr Val₃₃₀ Ala Ala Ile Arg Trp₃₃₅ Ser
 Gly Gly Thr Ala₃₄₀ Tyr Tyr Ala Asp Ser₃₄₅ Val Gln Gly Arg Phe₃₅₀ Thr Ile
 Ser Arg Asp₃₅₅ Asn Ala Lys Asn Thr₃₆₀ Val Tyr Leu Gln Met₃₆₅ Asn Ser Leu
 Lys Pro₃₇₀ Glu Asp Thr Ala Val₃₇₅ Tyr Tyr Cys Ala Asn₃₈₀ Arg Ala Pro Asp
 Thr₃₈₅ Arg Leu Ala Pro Tyr₃₉₀ Glu Tyr Asp His Trp₃₉₅ Gly Gln Gly Thr Gln₄₀₀
 Val Thr Val Ser Ser₄₀₅

<210> 79
 <211> 431
 <212> PRT
 <213> Artificial

<220>
 <223> Artificial polypeptide comprising lama glama sequences.
 <400> 79

Glu Val Gln Leu Val₅ Glu Ser Gly Gly Gly₁₀ Leu Val Gln Thr Gly₁₅ Asp
 Ser Leu Arg Leu₂₀ Ser Cys Glu Val Ser₂₅ Gly Arg Thr Phe Ser₃₀ Ser Tyr
 Ser Met Gly₃₅ Trp Phe Arg Gln Ala₄₀ Gln Gly Lys Glu Arg₄₅ Glu Phe Val
 Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
 Seite 59

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Cys Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
165 170 175

Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Ile Arg Phe Met Ser Met
180 185 190

Ala Trp Tyr Arg Gln Ala Pro Gly Lys His Arg Glu Leu Val Ala Arg
195 200 205

Ile Ser Ser Gly Gly Thr Thr Ala Tyr Val Asp Ser Val Lys Gly Arg
210 215 220

Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr Leu Gln Met
225 230 235 240

Asn Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys Asn Thr Phe
245 250 255

Ser Ser Arg Pro Asn Pro Trp Gly Ala Gly Thr Gln Val Thr Val Ser
260 265 270

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
275 280 285

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
290 295 300

Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
305 310 315 320

Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr
325 330 335

12-0308-PCT_Sequence_listing.txt

Phe Ser Ser Tyr Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu
340 345 350

Arg Glu Tyr Val Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr
355 360 365

Ala Asp Ser Val Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
370 375 380

Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala
385 390 395 400

Val Tyr Tyr Cys Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr
405 410 415

Glu Tyr Asp His Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
420 425 430

<210> 80
<211> 407
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising lama glama sequences.

<400> 80

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly ser Gly Gly Gly Gly ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
Seite 61

130

135

140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 145 150 155 160

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 165 170 175

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
 180 185 190

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
 195 200 205

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
 210 215 220

Gln Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 225 230 235 240

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 245 250 255

Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr Asp His
 260 265 270

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser
 275 280 285

Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
 290 295 300

Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr
 305 310 315 320

Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly
 325 330 335

Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr
 340 345 350

Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
 355 360 365

Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
 370 375 380

Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly
 385 390 395 400

Thr Leu Val Thr Val Ser Ser
 405

<210> 81
 <211> 282
 <212> PRT
 <213> Artificial

<220>
 <223> Artificial polypeptide comprising sequences derived from lama glama.

<400> 81

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser
 1 5 10 15

Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr Ser
 20 25 30

Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Val
 35 40 45

Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val Ser Leu Glu Gly
 50 55 60

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 65 70 75 80

Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser
 85 90 95

Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr Glu
 100 105 110

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Cys Gly Gly Gly Gly Ser
 130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
 145 150 155 160

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser
 165 170 175

Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr Ala
 180 185 190

Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val Ala
 195 200 205

Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val Lys
 210 215 220

12-0308-PCT_Sequence_listing.txt

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
225 230 235 240

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
245 250 255

Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr Asp His Trp
260 265 270

Gly Gln Gly Thr Leu Val Thr Val Ser Ser
275 280

<210> 82

<211> 380

<212> PRT

<213> Artificial

<220>

<223> Artificial polypeptide comprising sequences derived from lama
glama.

<400> 82

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser
1 5 10 15

Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr Ser
20 25 30

Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Val
35 40 45

Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val Ser Leu Glu Gly
50 55 60

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
65 70 75 80

Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser
85 90 95

Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr Glu
100 105 110

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
130 135 140

Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
145 150 155 160

Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys
165 170 175

12-0308-PCT_Sequence_listing.txt

Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu
180 185 190

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
195 200 205

Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr
210 215 220

Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln
225 230 235 240

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
245 250 255

Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
260 265 270

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser
275 280 285

Tyr Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr
290 295 300

Val Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser
305 310 315 320

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val
325 330 335

Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr
340 345 350

Cys Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr Asp
355 360 365

His Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
370 375 380

<210> 83

<211> 430

<212> PRT

<213> Artificial

<220>

<223> Artificial polypeptide comprising sequences derived from lama glama.

<400> 83

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser
1 5 10 15

12-0308-PCT_Sequence_listing.txt

Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr Ser
20 25 30

Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Val
35 40 45

Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val Ser Leu Glu Gly
50 55 60

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
65 70 75 80

Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser
85 90 95

Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr Glu
100 105 110

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Cys Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
145 150 155 160

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser
165 170 175

Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Arg Phe Ile Ser Met Ala
180 185 190

Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg Glu Leu Val Ala Arg Ile
195 200 205

Ser Ser Gly Gly Thr Thr Ala Tyr Ala Asp Ser Val Lys Gly Arg Phe
210 215 220

Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr Leu Gln Met Asn
225 230 235 240

Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Asn Thr Phe Ser
245 250 255

Ser Arg Pro Asn Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
260 265 270

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
275 280 285

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly

290

Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
305 310 315 320

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe
325 330 335

Ser Ser Tyr Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg
340 345 350

Glu Tyr Val Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala
355 360 365

Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
370 375 380

Thr Val Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val
385 390 395 400

Tyr Tyr Cys Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu
405 410 415

Tyr Asp His Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
420 425 430

<210> 84
<211> 868
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising sequences derived from lama
glama.

<400> 84

Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

12-0308-PCT_Sequence_listing.txt

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
165 170 175

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
180 185 190

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
195 200 205

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
210 215 220

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
225 230 235 240

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
245 250 255

Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr Asp His
260 265 270

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Asp Ala His Lys Ser
275 280 285

Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala
290 295 300

Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu
305 310 315 320

Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys
325 330 335

Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu
340 345 350

Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly
355 360 365

12-0308-PCT_Sequence_listing.txt

Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys
370 375 380

Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg
385 390 395 400

Pro Glu Val Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr
405 410 415

Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe
420 425 430

Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe
435 440 445

Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys
450 455 460

Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg
465 470 475 480

Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala
485 490 495

Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala
500 505 510

Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys
515 520 525

Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala
530 535 540

Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu
545 550 555 560

Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val
565 570 575

Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe
580 585 590

Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val
595 600 605

Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr
610 615 620

Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu
625 630 635 640

Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val
Seite 69

645

650

655

Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys
 660 665 670

Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn
 675 680 685

Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro
 690 695 700

Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys
 705 710 715 720

Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu
 725 730 735

Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val
 740 745 750

Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg
 755 760 765

Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu
 770 775 780

Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser
 785 790 795 800

Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val
 805 810 815

Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp
 820 825 830

Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu
 835 840 845

Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala
 850 855 860

Ala Leu Gly Leu
 865

<210> 85
 <211> 990
 <212> PRT
 <213> Artificial

<220>
 <223> Artificial polypeptide comprising sequences derived from lama
 glama.

<400> 85

12-0308-PCT_Sequence_listing.txt

Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30
 Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val Ser Leu Glu
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80
 Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
 100 105 110
 Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 130 135 140
 Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 145 150 155 160
 Ile Arg Phe Ile Ser Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Gln
 165 170 175
 Arg Glu Leu Val Ala Arg Ile Ser Ser Gly Gly Thr Thr Ala Tyr Ala
 180 185 190
 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
 195 200 205
 Thr Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 210 215 220
 Tyr Tyr Cys Asn Thr Phe Ser Ser Arg Pro Asn Pro Trp Gly Gln Gly
 225 230 235 240
 Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 245 250 255
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 260 265 270

12-0308-PCT_Sequence_listing.txt

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu
275 280 285

Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
290 295 300

Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr Ala Met Ala Trp Tyr Arg
305 310 315 320

Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val Ala Ala Ile Arg Trp Ser
325 330 335

Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile
340 345 350

Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu
355 360 365

Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Asn Arg Ala Pro Asp
370 375 380

Thr Arg Leu Ala Pro Tyr Glu Tyr Asp His Trp Gly Gln Gly Thr Leu
385 390 395 400

Val Thr Val Ser Ser Asp Ala His Lys Ser Glu Val Ala His Arg Phe
405 410 415

Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe
420 425 430

Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val
435 440 445

Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala
450 455 460

Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys
465 470 475 480

Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys
485 490 495

Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp
500 505 510

Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val Asp Val Met
515 520 525

Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu
530 535 540

Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu

545															550															555															560
Phe	Phe	Ala	Lys	Arg 565	Tyr	Lys	Ala	Ala	Phe 570	Thr	Glu	Cys	Cys	Gln 575	Ala																														
Ala	Asp	Lys	Ala 580	Ala	Cys	Leu	Leu	Pro 585	Lys	Leu	Asp	Glu	Leu 590	Arg	Asp																														
Glu	Gly	Lys 595	Ala	Ser	Ser	Ala	Lys 600	Gln	Arg	Leu	Lys	Cys 605	Ala	Ser	Leu																														
Gln	Lys 610	Phe	Gly	Glu	Arg	Ala 615	Phe	Lys	Ala	Trp	Ala 620	Val	Ala	Arg	Leu																														
Ser 625	Gln	Arg	Phe	Pro	Lys 630	Ala	Glu	Phe	Ala	Glu 635	Val	Ser	Lys	Leu	Val 640																														
Thr	Asp	Leu	Thr	Lys 645	Val	His	Thr	Glu	Cys 650	Cys	His	Gly	Asp	Leu 655	Leu																														
Glu	Cys	Ala	Asp 660	Asp	Arg	Ala	Asp	Leu 665	Ala	Lys	Tyr	Ile	Cys 670	Glu	Asn																														
Gln	Asp	Ser 675	Ile	Ser	Ser	Lys	Leu 680	Lys	Glu	Cys	Cys	Glu 685	Lys	Pro	Leu																														
Leu	Glu 690	Lys	Ser	His	Cys	Ile 695	Ala	Glu	Val	Glu	Asn 700	Asp	Glu	Met	Pro																														
Ala 705	Asp	Leu	Pro	Ser	Leu 710	Ala	Ala	Asp	Phe	Val 715	Glu	Ser	Lys	Asp	Val 720																														
Cys	Lys	Asn	Tyr	Ala 725	Glu	Ala	Lys	Asp	Val 730	Phe	Leu	Gly	Met	Phe 735	Leu																														
Tyr	Glu	Tyr	Ala 740	Arg	Arg	His	Pro	Asp 745	Tyr	Ser	Val	Val	Leu 750	Leu	Leu																														
Arg	Leu	Ala 755	Lys	Thr	Tyr	Glu	Thr 760	Thr	Leu	Glu	Lys	Cys 765	Cys	Ala	Ala																														
Ala	Asp 770	Pro	His	Glu	Cys	Tyr 775	Ala	Lys	Val	Phe	Asp 780	Glu	Phe	Lys	Pro																														
Leu 785	Val	Glu	Glu	Pro	Gln 790	Asn	Leu	Ile	Lys	Gln 795	Asn	Cys	Glu	Leu	Phe 800																														
Glu	Gln	Leu	Gly	Glu 805	Tyr	Lys	Phe	Gln	Asn 810	Ala	Leu	Leu	Val	Arg 815	Tyr																														
Thr	Lys	Lys	Val 820	Pro	Gln	Val	Ser	Thr 825	Pro	Thr	Leu	Val	Glu 830	Val	Ser																														

12-0308-PCT_Sequence_listing.txt

Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala
835 840 845

Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln
850 855 860

Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys
865 870 875 880

Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu
885 890 895

Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe
900 905 910

Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile
915 920 925

Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys Pro Lys Ala
930 935 940

Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val
945 950 955 960

Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu
965 970 975

Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu Gly Leu
980 985 990

<210> 86

<211> 995

<212> PRT

<213> Artificial

<220>

<223> Artificial polypeptide comprising sequences derived from lama
glama.

<400> 86

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Ile Gly Ser Tyr
20 25 30

Asp Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Ser Ser Ile Ser Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
50 55 60

12-0308-PCT_Sequence_listing.txt

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
 100 105 110
 Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 145 150 155 160
 Gly Gly Ser Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
 165 170 175
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe
 180 185 190
 Ser Ser Tyr Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg
 195 200 205
 Glu Phe Val Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val
 210 215 220
 Ser Leu Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr
 225 230 235 240
 Val Tyr Leu Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr
 245 250 255
 Tyr Cys Ala Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala
 260 265 270
 Asp Thr Tyr Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 275 280 285
 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser
 290 295 300
 Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala
 305 310 315 320
 Ala Ser Gly Ile Arg Phe Ile Ser Met Ala Trp Tyr Arg Gln Ala Pro
 325 330 335
 Gly Lys Gln Arg Glu Leu Val Ala Arg Ile Ser Ser Gly Gly Thr Thr
 Seite 75

340

345

350

Ala Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn
 355 360 365

Ser Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
 370 375 380

Thr Ala Val Tyr Tyr Cys Asn Thr Phe Ser Ser Arg Pro Asn Pro Trp
 385 390 395 400

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Asp Ala His Lys Ser Glu
 405 410 415

Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu
 420 425 430

Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp
 435 440 445

His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val
 450 455 460

Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe
 465 470 475 480

Gly Asp Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu
 485 490 495

Met Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe
 500 505 510

Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro
 515 520 525

Glu Val Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe
 530 535 540

Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr
 545 550 555 560

Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr
 565 570 575

Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu
 580 585 590

Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu
 595 600 605

Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp
 610 615 620

12-0308-PCT_Sequence_listing.txt

Ala Val Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu
625 630 635 640

Val Ser Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys
645 650 655

His Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys
660 665 670

Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys
675 680 685

Cys Glu Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu
690 695 700

Asn Asp Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val
705 710 715 720

Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe
725 730 735

Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser
740 745 750

Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu
755 760 765

Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe
770 775 780

Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln
785 790 795 800

Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala
805 810 815

Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr
820 825 830

Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys
835 840 845

Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser
850 855 860

Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser
865 870 875 880

Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro
885 890 895

12-0308-PCT_Sequence_listing.txt

Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe
900 905 910

Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu
915 920 925

Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys
930 935 940

His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp
945 950 955 960

Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr
965 970 975

Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala
980 985 990

Leu Gly Leu
995

<210> 87
<211> 903
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising sequences derived from lama
glama.

<400> 87

Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val Ser Leu Glu
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100 105 110

Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
Seite 78

115

120

125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 145 150 155 160

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 165 170 175

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
 180 185 190

Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val
 195 200 205

Ala Ala Ile Arg Trp Ser Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val
 210 215 220

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 225 230 235 240

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 245 250 255

Ala Asn Arg Ala Pro Asp Thr Arg Leu Ala Pro Tyr Glu Tyr Asp His
 260 265 270

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser
 275 280 285

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 290 295 300

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ala
 305 310 315 320

His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn
 325 330 335

Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys
 340 345 350

Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala
 355 360 365

Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu
 370 375 380

His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu Arg Glu
 385 390 395 400

12-0308-PCT_Sequence_listing.txt

Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg
405 410 415

Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro Arg
420 425 430

Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His Asp Asn
435 440 445

Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His
450 455 460

Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys
465 470 475 480

Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu
485 490 495

Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala
500 505 510

Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala
515 520 525

Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala
530 535 540

Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys Val His
545 550 555 560

Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala
565 570 575

Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys
580 585 590

Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His Cys Ile
595 600 605

Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser Leu Ala
610 615 620

Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala
625 630 635 640

Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His
645 650 655

Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu
660 665 670

12-0308-PCT_Sequence_listing.txt

Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr
675 680 685

Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn
690 695 700

Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys
705 710 715 720

Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val
725 730 735

Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly
740 745 750

Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu
755 760 765

Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys
770 775 780

Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val
785 790 795 800

Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val
805 810 815

Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys
820 825 830

Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val
835 840 845

Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala
850 855 860

Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp
865 870 875 880

Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala
885 890 895

Ser Gln Ala Ala Leu Gly Leu
900

<210> 88
<211> 1025

<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising sequences derived from lama
glama.

12-0308-PCT_Sequence_listing.txt

<400> 88

```

Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1      5      10
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
20     25     30
Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35     40     45
Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val Ser Leu Glu
50     55     60
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
65     70     75     80
Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85     90     95
Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr
100    105    110
Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
115    120    125
Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
130    135    140
Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
145    150    155    160
Ile Arg Phe Ile Ser Met Ala Trp Tyr Arg Gln Ala Pro Gly Lys Gln
165    170    175
Arg Glu Leu Val Ala Arg Ile Ser Ser Gly Gly Thr Thr Ala Tyr Ala
180    185    190
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
195    200    205
Thr Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
210    215    220
Tyr Tyr Cys Asn Thr Phe Ser Ser Arg Pro Asn Pro Trp Gly Gln Gly
225    230    235    240
Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
245    250    255
Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
260    265    270

```

12-0308-PCT_Sequence_listing.txt

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu
275 280 285

Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
290 295 300

Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr Ala Met Ala Trp Tyr Arg
305 310 315 320

Gln Ala Pro Gly Lys Glu Arg Glu Tyr Val Ala Ala Ile Arg Trp Ser
325 330 335

Gly Gly Thr Ala Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile
340 345 350

Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu
355 360 365

Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Asn Arg Ala Pro Asp
370 375 380

Thr Arg Leu Ala Pro Tyr Glu Tyr Asp His Trp Gly Gln Gly Thr Leu
385 390 395 400

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
405 410 415

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
420 425 430

Gly Gly Ser Gly Gly Gly Gly Ser Asp Ala His Lys Ser Glu Val Ala
435 440 445

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
450 455 460

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
465 470 475 480

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
485 490 495

Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
500 505 510

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
515 520 525

Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
530 535 540

12-0308-PCT_Sequence_listing.txt

His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
 545 550 555 560
 Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
 565 570 575
 Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
 580 585 590
 Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
 595 600 605
 Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
 610 615 620
 Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
 625 630 635 640
 Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val
 645 650 655
 Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser
 660 665 670
 Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
 675 680 685
 Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 690 695 700
 Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
 705 710 715 720
 Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
 725 730 735
 Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
 740 745 750
 Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe Leu Gly
 755 760 765
 Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
 770 775 780
 Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
 785 790 795 800
 Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
 805 810 815

12-0308-PCT_Sequence_listing.txt

Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
820 825 830

Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
835 840 845

Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
850 855 860

Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
865 870 875 880

Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
885 890 895

Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
900 905 910

Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
915 920 925

Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
930 935 940

Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
945 950 955 960

Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
965 970 975

Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
980 985 990

Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
995 1000 1005

Ala Glu Glu Gly Lys Lys Leu Val Ala Ala Ser Gln Ala Ala Leu
1010 1015 1020

Gly Leu
1025

<210> 89
<211> 1030
<212> PRT
<213> Artificial

<220>
<223> Artificial polypeptide comprising sequences derived from lama
glama.

<400> 89

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

12-0308-PCT_Sequence_listing.txt

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Ile Gly Ser Tyr
 20 25 30
 Asp Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Pro Glu Trp Val
 35 40 45
 Ser Ser Ile Ser Ser Gly Gly Gly Ser Thr Tyr Tyr Ala Asp Tyr Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Ala Asp Arg Tyr Ile Trp Ala Arg Gln Gly Glu Tyr Trp Gly Ala
 100 105 110
 Tyr Glu Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120 125
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly
 145 150 155 160
 Gly Gly Ser Asp Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
 165 170 175
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe
 180 185 190
 Ser Ser Tyr Ser Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg
 195 200 205
 Glu Phe Val Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ala Val
 210 215 220
 Ser Leu Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr
 225 230 235 240
 Val Tyr Leu Gln Ile Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr
 245 250 255
 Tyr Cys Ala Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala
 260 265 270
 Asp Thr Tyr Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 275 280 285

12-0308-PCT_Sequence_listing.txt

Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser
290 295 300

Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala
305 310 315 320

Ala Ser Gly Ile Arg Phe Ile Ser Met Ala Trp Tyr Arg Gln Ala Pro
325 330 335

Gly Lys Gln Arg Glu Leu Val Ala Arg Ile Ser Ser Gly Gly Thr Thr
340 345 350

Ala Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn
355 360 365

Ser Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
370 375 380

Thr Ala Val Tyr Tyr Cys Asn Thr Phe Ser Ser Arg Pro Asn Pro Trp
385 390 395 400

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
405 410 415

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
420 425 430

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ala His
435 440 445

Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe
450 455 460

Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro
465 470 475 480

Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys
485 490 495

Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His
500 505 510

Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr
515 520 525

Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn
530 535 540

Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu
545 550 555 560

12-0308-PCT_Sequence_listing.txt

Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His Asp Asn Glu
565 570 575

Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro
580 585 590

Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala
595 600 605

Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu
610 615 620

Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys
625 630 635 640

Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe
645 650 655

Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu
660 665 670

Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys Val His Thr
675 680 685

Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp
690 695 700

Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu
705 710 715 720

Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala
725 730 735

Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala
740 745 750

Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala Glu Ala Lys
755 760 765

Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro
770 775 780

Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr
785 790 795 800

Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala
805 810 815

Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu
820 825 830

Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe
Seite 88

835

840

845

Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser
 850 855 860

Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser
 865 870 875 880

Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp
 885 890 895

Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr
 900 905 910

Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn
 915 920 925

Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro
 930 935 940

Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr
 945 950 955 960

Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu
 965 970 975

Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val
 980 985 990

Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp
 995 1000 1005

Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val Ala Ala
 1010 1015 1020

Ser Gln Ala Ala Leu Gly Leu
 1025 1030

<210> 90
 <211> 35
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic linker.

<400> 90

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 20 25 30

Gly Gly Ser
35

<210> 91
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker.

<400> 91

Gly Gly Gly Gly Ser Gly Gly Gly Ser
1 5

<210> 92
<211> 40
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker.

<400> 92

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
20 25 30

Gly Gly Ser Gly Gly Gly Gly Ser
35 40

<210> 93
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker.

<400> 93

Gly Gly Gly Gly Cys Gly Gly Gly Ser
1 5

<210> 94
<211> 25
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker.

<400> 94

Gly Gly Gly Gly Cys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser

20

25

<210> 95
 <211> 27
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic linker.

<400> 95

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Cys Gly Gly
 1 5 10 15

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
 20 25

<210> 96
 <211> 35
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic linker.

<400> 96

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Cys Gly
 1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 20 25 30

Gly Gly Ser
 35

<210> 97
 <211> 35
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic linker.

<400> 97

Gly Gly Gly Gly Cys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 20 25 30

Gly Gly Ser
 35

<210> 98
 <211> 115
 <212> PRT
 <213> Artificial

12-0308-PCT_Sequence_listing.txt

<220>

<223> Mutated sequence from lama glama.

<400> 98

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe
20 25 30

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 99

<211> 585

<212> PRT

<213> Homo sapiens

<400> 99

Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu
1 5 10 15

Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
20 25 30

Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
35 40 45

Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
50 55 60

Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
65 70 75 80

Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
85 90 95

12-0308-PCT_Sequence_listing.txt

Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
100 105 110

Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
115 120 125

Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg
130 135 140

Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Phe Phe Ala Lys Arg
145 150 155 160

Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala
165 170 175

Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser
180 185 190

Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu
195 200 205

Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro
210 215 220

Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys
225 230 235 240

Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp
245 250 255

Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser
260 265 270

Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His
275 280 285

Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
290 295 300

Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala
305 310 315 320

Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg
325 330 335

Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
340 345 350

Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Ala Asp Pro His Glu
355 360 365

Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Val Glu Glu Pro
Seite 93

370

375

380

Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu
 385 390 395 400

Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
 405 410 415

Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
 420 425 430

Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
 435 440 445

Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
 450 455 460

Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
 465 470 475 480

Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr
 485 490 495

Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
 500 505 510

Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala
 515 520 525

Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu
 530 535 540

Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys
 545 550 555 560

Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val
 565 570 575

Ala Ala Ser Gln Ala Ala Leu Gly Leu
 580 585

<210> 100
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 100

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30

12-0308-PCT_Sequence_listing.txt

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
100 105

<210> 101
<211> 687
<212> PRT
<213> Homo sapiens

<400> 101

His Met Met Ala Ala Ala Ser Arg Ser Ala Ser Gly Trp Ala Leu Leu
1 5 10 15

Leu Leu Val Ala Leu Trp Gln Gln Arg Ala Ala Gly Ser Gly Val Phe
20 25 30

Gln Leu Gln Leu Gln Glu Phe Ile Asn Glu Arg Gly Val Leu Ala Ser
35 40 45

Gly Arg Pro Cys Glu Pro Gly Cys Arg Thr Phe Phe Arg Val Cys Leu
50 55 60

Lys His Phe Gln Ala Val Val Ser Pro Gly Pro Cys Thr Phe Gly Thr
65 70 75 80

Val Ser Thr Pro Val Leu Gly Thr Asn Ser Phe Ala Val Arg Asp Asp
85 90 95

Ser Ser Gly Gly Gly Arg Asn Pro Leu Gln Leu Pro Phe Asn Phe Thr
100 105 110

Trp Pro Gly Thr Phe Ser Leu Ile Ile Glu Ala Trp His Ala Pro Gly
115 120 125

Asp Asp Leu Arg Pro Glu Ala Leu Pro Pro Asp Ala Leu Ile Ser Lys
130 135 140

Ile Ala Ile Gln Gly Ser Leu Ala Val Gly Gln Asn Trp Leu Leu Asp
145 150 155 160

Glu Gln Thr Ser Thr Leu Thr Arg Leu Arg Tyr Ser Tyr Arg Val Ile
Seite 95

165

170

175

Cys Ser Asp Asn₁₈₀ Tyr Tyr Gly Asp Asn₁₈₅ Cys Ser Arg Leu Cys₁₉₀ Lys Lys
 Arg Asn Asp₁₉₅ His Phe Gly His Tyr₂₀₀ Val Cys Gln Pro Asp₂₀₅ Gly Asn Leu
 Ser Cys₂₁₀ Leu Pro Gly Trp Thr₂₁₅ Gly Glu Tyr Cys Gln₂₂₀ Gln Pro Ile Cys
 Leu₂₂₅ Ser Gly Cys His Glu₂₃₀ Gln Asn Gly Tyr Cys₂₃₅ Ser Lys Pro Ala Glu₂₄₀
 Cys Leu Cys Arg Pro₂₄₅ Gly Trp Gln Gly Arg₂₅₀ Leu Cys Asn Glu Cys₂₅₅ Ile
 Pro His Asn Gly₂₆₀ Cys Arg His Gly Thr₂₆₅ Cys Ser Thr Pro Trp₂₇₀ Gln Cys
 Thr Cys Asp₂₇₅ Glu Gly Trp Gly Gly₂₈₀ Leu Phe Cys Asp Gln₂₈₅ Asp Leu Asn
 Tyr Cys₂₉₀ Thr His His Ser Pro₂₉₅ Cys Lys Asn Gly Ala₃₀₀ Thr Cys Ser Asn
 Ser₃₀₅ Gly Gln Arg Ser Tyr₃₁₀ Thr Cys Thr Cys Arg₃₁₅ Pro Gly Tyr Thr Gly₃₂₀
 Val Asp Cys Glu Leu₃₂₅ Glu Leu Ser Glu Cys₃₃₀ Asp Ser Asn Pro Cys₃₃₅ Arg
 Asn Gly Gly Ser₃₄₀ Cys Lys Asp Gln Glu₃₄₅ Asp Gly Tyr His Cys₃₅₀ Leu Cys
 Pro Pro Gly₃₅₅ Tyr Tyr Gly Leu His₃₆₀ Cys Glu His Ser Thr₃₆₅ Leu Ser Cys
 Ala Asp₃₇₀ Ser Pro Cys Phe Asn₃₇₅ Gly Gly Ser Cys Arg₃₈₀ Glu Arg Asn Gln
 Gly₃₈₅ Ala Asn Tyr Ala Cys₃₉₀ Glu Cys Pro Pro Asn₃₉₅ Phe Thr Gly Ser Asn₄₀₀
 Cys Glu Lys Lys Val₄₀₅ Asp Arg Cys Thr Ser₄₁₀ Asn Pro Cys Ala Asn₄₁₅ Gly
 Gly Gln Cys Leu₄₂₀ Asn Arg Gly Pro Ser₄₂₅ Arg Met Cys Arg Cys₄₃₀ Arg Pro
 Gly Phe Thr₄₃₅ Gly Thr Tyr Cys Glu₄₄₀ Leu His Val Ser Asp₄₄₅ Cys Ala Arg

12-0308-PCT_Sequence_listing.txt

Asn Pro Cys Ala His Gly Gly Thr Cys His Asp Leu Glu Asn Gly Leu
 450 455 460
 Met Cys Thr Cys Pro Ala Gly Phe Ser Gly Arg Arg Cys Glu Val Arg
 465 470 475 480
 Thr Ser Ile Asp Ala Cys Ala Ser Ser Pro Cys Phe Asn Arg Ala Thr
 485 490 495
 Cys Tyr Thr Asp Leu Ser Thr Asp Thr Phe Val Cys Asn Cys Pro Tyr
 500 505 510
 Gly Phe Val Gly Ser Arg Cys Glu Phe Pro Val Gly Leu Pro Pro Ser
 515 520 525
 Phe Pro Trp Val Ala Val Ser Leu Gly Val Gly Leu Ala Val Leu Leu
 530 535 540
 Val Leu Leu Gly Met Val Ala Val Ala Val Arg Gln Leu Arg Leu Arg
 545 550 555 560
 Arg Pro Asp Asp Gly Ser Arg Glu Ala Met Asn Asn Leu Ser Asp Phe
 565 570 575
 Gln Lys Asp Asn Leu Ile Pro Ala Ala Gln Leu Lys Asn Thr Asn Gln
 580 585 590
 Lys Lys Glu Leu Glu Val Asp Cys Gly Leu Asp Lys Ser Asn Cys Gly
 595 600 605
 Lys Gln Gln Asn His Thr Leu Asp Tyr Asn Leu Ala Pro Gly Pro Leu
 610 615 620
 Gly Arg Gly Thr Met Pro Gly Lys Phe Pro His Ser Asp Lys Ser Leu
 625 630 635 640
 Gly Glu Lys Ala Pro Leu Arg Leu His Ser Glu Lys Pro Glu Cys Arg
 645 650 655
 Ile Ser Ala Ile Cys Ser Pro Arg Asp Ser Met Tyr Gln Ser Val Cys
 660 665 670
 Leu Ile Ser Glu Glu Arg Asn Glu Cys Val Ile Ala Thr Glu Val
 675 680 685
 <210> 102
 <211> 707
 <212> PRT
 <213> Macaca mulatta
 <400> 102

12-0308-PCT_Sequence_listing.txt

Met Ala Cys Ala Cys Ala Met Leu Ala Thr Thr Ala Arg His Glu Ser
1 5 10 15

Ser Met Asn Lys Glu Tyr Met Ala Ala Ala Ser Trp Ser Ala Ser Gly
20 25 30

Trp Ala Leu Leu Leu Leu Val Ala Leu Trp Gln Gln Arg Ala Ala Gly
35 40 45

Ser Gly Val Phe Gln Leu Gln Leu Gln Glu Phe Val Asn Glu Arg Gly
50 55 60

Val Leu Ala Ser Gly Arg Pro Cys Glu Pro Gly Cys Arg Thr Phe Phe
65 70 75 80

Arg Val Cys Leu Lys His Phe Gln Ala Val Val Ser Pro Gly Pro Cys
85 90 95

Thr Phe Gly Ser Val Ser Thr Pro Val Leu Gly Thr Asn Ser Phe Ala
100 105 110

Val Arg Asp Asp Ser Ser Gly Gly Gly Arg Asn Pro Leu Gln Leu Pro
115 120 125

Phe Asn Phe Thr Trp Pro Gly Thr Phe Ser Leu Ile Ile Glu Ala Trp
130 135 140

His Ala Pro Gly Asp Asp Leu Arg Pro Glu Ala Leu Pro Pro Asp Ala
145 150 155 160

Leu Ile Ser Lys Ile Ala Ile Gln Gly Ser Leu Ala Val Gly Gln Asn
165 170 175

Trp Leu Leu Asp Glu Gln Thr Ser Thr Leu Thr Arg Leu Arg Tyr Ser
180 185 190

Tyr Arg Val Ile Cys Ser Asp Asn Tyr Tyr Gly Asp Asn Cys Ser Arg
195 200 205

Leu Cys Lys Lys Arg Asn Asp His Phe Gly His Tyr Val Cys Gln Pro
210 215 220

Asp Gly Asn Leu Ser Cys Leu Pro Gly Trp Thr Gly Glu Tyr Cys Gln
225 230 235 240

Gln Pro Ile Cys Leu Ser Gly Cys His Glu Gln Asn Gly Tyr Cys Ser
245 250 255

Lys Pro Ala Glu Cys Leu Cys Arg Pro Gly Trp Gln Gly Arg Leu Cys
260 265 270

Asn Glu Cys Ile Pro His Asn Gly Cys Arg His Gly Thr Cys Ser Thr

275

280

285

Pro Trp Gln Cys Thr Cys Asp Glu Gly Trp Gly Gly Leu Phe Cys Asp
 290 295 300

Gln Asp Leu Asn Tyr Cys Thr His His Ser Pro Cys Lys Asn Gly Ala
 305 310 315 320

Thr Cys Ser Asn Ser Gly Gln Arg Ser Tyr Thr Cys Thr Cys Arg Pro
 325 330 335

Gly Tyr Thr Gly Val Asp Cys Glu Leu Glu Leu Ser Glu Cys Asp Ser
 340 345 350

Asn Pro Cys Arg Asn Gly Gly Ser Cys Lys Asp Gln Glu Asp Gly Tyr
 355 360 365

His Cys Leu Cys Pro Pro Gly Tyr Tyr Gly Leu His Cys Glu His Ser
 370 375 380

Thr Leu Ser Cys Ala Asp Ser Pro Cys Phe Asn Gly Gly Ser Cys Arg
 385 390 395 400

Glu Arg Asn Gln Gly Ala Ser Tyr Ala Cys Glu Cys Pro Pro Asn Phe
 405 410 415

Thr Gly Ser Asn Cys Glu Lys Lys Val Asp Arg Cys Thr Ser Asn Pro
 420 425 430

Cys Ala Asn Gly Gly Gln Cys Leu Asn Arg Gly Pro Ser Arg Met Cys
 435 440 445

Arg Cys Arg Pro Gly Phe Thr Gly Thr Tyr Cys Glu Arg His Val Ser
 450 455 460

Asp Cys Ala Arg Asn Pro Cys Ala His Gly Gly Thr Cys His Asp Leu
 465 470 475 480

Glu Ser Gly Leu Met Cys Thr Cys Pro Ala Gly Phe Ser Gly Arg Arg
 485 490 495

Cys Glu Val Arg Thr Ser Ile Asp Ala Cys Ala Ser Ser Pro Cys Phe
 500 505 510

Asn Arg Ala Thr Cys Tyr Thr Asp Leu Ser Thr Asp Thr Phe Val Cys
 515 520 525

Asn Cys Pro Tyr Gly Phe Val Gly Ser Arg Cys Glu Phe Pro Val Gly
 530 535 540

Leu Pro Pro Ser Phe Pro Trp Val Ala Val Ser Leu Gly Val Gly Leu
 545 550 555 560

12-0308-PCT_Sequence_listing.txt

Ala Val Leu Leu Val₅₆₅ Leu Leu Gly Met Val₅₇₀ Ala Val Ala Val Arg Gln₅₇₅

Leu Arg Leu Arg₅₈₀ Arg Pro Asp Asp Gly₅₈₅ Ser Arg Glu Ala Met₅₉₀ Asn Asn

Leu Ser Asp₅₉₅ Phe Gln Lys Asp Asn₆₀₀ Leu Ile Pro Ala Ala₆₀₅ Gln Leu Lys

Asn Thr₆₁₀ Asn Gln Lys Lys Glu₆₁₅ Leu Glu Val Asp Cys₆₂₀ Gly Leu Asp Lys

Ser₆₂₅ Asn Cys Gly Lys Gln₆₃₀ Gln Asn His Thr Leu₆₃₅ Asp Tyr Asn Leu Ala₆₄₀

Pro Gly Pro Leu Gly₆₄₅ Arg Gly Thr Met Pro₆₅₀ Gly Lys Phe Pro His₆₅₅ Ser

Asp Lys Ser Leu₆₆₀ Gly Glu Lys Ala Pro₆₆₅ Leu Arg Leu His Ser₆₇₀ Glu Lys

Pro Glu Cys₆₇₅ Arg Ile Ser Ala Ile₆₈₀ Cys Ser Pro Arg Asp₆₈₅ Ser Met Tyr

Gln Ser₆₉₀ Val Cys Leu Ile Ser₆₉₅ Glu Glu Arg Asn Glu₇₀₀ Cys Val Ile Ala

Thr₇₀₅ Glu Val