SEQUENCE LISTING

<110> Boehringer Ingelheim International GmbH

<120> BISPECIFIC BINDING MOLECULES BINDING TO VEGF AND ANG2

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

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Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr Glu
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Tyr

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

Tyr

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

Tyr

<210> 7
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Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Pro Asp Thr Tyr Asp

eolf-seql

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Tyr

<210> 8
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Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Pro Gly Thr Tyr Asp
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Tyr

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

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

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

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

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

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eolf-seql

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

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

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

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

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

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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
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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 Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

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

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

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

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

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

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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 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 Ser 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 Ala 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
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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 Val Ala 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 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
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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
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35 40 45

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

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<400> 16

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

Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr 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

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

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

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

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

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

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

<210> 19
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<212> PRT
<213> Lama glama

<400> 19

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

Ser Met Ala 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
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

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

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
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<210> 21
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<212> PRT
<213> Lama glama

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Glu Met 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 Ser Gly Gly Tyr Ile Tyr Asp Ser Val Ser Leu
    50                  55                  60

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

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

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

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115                 120                 125
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<210> 22
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
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 Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

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

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

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

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

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

<210> 23
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<212> PRT
<213> Lama glama

<400> 23

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

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

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

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

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

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<213> Lama glama

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

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

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

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

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115                 120                 125
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<210> 25
<211> 125
<212> PRT
<213> Lama glama

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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 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
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Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
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<213> Lama glama

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

Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Gln 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

Ala Ser Arg Ala Tyr Gly Ser Gly 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> 27
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<400> 27

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 Val Ala Ser Gly Arg Thr Ser Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Gln 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> 28
<211> 125
<212> PRT
<213> Lama glama

<400> 28

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 Ile Ala Ser Gly Arg Thr Ser Ser Ser Tyr
20 25 30

Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Gln 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> 29
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<212> PRT
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<400> 29

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
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 Gln Gly Lys Glu Arg Glu Phe Val
        35                  40                  45

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

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

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

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

Tyr Asp Tyr Trp Gly Gln Gly Thr Arg Val Thr Val Ser Ser
        115                 120                 125
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<213> Lama glama

<400> 30

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

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

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

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

Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115                 120                 125
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asp
1 5 10 15

Pro 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 Ser Gly Gly Tyr Ile Tyr Asp Ser Val Ser Leu
50 55 60

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

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

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

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

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<212> PRT
<213> Lama glama

<400> 32

Glu Val Pro Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Asp
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 Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

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

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

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

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

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


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<400>  33

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 Ala 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
    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 Gly 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>  34
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<212>  PRT
<213>  Lama glama

<400>  34

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 Ser Gly Gly Tyr Ile Tyr Asp Ser Val Ser Leu
    50                  55                  60
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Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Lys Asn Ala Val Tyr
65 70 75 80

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

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

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

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Glu Val Gln Leu Met 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 Ser Gly Gly Tyr Ile Tyr Asp Ser Val Ser Leu
50 55 60

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

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

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

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

<210> 36
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<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 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
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> 37
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<212> PRT
<213> Lama glama

<400> 37

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 Ala 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
50 55 60

Gly Arg Phe Thr Ile Ser Arg Glu 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> 38
<211> 126
<212> PRT

<213> Lama glama

<400> 38

```
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 Ser Gly Gly Tyr Ile Tyr Asp Ser Val Ser Leu
    50                  55                  60

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

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

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

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

<210> 39
<211> 126
<212> PRT
<213> Lama glama

<400> 39

```
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 Ser Gly Gly Tyr Ile Tyr Asp Ser Val Ser Leu
    50                  55                  60

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

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

Ala Ala Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr
```

100 105 110

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

<210> 40
<211> 125
<212> PRT
<213> Lama glama

<400> 40

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 Val Ala Ser Gly Arg Thr Ser Ser Ser Tyr
20 25 30

Ser Val 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> 41
<211> 126
<212> PRT
<213> Lama glama

<400> 41

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

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

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

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

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

<210> 42
<211> 126
<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 Ser Gly Gly Tyr Ile Tyr Asp Ser Val Ser Leu
50 55 60

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

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

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

Tyr 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 Ala Gly Gly
1 5 10 15

Ser Leu Arg 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 Tyr Lys Tyr Asp Ala Val Ser Leu Glu
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 Ala 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> 44
<211> 126
<212> PRT
<213> Lama glama

<400> 44

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

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

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

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

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

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

<210> 45
<211> 126

<212> PRT
<213> Lama glama

<400> 45

Glu Val Gln Leu Val Glu Ser Glu Gly Gly Leu Val Gln Ala Gly Asp
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 Gln Gly Lys Glu Arg Glu Phe Val
35 40 45

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

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

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

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

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

<210> 46
<211> 125
<212> PRT
<213> Lama glama

<400> 46

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

Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Lys Asp 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> 47
<211> 125
<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<400> 47

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> 48
<211> 125
<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<400> 48

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

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> 49
<211> 125
<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<400> 49

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> 50
<211> 125

<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<400> 50

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> 51
<211> 125
<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<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 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> 52
<211> 125
<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<400> 52

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> 53
<211> 125
<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<400> 53

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

<220>
<223> Mutated lama glama sequence

<400> 54

```
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
            100                 105                 110
```

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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 lama glama sequence

<400> 55

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> 56
<211> 125
<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<400> 56

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

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

<220>
<223> Mutated lama glama sequence

<400> 57

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> 58
<211> 122
<212> PRT
<213> Lama glama

<400> 58

```
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 Gly Ser Phe Ser Ser Tyr
            20                  25                  30

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

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

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

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

Ala Ser Pro Thr Ile Leu Leu Thr Thr Glu Gln Trp Tyr Lys Tyr Trp
            100                 105                 110

Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115                 120
```

<210> 59
<211> 126
<212> PRT
<213> Lama glama

<400> 59

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

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

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

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

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

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

Ala Ala Gly Arg Ile Pro Ser Ser Ser Arg Phe Ser Ser Pro Ala Ala
            100                 105                 110
```

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

<210> 60
<211> 125
<212> PRT
<213> Lama glama

<400> 60

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 Thr Ser Ile Tyr Thr Ile Thr
20 25 30

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

Ala Ala Ile Thr Trp Ser Ala Pro Thr 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 Arg Met Asn Ser Leu Lys Pro Glu Asp Ser Ala Ile Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Phe Lys Gly Arg Ser Ile Val Thr Pro Ser Asp Tyr
100 105 110

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

<210> 61
<211> 111
<212> PRT
<213> Lama glama

<400> 61

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 Ser Ala Val Gly Asp Ile
20 25 30

Thr Val Ala Trp Tyr Arg Gln Ala Pro Gly Ile Gln Arg Gln Leu Val
35 40 45

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

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

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

Thr Gln Phe Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
            100                 105                 110
```

<210> 62
<211> 128
<212> PRT
<213> Lama glama

<400> 62

```
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 Thr Asp
            20                  25                  30

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

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

Lys Gly Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Thr Met 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 Arg Ser Arg Pro Leu Gly Ala Gly Ala Trp Tyr Ser Gly Glu
            100                 105                 110

Lys His Tyr Asn Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115                 120                 125
```

<210> 63
<211> 121
<212> PRT
<213> Lama glama

<400> 63

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

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

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

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

Lys Asp Arg Phe Thr Ile Ser Arg Glu 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 Thr Ala Phe Tyr Arg Gly Pro Tyr Asp Tyr Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 64
<211> 113
<212> PRT
<213> Lama glama

<400> 64

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> 65
<211> 116
<212> PRT
<213> 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 Asn Ile Phe Ser Asn Asn
20 25 30

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

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

Lys Gly Arg Phe Thr Val 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

Asn Ala Ala Tyr Arg Thr Tyr Asn Tyr Trp Gly Gln Gly Thr Gln Val
100 105 110

Thr Val Ser Ser
115

<210> 66
<211> 125
<212> PRT
<213> Lama glama

<400> 66

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 Thr Ser Ile Tyr Ser Ile Thr
20 25 30

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

Ala Ala Ile Thr Trp Ser Ala Pro Ser Ser 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 Ser Ala Ile Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Phe Lys Gly Arg Ser Ile Val Thr Arg Ser Asp Tyr
100 105 110

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

<210> 67
<211> 125
<212> PRT
<213> Lama glama

<400> 67

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 Val Ser Thr Ser Ile Tyr Ser Ile Ser
20 25 30

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

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

Ala Ala Asp Arg Phe Lys Gly Arg Ser Ile Val Thr Arg Ser Asp Tyr
100 105 110

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

<210> 68
<211> 126
<212> PRT
<213> Lama glama

<400> 68

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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Ser Ala Lys Asn Ser Val Phe
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 Thr Trp Tyr Gly Tyr Ser Thr Tyr Ala Arg Arg Glu Glu
100 105 110

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

<210> 69
<211> 123
<212> PRT
<213> Lama glama

<400> 69

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 Ser Phe Ser Asp Asn
20 25 30

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

Ala His Ile Ser Arg Gly Gly Ser Arg Thr Glu Tyr Ala Glu Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Lys Lys Thr Met 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 Arg Ser Val Ala Leu Ala Thr Ala Arg Pro Tyr Asp Tyr
100 105 110

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

<210> 70
<211> 121
<212> PRT
<213> Lama glama

<400> 70

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

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

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

```
Ala Thr Ile Ser Trp Asn Lys Ile Ser Thr Ile Tyr Thr Asp Ser Val
    50                  55                  60

Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Asn 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 Ala Ser Arg Pro Thr Leu Arg Ile Pro Gln Tyr Trp Gly
            100                 105                 110

Gln Gly Thr Gln Val Thr Val Ser Ser
        115                 120
```

<210> 71
<211> 115
<212> PRT
<213> Lama glama

<400> 71

```
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 Ser Ile Val Arg Ser Asp
            20                  25                  30

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

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

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

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

Ala Arg Phe Ser Gly Glu Ser Tyr Trp Gly Gln Gly Thr Pro Val Thr
            100                 105                 110

Val Ser Ser
        115
```

<210> 72
<211> 124
<212> PRT
<213> Lama glama

<400> 72

```
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
```

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1 5 10 15

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

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

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

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

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

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

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

<210> 73
<211> 113
<212> PRT
<213> Lama glama

<400> 73

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 Glu 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 Thr Val Thr Val Ser
100 105 110

Ser

<210> 74
<211> 128
<212> PRT
<213> Lama glama

<400> 74

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 Thr Asp
20 25 30

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

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

Ala Gly Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Thr Met 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 Arg Ser Arg Pro Leu Gly Ala Gly Ala Trp Tyr Thr Gly Glu
100 105 110

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

<210> 75
<211> 122
<212> PRT
<213> Lama glama

<400> 75

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

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

Ile Ala Ile Ser Glu Tyr Asp Asn Val Tyr Thr Ala Asp Ser Val Arg
50 55 60

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

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

Ala Ser Pro Thr Ile Leu Leu Ser Thr Asp Glu Trp Tyr Lys Tyr Trp
100 105 110

Gly Arg Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 76
<211> 128
<212> PRT
<213> Lama glama

<400> 76

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 Thr Asp
20 25 30

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

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

Lys Gly Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Thr Met 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 Arg Ser Arg Pro Leu Gly Ala Gly Ala Trp Tyr Thr Gly Glu
100 105 110

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

<210> 77
<211> 127
<212> PRT
<213> Lama glama

<400> 77

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

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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ile 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 Tyr Trp Asn Ser Asp Ser Tyr Thr Tyr Thr Asp Ser Arg
100 105 110

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

<210> 78
<211> 124
<212> PRT
<213> Lama glama

<400> 78

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> 79
<211> 125
<212> PRT
<213> Lama glama

<400> 79

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```
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 Asp Thr Leu Ser Arg Tyr
            20                  25                  30

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

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

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

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

Ala Ala Asp Arg Phe Phe Gly Ser Asp Ser Asn Glu Pro Arg Ala Tyr
            100                 105                 110

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

<210> 80
<211> 123
<212> PRT
<213> Lama glama

<400> 80

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

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

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

Ala Thr Ile Arg His His Gly Tyr Asp Thr Tyr Tyr Ala Glu 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 Leu Tyr Ser Cys
                85                  90                  95

Ala Lys Lys Leu Phe Trp Asp Met Asp Pro Lys Thr Gly Phe Ser Ser
            100                 105                 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
```

115 120

<210> 81
<211> 126
<212> PRT
<213> Lama glama

<400> 81

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 Leu Ser Ser Tyr
20 25 30

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

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

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

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

Ala Ala Lys Val Arg Asn Phe Asn Ser Asp Trp Asp Leu Leu Thr Ser
100 105 110

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

<210> 82
<211> 125
<212> PRT
<213> Lama glama

<400> 82

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

Ser Leu Met Leu Ser Cys Ala Ala Ser Gly Arg Ala Leu Ser Ser Tyr
20 25 30

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

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

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

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

Ala Ala Gln Thr Thr Ser Lys Tyr Asp Asn Tyr Asp Ala Arg Ala Tyr
            100                 105                 110

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

<210> 83
<211> 125
<212> PRT
<213> Lama glama

<400> 83

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

Ser Leu Met Leu Ser Cys Ala Ala Ser Gly Arg Ala Leu Ser Ser Tyr
            20                  25                  30

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

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

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

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

Ala Ala Gln Thr Thr Ser Lys Tyr Asp Asn Tyr Asp Ala Arg Ala Tyr
            100                 105                 110

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

<210> 84
<211> 123
<212> PRT
<213> Lama glama

<400> 84

```
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 Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
```

35 40 45

Ala Thr Ile Ser Gln Ser Gly Tyr 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 Asn
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 Phe Tyr Ser Tyr Gly Ser Pro Ser Pro Tyr Arg Tyr
100 105 110

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

<210> 85
<211> 125
<212> PRT
<213> Lama glama

<400> 85

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 Ser Ser Gly Arg Leu Phe Ser Phe Ser
20 25 30

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

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

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

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

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

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

<210> 86
<211> 125
<212> PRT
<213> Lama glama

<400> 86

```
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 Thr Ser Ile Tyr Ser Ile Thr
            20                  25                  30

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

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

Ala Ala Asp Arg Phe Lys Gly Arg Ser Ile Val Thr Arg Ser Asp Tyr
            100                 105                 110

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

<210> 87
<211> 125
<212> PRT
<213> Lama glama

<400> 87

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

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

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

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

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

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

Ala Thr Ser Val Phe Tyr Ser Thr Ala Leu Thr Arg Pro Val Asp Tyr
            100                 105                 110
```

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

<210> 88
<211> 125
<212> PRT
<213> Lama glama

<400> 88

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 Thr Ser Ile Tyr Ser Ile Thr
20 25 30

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

Ala Ala Ile Thr Trp Ser Ala Pro Thr Thr Tyr Ser 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 Ser Ala Ile Tyr Tyr Cys
85 90 95

Ala Ala Asp Arg Phe Lys Gly Arg Ser Ile Val Thr Arg Ser Asp Tyr
100 105 110

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

<210> 89
<211> 129
<212> PRT
<213> Lama glama

<400> 89

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 Ser Val Thr Gly Arg Thr Phe Asn Lys Tyr
20 25 30

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

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

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

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

Ala Ile Asp Glu Asp Leu Tyr His Tyr Ser Ser Tyr His Phe Thr Arg
            100                 105                 110

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

Ser
```

<210> 90
<211> 117
<212> PRT
<213> Lama glama

<400> 90

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

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

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

Ser Arg Ile Ser Pro Gly Gly Leu Phe Thr Tyr Tyr Val Asp Ser Val
    50                  55                  60

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

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

Ala Lys Gly Gly Ala Pro Asn Tyr Thr Pro Arg Gly Arg Gly Thr Gln
            100                 105                 110

Val Thr Val Ser Ser
        115
```

<210> 91
<211> 115
<212> PRT
<213> Lama glama

<400> 91

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

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ser Ile Val Arg Ser Asp
20 25 30

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

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

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

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

Ala Arg Phe Ser Gly Glu Ser Tyr Trp Gly Gln Gly Thr Pro Val Thr
100 105 110

Val Ser Ser
115

<210> 92
<211> 129
<212> PRT
<213> Lama glama

<400> 92

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

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

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

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

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

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

Ala Ile Asp Glu Asp Leu Tyr His Tyr Ser Ser Tyr His Tyr Thr Arg
100 105 110

Val Ala Leu Tyr His Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser
115 120 125

Ser

<210> 93
<211> 124
<212> PRT
<213> Lama glama

<400> 93

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

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

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

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

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

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

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

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

<210> 94
<211> 128
<212> PRT
<213> Lama glama

<400> 94

```
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 Arg Thr Phe Ser Thr Asp
            20                  25                  30

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

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

Lys Gly Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Thr Met 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 Arg Ser Arg Pro Leu Gly Ala Gly Ala Trp Tyr Thr Gly Glu
            100                 105                 110

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

<210> 95
<211> 126
<212> PRT
<213> Lama glama

<400> 95

```
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 Ser Ser Gly Tyr
            20                  25                  30

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

Thr Ala Ile Thr Trp Ser Gly Gly Ser Thr Tyr Ser Pro 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 Asn Leu Thr Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Ser Gly Arg Ile Trp Arg Ser Arg Asp Tyr Asp Ser Glu Lys Tyr
            100                 105                 110

Tyr Asp Ile Trp Gly His Gly Thr Gln Val Thr Val Ser Ser
        115                 120                 125
```

<210> 96
<211> 129
<212> PRT
<213> Lama glama

<400> 96

```
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 Ala Tyr
            20                  25                  30

Asp Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
```

35 40 45

Ala Val Ile Ser Trp Thr Asn Ser Met 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 Val Asp Arg Arg Arg Thr Tyr Ser Arg Trp Arg Phe Tyr Thr Gly
100 105 110

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

Ser

<210> 97
<211> 129
<212> PRT
<213> Lama glama

<400> 97

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

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

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

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

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

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

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

Ser

<210> 98
<211> 129
<212> PRT
<213> Lama glama

<400> 98

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 Ala Tyr
20 25 30

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

Ala Val Ile Ser Trp Ser Gly Gly Met 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 Val Asp Arg Arg Arg Leu Tyr Ser Arg Trp Arg Tyr Tyr Thr Gly
100 105 110

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

Ser

<210> 99
<211> 129
<212> PRT
<213> Lama glama

<400> 99

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 Ala Tyr
20 25 30

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

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

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

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

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

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

Ser

<210> 100
<211> 129
<212> PRT
<213> Lama glama

<400> 100

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 Ala Tyr
20 25 30

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Thr Val Ser
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 Arg Arg Thr Tyr Ser Arg Trp Arg Tyr Tyr Thr Gly
100 105 110

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

Ser

<210> 101
<211> 123
<212> PRT
<213> Lama glama

<400> 101

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 Val Tyr
20 25 30

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Glu 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 Ser Cys
85 90 95

Ala Ala Gly Pro Ile Ala Pro Ser Pro Arg Pro Arg Glu Tyr Tyr Tyr
100 105 110

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

<210> 102
<211> 129
<212> PRT
<213> Lama glama

<400> 102

Glu Val Gln Leu Met 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 Ala Tyr
20 25 30

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

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

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

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

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

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

Ser

<210> 103
<211> 129
<212> PRT
<213> Lama glama

<400> 103

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 Ala Tyr
20 25 30

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

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

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

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

Ala Val Gly Arg Arg Arg Ala Tyr Ser Arg Trp Arg Tyr Tyr Thr Gly
100 105 110

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

Ser

<210> 104
<211> 125
<212> PRT
<213> Lama glama

<400> 104

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

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

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

35 40 45

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

Ala Ala Gly Arg Tyr Tyr Ser Ser Asp Gly Val Pro Ser Ala Ser Phe
100 105 110

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

<210> 105
<211> 128
<212> PRT
<213> Lama glama

<400> 105

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

Ser Leu Arg Leu Ser Cys Phe Thr Ser Ala Arg Thr Phe Asp Thr Trp
20 25 30

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

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

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

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

Ala Ala Lys Thr Val Asp Tyr Cys Ser Ala Tyr Glu Cys Tyr Ala Arg
100 105 110

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

<210> 106
<211> 126
<212> PRT
<213> Lama glama

<400> 106

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

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

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

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

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

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

Ala Asp Pro Ser Tyr Tyr Ser Thr Ser Arg Tyr Thr Lys Ala Thr Glu
            100                 105                 110

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

<210> 107
<211> 126
<212> PRT
<213> Lama glama

<400> 107

```
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 Asn Thr Tyr
            20                  25                  30

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Ile Val 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 Gln Thr Ser Ala Pro Arg Ser Leu Ile Arg Met Ser Asn Glu
            100                 105                 110
```

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

<210> 108
<211> 123
<212> PRT
<213> Lama glama

<400> 108

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 Leu Thr Phe Ser Leu Tyr
20 25 30

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

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

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

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

Ala Ala Thr Ser Arg Gly Leu Ser Ser Leu Ala Gly Glu Tyr Asn Tyr
100 105 110

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

<210> 109
<211> 123
<212> PRT
<213> Lama glama

<400> 109

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
            100                 105                 110

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

<210> 110
<211> 115
<212> PRT
<213> Lama glama

<400> 110

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

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

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

Ser Ser Ile Pro Pro Val Gly His Phe Ala Asn Tyr Ala Pro Ser Val
    50                  55                  60

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

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

Ala Lys Asp Ser Ala Gly Arg Thr Lys Gly Gln Gly Thr Gln Val Thr
            100                 105                 110

Val Ser Ser
        115
```

<210> 111
<211> 124
<212> PRT
<213> Lama glama

<400> 111

```
Lys 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 Glu Arg Thr Phe Ser Asn Tyr
            20                  25                  30
```

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

Ala Ala Ile Thr Arg Ser Gly Gly Gly 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 Thr Arg Ser Ser Thr Ile Val Val Gly Val Gly Gly Met Glu
100 105 110

Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 112
<211> 128
<212> PRT
<213> Lama glama

<400> 112

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 Gly Asp Tyr
20 25 30

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

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

Ala Val Asp Thr Gln Asp Leu Gly Leu Asp Ile Phe Cys Arg Gly Asn
100 105 110

Gly Pro Phe Asp Gly Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

<210> 113
<211> 134
<212> PRT
<213> Lama glama

<400> 113

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 Leu Asn Leu 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 Tyr Asp Ser Val Thr Tyr Tyr Ala Asp His Val
50 55 60

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

Leu Gln Met Asn Ser Leu Ser Ile Glu Asp Thr Gly Val Tyr Tyr Cys
85 90 95

Ala Ala Glu Arg Glu Gln Leu Arg Arg Arg Glu Ser Pro His Asp Glu
100 105 110

Leu Leu Arg Leu Cys Phe Tyr Gly Met Arg Tyr Ser Gly Lys Gly Thr
115 120 125

Leu Val Thr Val Ser Ser
130

<210> 114
<211> 123
<212> PRT
<213> Lama glama

<400> 114

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 Phe Arg Leu Asp Asp Tyr
20 25 30

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

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

Lys Gly Arg Phe Thr Phe 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 Ala Phe Arg Cys Ser Gly Tyr Glu Leu Arg Gly Phe Pro Thr
100 105 110

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

<210> 115
<211> 126
<212> PRT
<213> Lama glama

<400> 115

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 Gly Thr Phe Ser Ser Leu
20 25 30

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

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

Lys Asp Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Met 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 Ser Pro Asn Ile Ile Asn Val Val Thr Ala Tyr Glu
100 105 110

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

<210> 116
<211> 126
<212> PRT
<213> Lama glama

<400> 116

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

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

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

Ala Ala Ile Thr Ser Ser Pro Met Ser Thr Tyr Tyr Ala Asp Ser Val

50 55 60

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

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

Ala Ala Pro Glu Gly Ser Phe Arg Arg Gln Tyr Ala Asp Arg Ala Met
100 105 110

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

<210> 117
<211> 127
<212> PRT
<213> Lama glama

<400> 117

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

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

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

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

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

<210> 118
<211> 125
<212> PRT
<213> Lama glama

<400> 118

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

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

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

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

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

Ala Ala Ala Arg Tyr His Gly Asp Tyr Cys Tyr Tyr Glu Gly Tyr Tyr
            100                 105                 110

Pro Phe Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
        115                 120                 125
```

<210> 119
<211> 117
<212> PRT
<213> Lama glama

<400> 119

```
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 Thr Ser Ile Ser Ser Thr Asn
            20                  25                  30

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

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

Ala Arg Trp Arg Trp Ser Asp Val Glu Tyr Trp Gly Lys Gly Thr Leu
            100                 105                 110

Val Thr Val Ser Ser
        115
```

<210> 120
<211> 121
<212> PRT
<213> Lama glama

<400> 120

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 Thr Thr Ser Ser Ile Phe
20 25 30

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

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

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

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

Ala Ala Ile Arg Pro Glu Leu Tyr Ser Val Val Asn Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 121
<211> 127
<212> PRT
<213> Lama glama

<400> 121

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 Thr Ser Gly Leu Thr Phe Ser Asp Tyr
20 25 30

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

Ala Val Ile Ser Trp Arg Asp Ser Phe Ala Tyr Tyr Ala Glu Pro 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 Asp Arg Val Ser Ser Arg Leu Val Leu Pro Asn Thr Ser Pro
100 105 110

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

<210> 122
<211> 129
<212> PRT
<213> Lama glama

<400> 122

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

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

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

Ala Ala Met Asn Trp Arg Gly Gly Pro Thr Tyr Tyr Ala Asp Ser Val
50 55 60

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

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

Ala Ala Asp Glu Asp Leu Tyr His Tyr Ser Ser Tyr His Tyr Ser Arg
100 105 110

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

Ser

<210> 123
<211> 121
<212> PRT
<213> Lama glama

<400> 123

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 Thr Thr Ser Ser Ile Phe
20 25 30

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

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

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

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

Ala Ala Ile Arg Pro Glu Leu Tyr Ser Val Val Asn Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Gln Val Thr Val Ser Ser
115 120

<210> 124
<211> 123
<212> PRT
<213> Lama glama

<400> 124

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 Gly Ser Phe Ser Ser Tyr
20 25 30

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

Ala Ala Phe Thr Arg Ser Ser Asn Ile Pro Tyr Tyr Lys Asp Ser Val
50 55 60

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

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

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

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

<210> 125
<211> 113
<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<400> 125

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> 126
<211> 113
<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<400> 126

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

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85 90 95

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

Ser

<210> 127
<211> 113
<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<400> 127

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> 128
<211> 285
<212> PRT
<213> Artificial

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

<400> 128

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

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> 129

<211> 245
<212> PRT
<213> Artificial

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

<400> 129

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 Ala Ala Ser Gly
145 150 155 160

Ser Ala Val Gly Asp Ile Thr Val Ala Trp Tyr Arg Gln Ala Pro Gly
165 170 175

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

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

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

Ala Ala Tyr Tyr Cys Asn Thr Gln Phe Tyr Trp Gly Gln Gly Thr Gln
225 230 235 240

Val Thr Val Ser Ser
245

<210> 130
<211> 255
<212> PRT
<213> Artificial

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

<400> 130

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 Ala Gln Ala Gly Asp Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
145 150 155 160

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

Lys Glu Arg Glu Phe Val Ala Ser Ile Arg Gly Gly Gly Gly Ser Thr
180 185 190

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

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

210 215 220

Thr Ala Val Tyr Tyr Cys Ala Ala Thr Ala Phe Tyr Arg Gly Pro Tyr
225 230 235 240

Asp Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
245 250 255

<210> 131
<211> 247
<212> PRT
<213> Artificial

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

<400> 131

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

Thr Gln Val Thr Val Ser Ser
                245
```

<210> 132
<211> 250
<212> PRT
<213> Artificial

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

<400> 132

```
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 Ala Ala Ser Gly
145                 150                 155                 160

Asn Ile Phe Ser Asn Asn Ala Met Ala Trp Tyr Arg Gln Ala Pro Gly
```

165 170 175

Lys Gln Arg Glu Leu Val Ala Arg Ile Ser Ser Gly Gly Gly Phe Thr
180 185 190

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

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

Thr Ala Val Tyr Tyr Cys Asn Ala Ala Tyr Arg Thr Tyr Asn Tyr Trp
225 230 235 240

Gly Gln Gly Thr Gln Val Thr Val Ser Ser
245 250

<210> 133
<211> 258
<212> PRT
<213> Artificial

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

<400> 133

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 Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
145                 150                 155                 160

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

Lys Glu Arg Val Leu Val Ala Asp Ile Ser Ser Ser Gly Ile Asn Thr
            180                 185                 190

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

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

Thr Ala Val Tyr Tyr Cys Ala Ala Ser Ala Trp Trp Tyr Ser Gln Met
225                 230                 235                 240

Ala Arg Asp Asn Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val Thr Val
                245                 250                 255

Ser Ser
```

<210> 134
<211> 251
<212> PRT
<213> Artificial

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

<400> 134

```
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 Ala Cys Ala Ala Ser Gly
145 150 155 160

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

Lys Gly Leu Glu Trp Val Ser Arg Ile Ser Pro Gly Gly Leu Phe Thr
180 185 190

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

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

Thr Ala Leu Tyr Ser Cys Ala Lys Gly Gly Ala Pro Asn Tyr Thr Pro
225 230 235 240

Arg Gly Arg Gly Thr Gln Val Thr Val Ser Ser
245 250

<210> 135
<211> 259
<212> PRT
<213> Artificial

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

<400> 135

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 Ala Gly Asp Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly
145                 150                 155                 160

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

Lys Glu Arg Glu Ser Val Ala His Ile Asn Arg Ser Gly Ser Ser Thr
            180                 185                 190

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

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

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

Val Pro Ser Ala Ser Phe Asn Tyr Trp Gly Gln Gly Thr Gln Val Thr
                245                 250                 255

Val Ser Ser
```

<210> 136
<211> 257
<212> PRT
<213> Artificial

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

<400> 136

```
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 Ala Gly Gly Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly
145 150 155 160

Ser Ala Phe Lys Ser Tyr Arg Met Gly Trp Phe Arg Arg Thr Pro Gly
165 170 175

Lys Glu Asp Glu Phe Val Ala Ser Ile Ser Trp Thr Tyr Gly Ser Thr
180 185 190

Phe Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Met Ser Arg Asp Lys
195 200 205

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

Thr Ala Leu Tyr Tyr Cys Ala Ala Gly Ala Gln Ser Asp Arg Tyr Asn
225 230 235 240

Ile Arg Ser Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser
245 250 255

Ser

<210> 137
<211> 249
<212> PRT
<213> Artificial

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

<400> 137

```
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 Lys Leu Ser Cys Thr Ala Ser Gly
145                 150                 155                 160

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

Lys Gly Leu Glu Trp Val Ser Ser Ile Pro Pro Val Gly His Phe Ala
            180                 185                 190

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

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

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

Gln Gly Thr Gln Val Thr Val Ser Ser
                245
```

<210> 138
<211> 258
<212> PRT

<213> Artificial

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

<400> 138

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 Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Glu
145 150 155 160

Arg Thr Phe Ser Asn Tyr Ala Met Asp Trp Phe Arg Gln Ala Pro Gly
165 170 175

Lys Glu Arg Glu Phe Val Ala Ala Ile Thr Arg Ser Gly Gly Gly Thr
180 185 190

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

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

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

Gly Val Gly Gly Met Glu Tyr Trp Gly Lys Gly Thr Gln Val Thr Val

245 250 255

Ser Ser

<210> 139
<211> 276
<212> PRT
<213> Artificial

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

<400> 139

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

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 Ala Ala Ser Gly Ser
180 185 190

Ala Val Gly Asp Ile Thr Val Ala Trp Tyr Arg Gln Ala Pro Gly Ile
195 200 205

```
Gln Arg Gln Leu Val Ala Thr Ile Thr Pro Ser Gly Tyr Thr Tyr Tyr
    210                 215                 220

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

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

Ala Tyr Tyr Cys Asn Thr Gln Phe Tyr Trp Gly Gln Gly Thr Gln Val
            260                 265                 270

Thr Val Ser Ser
        275
```

<210> 140
<211> 286
<212> PRT
<213> Artificial

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

<400> 140

```
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

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

Ala Gln Ala Gly Asp Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg
180 185 190

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

Glu Arg Glu Phe Val Ala Ser Ile Arg Gly Gly Gly Gly Ser Thr Thr
210 215 220

Tyr Ala Asn Ser Val Lys Asp Arg Phe Thr Ile Ser Arg Glu 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 Thr Ala Phe Tyr Arg Gly Pro Tyr Asp
260 265 270

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

<210> 141
<211> 278
<212> PRT
<213> Artificial

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

<400> 141

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

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>  142
<211>  281
<212>  PRT
<213>  Artificial

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

<400>  142

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

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 Ala Ala Ser Gly Asn
            180                 185                 190

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

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

Tyr Leu Asp Ser Val Lys Gly Arg Phe Thr Val 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 Asn Ala Ala Tyr Arg Thr Tyr Asn Tyr Trp Gly
            260                 265                 270

Gln Gly Thr Gln Val Thr Val Ser Ser
        275                 280
```

<210> 143
<211> 289
<212> PRT
<213> Artificial

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

<400> 143

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

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> 144
<211> 282
<212> PRT
<213> Artificial

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

<400> 144

```
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

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 Ala Cys Ala Ala Ser Gly Phe
```

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180 185 190

Thr Leu Ser Ser Ser Trp Met Tyr Trp Val Arg Gln Ala Pro Gly Lys
195 200 205

Gly Leu Glu Trp Val Ser Arg Ile Ser Pro Gly Gly Leu Phe Thr Tyr
210 215 220

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

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

Ala Leu Tyr Ser Cys Ala Lys Gly Gly Ala Pro Asn Tyr Thr Pro Arg
260 265 270

Gly Arg Gly Thr Gln Val Thr Val Ser Ser
275 280

<210> 145
<211> 290
<212> PRT
<213> Artificial

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

<400> 145

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

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

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

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

Glu Arg Glu Ser Val Ala His Ile Asn Arg Ser Gly Ser Ser Thr Tyr
    210                 215                 220

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

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

Ala Val Tyr Tyr Cys Ala Ala Gly Arg Tyr Tyr Ser Ser Asp Gly Val
            260                 265                 270

Pro Ser Ala Ser Phe Asn Tyr Trp Gly Gln Gly Thr Gln Val Thr Val
        275                 280                 285

Ser Ser
    290
```

<210> 146
<211> 288
<212> PRT
<213> Artificial

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

<400> 146

```
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

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> 147
<211> 280
<212> PRT
<213> Artificial

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

<400> 147

```
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

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 Lys Leu Ser Cys Thr Ala Ser Gly Phe
            180                 185                 190

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

Gly Leu Glu Trp Val Ser Ser Ile Pro Pro Val Gly His Phe Ala Asn
    210                 215                 220

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

Lys Asn Thr Leu Phe Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr
                245                 250                 255

Ala Val Tyr Tyr Cys Ala Lys Asp Ser Ala Gly Arg Thr Lys Gly Gln
            260                 265                 270
```

Gly Thr Gln Val Thr Val Ser Ser
275 280

<210> 148
<211> 289
<212> PRT
<213> Artificial

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

<400> 148

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

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 Glu Arg
180 185 190

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

Glu Arg Glu Phe Val Ala Ala Ile Thr Arg Ser Gly Gly Gly Thr Tyr

210 215 220

Tyr Ala Asp Ser 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 Thr Arg Ser Ser Thr Ile Val Val Gly
260 265 270

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

Ser

<210> 149
<211> 245
<212> PRT
<213> Artificial

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

<400> 149

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 Ser Ala Val Gly Asp Ile
20 25 30

Thr Val Ala Trp Tyr Arg Gln Ala Pro Gly Ile Gln Arg Gln Leu Val
35 40 45

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

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

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

Thr Gln Phe Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly
100 105 110

Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly
115 120 125

Gly Gly Leu Val Gln Thr Gly Asp Ser Leu Arg Leu Ser Cys Glu Val
130 135 140

```
Ser Gly Arg Thr Phe Ser Ser Tyr Ser Met Gly Trp Phe Arg Gln Ala
145                 150                 155                 160

Gln Gly Lys Glu Arg Glu Phe Val Val Ala Ile Ser Lys Gly Gly Tyr
                165                 170                 175

Lys Tyr Asp Ser Val Ser Leu Glu Gly Arg Phe Thr Ile Ser Lys Asp
            180                 185                 190

Asn Ala Lys Asn Thr Val Tyr Leu Gln Ile Asn Ser Leu Lys Pro Glu
        195                 200                 205

Asp Thr Ala Val Tyr Tyr Cys Ala Ser Ser Arg Ala Tyr Gly Ser Ser
    210                 215                 220

Arg Leu Arg Leu Ala Asp Thr Tyr Glu Tyr Trp Gly Gln Gly Thr Gln
225                 230                 235                 240

Val Thr Val Ser Ser
                245
```

<210> 150
<211> 255
<212> PRT
<213> Artificial

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

<400> 150

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

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

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

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

Lys Asp Arg Phe Thr Ile Ser Arg Glu 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 Thr Ala Phe Tyr Arg Gly Pro Tyr Asp Tyr Asp Tyr Trp Gly
            100                 105                 110

Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
```

115 120 125

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

Gly Asp Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser
145 150 155 160

Ser Tyr Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu
165 170 175

Phe Val Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser
180 185 190

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

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

Cys Ala Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp
225 230 235 240

Thr Tyr Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
245 250 255

<210> 151
<211> 247
<212> PRT
<213> Artificial

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

<400> 151

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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu
        115                 120                 125

Ser Gly Gly Gly Leu Val Gln Thr Gly Asp Ser Leu Arg Leu Ser Cys
    130                 135                 140

Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr Ser Met Gly Trp Phe Arg
145                 150                 155                 160

Gln Ala Gln Gly Lys Glu Arg Glu Phe Val Val Ala Ile Ser Lys Gly
                165                 170                 175

Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu Gly Arg Phe Thr Ile Ser
            180                 185                 190

Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Ile Asn Ser Leu Lys
        195                 200                 205

Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser Ser Arg Ala Tyr Gly
    210                 215                 220

Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr Glu Tyr Trp Gly Gln Gly
225                 230                 235                 240

Thr Gln Val Thr Val Ser Ser
                245
```

<210> 152
<211> 250
<212> PRT
<213> Artificial

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

<400> 152

```
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 Asn Ile Phe Ser Asn Asn
            20                  25                  30

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

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

Lys Gly Arg Phe Thr Val 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

Asn Ala Ala Tyr Arg Thr Tyr Asn Tyr Trp Gly Gln Gly Thr Gln Val
100 105 110

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

Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp Ser Leu Arg
130 135 140

Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr Ser Met Gly
145 150 155 160

Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val Val Ala Ile
165 170 175

Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu Gly Arg Phe
180 185 190

Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Ile Asn
195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser Ser Arg
210 215 220

Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr Glu Tyr Trp
225 230 235 240

Gly Gln Gly Thr Gln Val Thr Val Ser Ser
245 250

<210> 153
<211> 258
<212> PRT
<213> Artificial

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

<400> 153

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

Val Gln Thr Gly Asp Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg
145 150 155 160

Thr Phe Ser Ser Tyr Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys
165 170 175

Glu Arg Glu Phe Val Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp
180 185 190

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

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

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

Leu Ala Asp Thr Tyr Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val
245 250 255

Ser Ser

<210> 154
<211> 251
<212> PRT
<213> Artificial

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

<400> 154

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

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```
1               5                   10                  15

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

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

Ser Arg Ile Ser Pro Gly Gly Leu Phe Thr Tyr Tyr Val Asp Ser Val
    50                  55                  60

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

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

Ala Lys Gly Gly Ala Pro Asn Tyr Thr Pro Arg Gly Arg Gly Thr Gln
            100                 105                 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val
        115                 120                 125

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

Arg Leu Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr Ser Met
145                 150                 155                 160

Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val Val Ala
                165                 170                 175

Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu Gly Arg
            180                 185                 190

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

Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser Ser
    210                 215                 220

Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr Glu Tyr
225                 230                 235                 240

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
                245                 250
```

<210> 155
<211> 259
<212> PRT
<213> Artificial

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

<400> 155

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

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

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

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

Ala Ala Gly Arg Tyr Tyr Ser Ser Asp Gly Val Pro Ser Ala Ser Phe
            100                 105                 110

Asn 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 Thr Gly Asp Ser Leu Arg Leu Ser Cys Glu Val Ser Gly
145                 150                 155                 160

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

Lys Glu Arg Glu Phe Val Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr
            180                 185                 190

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

Lys Asn Thr Val Tyr Leu Gln Ile Asn Ser Leu Lys Pro Glu Asp Thr
    210                 215                 220

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

Arg Leu Ala Asp Thr Tyr Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr
                245                 250                 255
```

Val Ser Ser

<210> 156
<211> 257
<212> PRT
<213> Artificial

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

<400> 156

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
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 Thr Gly Asp Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg Thr
145 150 155 160

Phe Ser Ser Tyr Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Glu
165 170 175

Arg Glu Phe Val Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp Ser
180 185 190

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

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

210 215 220

Tyr Tyr Cys Ala Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu Arg Leu
225 230 235 240

Ala Asp Thr Tyr Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser
245 250 255

Ser

<210> 157
<211> 249
<212> PRT
<213> Artificial

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

<400> 157

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

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

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

Ser Ser Ile Pro Pro Val Gly His Phe Ala Asn Tyr Ala Pro Ser Val
50 55 60

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

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

Ala Lys Asp Ser Ala Gly Arg Thr Lys Gly Gln Gly Thr Gln Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
115 120 125

Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Asp Ser Leu Arg Leu
130 135 140

Ser Cys Glu Val Ser Gly Arg Thr Phe Ser Ser Tyr Ser Met Gly Trp
145 150 155 160

Phe Arg Gln Ala Gln Gly Lys Glu Arg Glu Phe Val Val Ala Ile Ser
165 170 175

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

Ile Ser Lys Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Ile Asn Ser
195 200 205

Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser Ser Arg Ala
210 215 220

Tyr Gly Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr Glu Tyr Trp Gly
225 230 235 240

Gln Gly Thr Gln Val Thr Val Ser Ser
245

<210> 158
<211> 258
<212> PRT
<213> Artificial

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

<400> 158

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 Glu Arg Thr Phe Ser Asn Tyr
20 25 30

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

Ala Ala Ile Thr Arg Ser Gly Gly Gly 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 Thr Arg Ser Ser Thr Ile Val Val Gly Val Gly Gly Met Glu
100 105 110

Tyr Trp Gly Lys Gly Thr Gln 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 Thr Gly Asp Ser Leu Arg Leu Ser Cys Glu Val Ser Gly Arg

145 150 155 160

Thr Phe Ser Ser Tyr Ser Met Gly Trp Phe Arg Gln Ala Gln Gly Lys
165 170 175

Glu Arg Glu Phe Val Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr Asp
180 185 190

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

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

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

Leu Ala Asp Thr Tyr Glu Tyr Trp Gly Gln Gly Thr Gln Val Thr Val
245 250 255

Ser Ser

<210> 159
<211> 276
<212> PRT
<213> Artificial

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

<400> 159

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 Ser Ala Val Gly Asp Ile
20 25 30

Thr Val Ala Trp Tyr Arg Gln Ala Pro Gly Ile Gln Arg Gln Leu Val
35 40 45

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

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

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

Thr Gln Phe Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly
100 105 110

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

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

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

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

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

Gly Lys Glu Arg Glu Phe Val Val Ala Ile Ser Lys Gly Gly Tyr Lys
195 200 205

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

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

Thr Ala Val Tyr Tyr Cys Ala Ser Ser Arg Ala Tyr Gly Ser Ser Arg
245 250 255

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

Thr Val Ser Ser
275

<210> 160
<211> 286
<212> PRT
<213> Artificial

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

<400> 160

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

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

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

Ala Ser Ile Arg Gly Gly Gly Gly Ser Thr Thr Tyr Ala Asn Ser Val

50 55 60

Lys Asp Arg Phe Thr Ile Ser Arg Glu 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 Thr Ala Phe Tyr Arg Gly Pro Tyr Asp Tyr Asp Tyr Trp Gly
100 105 110

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

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

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

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

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

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

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

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

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

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

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

<210> 161
<211> 278
<212> PRT
<213> Artificial

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

<400> 161

```
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 Gly Gly Gly Gly Ser Gly Gly Gly Gly 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 Gln Thr Gly Asp Ser Leu Arg Leu Ser Cys Glu
                165                 170                 175

Val Ser Gly Arg Thr Phe Ser Ser Tyr Ser Met Gly Trp Phe Arg Gln
            180                 185                 190

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

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

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

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser Ser Arg Ala Tyr Gly Ser
                245                 250                 255

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

Gln Val Thr Val Ser Ser
275

<210> 162
<211> 281
<212> PRT
<213> Artificial

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

<400> 162

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 Asn Ile Phe Ser Asn Asn
20 25 30

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

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

Lys Gly Arg Phe Thr Val 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

Asn Ala Ala Tyr Arg Thr Tyr Asn Tyr Trp Gly Gln Gly Thr Gln Val
100 105 110

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

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

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

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

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

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

Lys Gly Gly Tyr Lys Tyr Asp Ser Val Ser Leu Glu Gly Arg Phe Thr

210 215 220

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

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

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

Gln Gly Thr Gln Val Thr Val Ser Ser
275 280

<210> 163
<211> 289
<212> PRT
<213> Artificial

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

<400> 163

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

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> 164
<211> 282
<212> PRT
<213> Artificial

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

<400> 164

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

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

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

Ser Arg Ile Ser Pro Gly Gly Leu Phe Thr Tyr Tyr Val Asp Ser Val
50 55 60

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

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

85 90 95

Ala Lys Gly Gly Ala Pro Asn Tyr Thr Pro Arg Gly Arg Gly Thr Gln
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

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

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

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

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

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

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

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

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

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

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

<210> 165
<211> 290
<212> PRT
<213> Artificial

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

<400> 165

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

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

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

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

Ala Ala Gly Arg Tyr Tyr Ser Ser Asp Gly Val Pro Ser Ala Ser Phe
            100                 105                 110

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

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

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

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

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

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

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

Ser Ser
    290
```

<210> 166
<211> 288
<212> PRT
<213> Artificial

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

<400> 166

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
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 Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

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

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

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

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

Ser Leu Glu Gly Arg Phe Thr Ile Ser Lys Asp Asn Ala Lys Asn Thr

225 230 235 240

Val Tyr Leu Gln Ile Asn Ser Leu Lys 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 Gln Val Thr Val Ser Ser
275 280 285

<210> 167
<211> 280
<212> PRT
<213> Artificial

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

<400> 167

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

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

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

Ser Ser Ile Pro Pro Val Gly His Phe Ala Asn Tyr Ala Pro Ser Val
50 55 60

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

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

Ala Lys Asp Ser Ala Gly Arg Thr Lys Gly Gln Gly Thr Gln Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 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 Thr Gly Asp Ser Leu Arg Leu Ser
165 170 175

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

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

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

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

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

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

Gly Thr Gln Val Thr Val Ser Ser
        275                 280
```

<210> 168
<211> 289
<212> PRT
<213> Artificial

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

<400> 168

```
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 Glu Arg Thr Phe Ser Asn Tyr
            20                  25                  30

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

Ala Ala Ile Thr Arg Ser Gly Gly Gly 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 Thr Arg Ser Ser Thr Ile Val Val Gly Val Gly Gly Met Glu
            100                 105                 110

Tyr Trp Gly Lys 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

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> 169
<211> 35
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker

<400> 169

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> 170
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker

<400> 170

Gly Gly Gly Gly Ser Gly Gly Gly Ser
1 5

<210> 171
<211> 40
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker

<400> 171

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> 172
<211> 9
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker

<400> 172

Gly Gly Gly Gly Cys Gly Gly Gly Ser
1 5

<210> 173
<211> 25
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker

<400> 173

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> 174
<211> 27
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker

<400> 174

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> 175
<211> 35
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker

<400> 175

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> 176
<211> 35
<212> PRT
<213> Artificial

<220>
<223> Synthetic linker

<400> 176

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> 177
<211> 115
<212> PRT
<213> Artificial

<220>
<223> Mutated lama glama sequence

<400> 177

```
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> 178
<211> 585
<212> PRT
<213> Homo sapiens

<400> 178

```
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
```

```
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
    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> 179
<211> 109
<212> PRT
<213> Homo sapiens

<400> 179

```
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

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> 180
<211> 257
<212> PRT
<213> Artificial

<220>
<223> Mutated Lama sequence

<400> 180

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

Ser Cys Ile Arg Cys 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 Ala Ser Ile Val Pro Arg Ser Lys Leu Glu Pro Tyr Glu Tyr Asp
100 105 110

Ala 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 Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
145                 150                 155                 160

Thr Phe Asp Asp Tyr Ala Leu Gly Trp Phe Arg Gln Ala Ala Gly Lys
                165                 170                 175

Glu Arg Glu Gly Val Ser Cys Ile Arg Cys Ser Asp Gly Ser Thr Tyr
            180                 185                 190

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

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

Ala Val Tyr Tyr Cys Ala Ala Ser Ile Val Pro Arg Ser Lys Leu Glu
225                 230                 235                 240

Pro Tyr Glu Tyr Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser
                245                 250                 255

Ser
```

<210> 181
<211> 288
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 181

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

Ser Cys Ile Arg Cys 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 Ala Ser Ile Val Pro Arg Ser Lys Leu Glu Pro Tyr Glu Tyr Asp
```

100 105 110

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

Phe Asp Asp Tyr Ala Leu Gly Trp Phe Arg Gln Ala Ala Gly Lys Glu
195 200 205

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

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

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

Val Tyr Tyr Cys Ala Ala Ser Ile Val Pro Arg Ser Lys Leu Glu Pro
260 265 270

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

<210> 182
<211> 255
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 182

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

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

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

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

Arg 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 Thr Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Gly Ser Tyr Asp Gly Asn Tyr Tyr Ile Pro Gly Phe Tyr Lys Asp
            100                 105                 110

Trp Gly Gln Gly Thr Leu 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 Val Gly Asp Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr
145                 150                 155                 160

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

Glu Arg Glu Phe Ala Ala Gly Ile Trp Ser Ser Gly Asp Thr Ala Tyr
            180                 185                 190

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

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

Val Tyr Tyr Cys Ala Gly Ser Tyr Asp Gly Asn Tyr Tyr Ile Pro Gly
225                 230                 235                 240

Phe Tyr Lys Asp Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
                245                 250                 255


<210>  183
<211>  267
<212>  PRT
<213>  Artificial

<220>
<223>  Mutated lama sequence

<400>  183

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Asp 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 Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro
100 105 110

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

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

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

Ala Ala Ser Gly Phe Thr Leu Asp Asp Tyr Ala Ile Gly Trp Phe Arg
165 170 175

Gln Ala Pro Gly Lys Glu Arg Glu Gly Val Ser Ser Ile Arg Asp Asn
180 185 190

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

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

Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Val Pro Ala Gly
225 230 235 240

Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro Leu Tyr Glu Tyr Asp Ala
245 250 255

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
260 265

<210> 184
<211> 298
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 184

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Asp 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 Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro
100 105 110

Leu Tyr Glu Tyr Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser
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 Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser
165 170 175

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

Ala Ser Gly Phe Thr Leu Asp Asp Tyr Ala Ile Gly Trp Phe Arg Gln
195 200 205

Ala Pro Gly Lys Glu Arg Glu Gly Val Ser Ser Ile Arg Asp Asn Asp
210 215 220

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

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

Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Val Pro Ala Gly Arg
260 265 270

Leu Arg Phe Gly Glu Gln Trp Tyr Pro Leu Tyr Glu Tyr Asp Ala Trp
275 280 285

Gly Gln Gly Thr Leu Val Thr Val Ser Ser
290 295

<210> 185
<211> 267
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 185

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ser 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 Ala Val Pro Ala Gly Arg Leu Arg Tyr Gly Glu Gln Trp Tyr Pro
100 105 110

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

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

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

Ala Ala Ser Gly Ile Thr Leu Asp Asp Tyr Ala Ile Gly Trp Phe Arg
165 170 175

Gln Ala Pro Gly Lys Glu Arg Glu Gly Val Ser Ser Ile Arg Asp Asn

180 185 190

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

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

Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Val Pro Ala Gly
225 230 235 240

Arg Leu Arg Tyr Gly Glu Gln Trp Tyr Pro Ile Tyr Glu Tyr Asp Ala
245 250 255

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
260 265

<210> 186
<211> 387
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 186

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 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 Phe Thr Leu Asp
        275                 280                 285

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
    290                 295                 300

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

Ser Val Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Asp 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 Ala Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp
        355                 360                 365

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

Val Ser Ser
385
```

<210> 187
<211> 387
<212> PRT

<213> Artificial

<220>
<223> Mutated lama sequence

<400> 187

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Asp 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 Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro
            100                 105                 110

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

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

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

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

Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser
            180                 185                 190

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

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

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

Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
```

245 250 255

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

Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
275 280 285

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

Lys Glu Arg Glu Phe Val Val Ala Ile Ser Lys Gly Gly Tyr Lys Tyr
305 310 315 320

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

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

Ala Val Tyr Tyr Cys Ala Ser Ser Arg Ala Tyr Gly Ser Ser Arg Leu
355 360 365

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

Val Ser Ser
385

<210> 188
<211> 387
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 188

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Asp 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 Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro
            100                 105                 110

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

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

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

Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr Ser Met Gly Trp Phe Arg
                165                 170                 175

Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Val Ala Ile Ser Lys Gly
            180                 185                 190

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

Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Ile Asn Ser Leu Arg
    210                 215                 220

Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser Ser Arg Ala Tyr Gly
225                 230                 235                 240

Ser Ser Arg Leu Arg Leu Ala Asp Thr Tyr Glu Tyr Trp Gly Gln Gly
                245                 250                 255

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
            260                 265                 270

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
        275                 280                 285

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe
    290                 295                 300

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
305                 310                 315                 320

Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val
                325                 330                 335

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr
            340                 345                 350
```

```
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
        355                 360                 365

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
    370                 375                 380

Val Ser Ser
385
```

<210> 189
<211> 375
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 189

```
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 Ala Ala Ala
        115                 120                 125

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

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

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

Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val
```

180 185 190

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

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

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

Val Ser Ser Ala Ala Ala Glu Val Gln Leu Val Glu Ser Gly Gly Gly
245 250 255

Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
260 265 270

Phe Thr Leu Asp Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly
275 280 285

Lys Glu Arg Glu Gly Val Ser Ser Ile Arg Asp Asn Asp Gly Ser Thr
290 295 300

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

Asp Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp
325 330 335

Thr Ala Val Tyr Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Phe
340 345 350

Gly Glu Gln Trp Tyr Pro Leu Tyr Glu Tyr Asp Ala Trp Gly Gln Gly
355 360 365

Thr Leu Val Thr Val Ser Ser
370 375

<210> 190
<211> 384
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 190

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

Phe Ala Leu Asp Tyr Tyr Ala Ile Gly Trp Phe Arg Gln Val Pro Gly
                165                 170                 175

Lys Glu Arg Glu Gly Val Ser Cys Ile Ser Ser Ser Asp Gly Ile Thr
            180                 185                 190

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

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

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

Asp Cys Met Gly Leu Gly Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val
                245                 250                 255

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

Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn Ser Leu Arg
        275                 280                 285

Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly Met Ser
    290                 295                 300
```

```
Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile
305                 310                 315                 320

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

Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met
            340                 345                 350

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

Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser
    370                 375                 380
```

<210> 191
<211> 384
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 191

```
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 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 Pro
            260                 265                 270

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

Tyr Tyr Ala Ile Gly Trp Phe Arg Gln Val Pro Gly Lys Glu Arg Glu
    290                 295                 300

Gly Val Ser Cys Ile Ser Ser Ser Asp Gly Ile Thr Tyr Tyr Val Asp
305                 310                 315                 320

Ser Val Lys 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 Thr Asp Ser Gly Gly Tyr Ile Asp Tyr Asp Cys Met Gly
        355                 360                 365

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

<210> 192
<211> 519
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 192

```
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

Phe Ala Leu Asp Tyr Tyr Ala Ile Gly Trp Phe Arg Gln Val Pro Gly
                165                 170                 175

Lys Glu Arg Glu Gly Val Ser Cys Ile Ser Ser Ser Asp Gly Ile Thr
            180                 185                 190

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

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

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

Asp Cys Met Gly Leu Gly Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val
                245                 250                 255

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln
            260                 265                 270
```

```
Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn Ser Leu Arg
        275                 280                 285

Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly Met Ser
    290                 295                 300

Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile
305                 310                 315                 320

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

Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met
            340                 345                 350

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

Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser
    370                 375                 380

Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser
385                 390                 395                 400

Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala
                405                 410                 415

Ala Ser Gly Phe Ala Leu Asp Tyr Tyr Ala Ile Gly Trp Phe Arg Gln
            420                 425                 430

Val Pro Gly Lys Glu Arg Glu Gly Val Ser Cys Ile Ser Ser Ser Asp
        435                 440                 445

Gly Ile Thr Tyr Tyr Val Asp Ser Val Lys Gly Arg Phe Thr Ile Ser
    450                 455                 460

Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys
465                 470                 475                 480

Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Asp Ser Gly Gly Tyr
                485                 490                 495

Ile Asp Tyr Asp Cys Met Gly Leu Gly Tyr Asp Tyr Trp Gly Gln Gly
            500                 505                 510

Thr Leu Val Thr Val Ser Ser
        515
```

<210> 193
<211> 525
<212> PRT

<213> Artificial

<220>
<223> Muttaed lama sequence

<400> 193

```
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 Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
145                 150                 155                 160

Phe Thr Leu Asp Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly
                165                 170                 175

Lys Glu Arg Glu Gly Val Ser Ser Ile Arg Asp Asn Asp Gly Ser Thr
            180                 185                 190

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

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

Thr Ala Val Tyr Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Phe
225                 230                 235                 240

Gly Glu Gln Trp Tyr Pro Leu Tyr Glu Tyr Asp Ala Trp Gly Gln Gly
```

245 250 255

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
260 265 270

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
275 280 285

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Asp Tyr
290 295 300

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val
305 310 315 320

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Asp Lys Asn Thr Val Tyr
340 345 350

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
355 360 365

Ala Ala Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro
370 375 380

Leu Tyr Glu Tyr Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser
385 390 395 400

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu
405 410 415

Ser Gly Gly Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys
420 425 430

Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg
435 440 445

Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser
450 455 460

Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile
465 470 475 480

Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu
485 490 495

Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu
500 505 510

Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser

515 520 525

<210> 194
<211> 525
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 194

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 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 Phe Thr Leu Asp
        275                 280                 285

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
    290                 295                 300

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

Ser Val Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Asp 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 Ala Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp
        355                 360                 365

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

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
385                 390                 395                 400

Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
                405                 410                 415

Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Asp Tyr Ala Ile Gly Trp
            420                 425                 430

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val Ser Ser Ile Arg
        435                 440                 445

Asp Asn Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
    450                 455                 460

Thr Ile Ser Ser Asp Asn Asp Lys Asn Thr Val Tyr Leu Gln Met Asn
465                 470                 475                 480

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Val Pro
                485                 490                 495
```

```
Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro Leu Tyr Glu Tyr
            500                 505                 510

Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        515                 520                 525
```

<210> 195
<211> 525
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 195

```
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 Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
145                 150                 155                 160

Phe Thr Leu Asp Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly
                165                 170                 175

Lys Glu Arg Glu Gly Val Ser Ser Ile Arg Asp Asn Asp Gly Ser Thr
            180                 185                 190

Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn
```

195 200 205

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

Thr Ala Val Tyr Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Phe
225 230 235 240

Gly Glu Gln Trp Tyr Pro Leu Tyr Glu Tyr Asp Ala Trp Gly Gln Gly
245 250 255

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
260 265 270

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
275 280 285

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe
290 295 300

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
305 310 315 320

Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val
325 330 335

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr
340 345 350

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
355 360 365

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
370 375 380

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
385 390 395 400

Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
405 410 415

Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Asp Tyr Ala Ile Gly Trp
420 425 430

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val Ser Ser Ile Arg
435 440 445

Asp Asn Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
450 455 460

Thr Ile Ser Ser Asp Asn Asp Lys Asn Thr Val Tyr Leu Gln Met Asn

465 470 475 480

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Val Pro
485 490 495

Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro Leu Tyr Glu Tyr
500 505 510

Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
515 520 525

<210> 196
<211> 515
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 196

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 Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
145 150 155 160

Phe Thr Phe Asp Asp Tyr Ala Leu Gly Trp Phe Arg Gln Ala Ala Gly
165 170 175

Lys Glu Arg Glu Gly Val Ser Cys Ile Arg Cys Ser Asp Gly Ser Thr
180 185 190

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

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

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

Glu Pro Tyr Glu Tyr Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val
245 250 255

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

Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser
275 280 285

Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr Ala Leu Gly Trp Phe
290 295 300

Arg Gln Ala Ala Gly Lys Glu Arg Glu Gly Val Ser Cys Ile Arg Cys
305 310 315 320

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

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

Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Ser Ile Val
355 360 365

Pro Arg Ser Lys Leu Glu Pro Tyr Glu Tyr Asp Ala Trp Gly Gln Gly
370 375 380

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
385 390 395 400

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
405 410 415

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe
420 425 430

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
435 440 445

Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val
450 455 460

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr
465 470 475 480

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
485 490 495

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
500 505 510

Val Ser Ser
515

<210> 197
<211> 515
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 197

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 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 Phe Thr Phe Asp
275 280 285

Asp Tyr Ala Leu Gly Trp Phe Arg Gln Ala Ala Gly Lys Glu Arg Glu
290 295 300

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

Ser Val Lys Gly Arg Phe Thr Ile Ser Ser 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 Ala Ser Ile Val Pro Arg Ser Lys Leu Glu Pro Tyr Glu
355 360 365

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

Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
385 390 395 400

Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser
405 410 415

Gly Phe Thr Phe Asp Asp Tyr Ala Leu Gly Trp Phe Arg Gln Ala Ala

420 425 430

Gly Lys Glu Arg Glu Gly Val Ser Cys Ile Arg Cys Ser Asp Gly Ser
435 440 445

Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Ser Asp
450 455 460

Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu
465 470 475 480

Asp Thr Ala Val Tyr Tyr Cys Ala Ala Ser Ile Val Pro Arg Ser Lys
485 490 495

Leu Glu Pro Tyr Glu Tyr Asp Ala Trp Gly Gln Gly Thr Leu Val Thr
500 505 510

Val Ser Ser
515

<210> 198
<211> 515
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 198

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 Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
145 150 155 160

Phe Thr Phe Asp Asp Tyr Ala Leu Gly Trp Phe Arg Gln Ala Ala Gly
165 170 175

Lys Glu Arg Glu Gly Val Ser Cys Ile Arg Cys Ser Asp Gly Ser Thr
180 185 190

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

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

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

Glu Pro Tyr Glu Tyr Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val
245 250 255

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

Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser
275 280 285

Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val
290 295 300

Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly
305 310 315 320

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

Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser
340 345 350

Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser
355 360 365

Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly
370 375 380

Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
385 390 395 400

Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser
405 410 415

Gly Phe Thr Phe Asp Asp Tyr Ala Leu Gly Trp Phe Arg Gln Ala Ala
420 425 430

Gly Lys Glu Arg Glu Gly Val Ser Cys Ile Arg Cys Ser Asp Gly Ser
435 440 445

Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Ser Asp
450 455 460

Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu
465 470 475 480

Asp Thr Ala Val Tyr Tyr Cys Ala Ala Ser Ile Val Pro Arg Ser Lys
485 490 495

Leu Glu Pro Tyr Glu Tyr Asp Ala Trp Gly Gln Gly Thr Leu Val Thr
500 505 510

Val Ser Ser
515

<210> 199
<211> 382
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 199

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 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 Phe Thr Phe Asp
275 280 285

Asp Tyr Ala Leu Gly Trp Phe Arg Gln Ala Ala Gly Lys Glu Arg Glu
290 295 300

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

Ser Val Lys Gly Arg Phe Thr Ile Ser Ser 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 Ala Ser Ile Val Pro Arg Ser Lys Leu Glu Pro Tyr Glu
355 360 365

Tyr Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser

370 375 380

<210> 200
<211> 387
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 200

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 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 Pro
260 265 270

Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Thr Leu Asp
275 280 285

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
290 295 300

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

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

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

Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Tyr Gly Glu Gln Trp
355 360 365

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

Val Ser Ser
385

<210> 201
<211> 387
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 201

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 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 Pro
260 265 270

Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Ile Thr Leu Asp
275 280 285

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
290 295 300

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

Ser Val Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ser Lys Asn Thr

325 330 335

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

Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Tyr Gly Glu Gln Trp
355 360 365

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

Val Ser Ser
385

<210> 202
<211> 387
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 202

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 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 Pro
            260                 265                 270

Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Thr Leu Asp
        275                 280                 285

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
    290                 295                 300

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

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

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

Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Tyr Gly Glu Gln Trp
        355                 360                 365

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

Val Ser Ser
385
```

<210> 203
<211> 387
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 203

```
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 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 Pro
```

260 265 270

Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Thr Leu Asp
275 280 285

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
290 295 300

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

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

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

Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Tyr Gly Glu Gln Trp
355 360 365

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

Val Ser Ser
385

<210> 204
<211> 387
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 204

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 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 Pro
260 265 270

Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Thr Leu Asp
275 280 285

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
290 295 300

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

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

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

Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Tyr Gly Glu Gln Trp
355 360 365

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

Val Ser Ser
385

<210> 205
<211> 387
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 205

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 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 Pro
260 265 270

Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Ile Thr Leu Asp
275 280 285

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
290 295 300

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

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

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

Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Tyr Gly Glu Gln Trp
355 360 365

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

Val Ser Ser
385

<210> 206
<211> 387
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 206

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 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 Pro
260 265 270

Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Ile Thr Leu Asp
275 280 285

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
290 295 300

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

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

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

Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Tyr Gly Glu Gln Trp
355 360 365

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

Val Ser Ser
385

<210> 207
<211> 387
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 207

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 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 Pro
260 265 270

Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Ile Thr Leu Asp
275 280 285

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
290 295 300

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

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

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

Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Tyr Gly Glu Gln Trp
355 360 365

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

Val Ser Ser
385

<210> 208

<211> 525
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 208

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 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

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Gln Gly Thr Leu Val Thr Val Ser Ser 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 Leu Asp
        275                 280                 285

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
    290                 295                 300

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

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

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

Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp
        355                 360                 365

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

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
385                 390                 395                 400

Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu
                405                 410                 415

Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Asp Tyr Ala Ile Gly Trp
            420                 425                 430

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val Ser Ala Ile Arg
        435                 440                 445

Asp Asn Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
    450                 455                 460

Thr Ile Ser Ser Asp Asn Ser Lys Asn Thr Val Tyr Leu Gln Met Asn
465                 470                 475                 480

Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Val Pro
                485                 490                 495

Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro Leu Tyr Glu Tyr
            500                 505                 510
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Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
515 520 525

<210> 209
<211> 525
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 209

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

Phe Thr Leu Asp Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly
165 170 175

Lys Glu Arg Glu Gly Val Ser Ala Ile Arg Asp Asn Gly Gly Ser Thr
180 185 190

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

Ser Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp

210 215 220

Thr Ala Val Tyr Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Phe
225 230 235 240

Gly Glu Gln Trp Tyr Pro Leu Tyr Glu Tyr Asp Ala Trp Gly Gln Gly
245 250 255

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
260 265 270

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
275 280 285

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Asp Tyr
290 295 300

Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val
305 310 315 320

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ser Lys Asn Thr Val Tyr
340 345 350

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
355 360 365

Ala Ala Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro
370 375 380

Leu Tyr Glu Tyr Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser
385 390 395 400

Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu
405 410 415

Ser Gly Gly Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys
420 425 430

Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg
435 440 445

Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser
450 455 460

Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile
465 470 475 480

Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu

485 490 495

Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu
500 505 510

Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser
515 520 525

<210> 210
<211> 515
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 210

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 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 Pro
            260                 265                 270

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

Asp Tyr Ala Leu Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
    290                 295                 300

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

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

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

Tyr Cys Ala Ala Ser Ile Val Pro Arg Ser Lys Leu Glu Pro Tyr Glu
        355                 360                 365

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

Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
385                 390                 395                 400

Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser
                405                 410                 415

Gly Phe Thr Phe Asp Asp Tyr Ala Leu Gly Trp Phe Arg Gln Ala Pro
            420                 425                 430

Gly Lys Glu Arg Glu Gly Val Ser Cys Ile Arg Cys Ser Gly Gly Ser
        435                 440                 445

Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Ser Asp
    450                 455                 460
```

Asn Ser Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
465 470 475 480

Asp Thr Ala Val Tyr Tyr Cys Ala Ala Ser Ile Val Pro Arg Ser Lys
485 490 495

Leu Glu Pro Tyr Glu Tyr Asp Ala Trp Gly Gln Gly Thr Leu Val Thr
500 505 510

Val Ser Ser
515

<210> 211
<211> 515
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 211

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

Phe Thr Phe Asp Asp Tyr Ala Leu Gly Trp Phe Arg Gln Ala Pro Gly

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                165                 170                 175

Lys Glu Arg Glu Gly Val Ser Cys Ile Arg Cys Ser Gly Gly Ser Thr
            180                 185                 190

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

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

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

Glu Pro Tyr Glu Tyr Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val
                245                 250                 255

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

Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser
        275                 280                 285

Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr Ala Leu Gly Trp Phe
    290                 295                 300

Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val Ser Cys Ile Arg Cys
305                 310                 315                 320

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

Ile Ser Ser Asp Asn Ser Lys Asn Thr Val Tyr Leu Gln Met Asn Ser
            340                 345                 350

Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Ser Ile Val
        355                 360                 365

Pro Arg Ser Lys Leu Glu Pro Tyr Glu Tyr Asp Ala Trp Gly Gln Gly
    370                 375                 380

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
385                 390                 395                 400

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
                405                 410                 415

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe
            420                 425                 430

Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
```

435 440 445

Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val
450 455 460

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr
465 470 475 480

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
485 490 495

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
500 505 510

Val Ser Ser
515

<210> 212
<211> 384
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 212

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 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 Pro
            260                 265                 270

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

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

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

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

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

Tyr Cys Ala Thr Asp Ser Gly Gly Tyr Ile Asp Tyr Asp Cys Ser Gly
        355                 360                 365

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

<210> 213
<211> 525
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 213

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 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 Pro

260 265 270

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

Asp Tyr Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu
290 295 300

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

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

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

Tyr Cys Ala Ala Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp
355 360 365

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

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
385 390 395 400

Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu
405 410 415

Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Asp Tyr Ala Ile Gly Trp
420 425 430

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val Ser Ala Ile Arg
435 440 445

Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
450 455 460

Thr Ile Ser Ser Asp Asn Ser Lys Asn Thr Val Tyr Leu Gln Met Asn
465 470 475 480

Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Val Pro
485 490 495

Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro Leu Tyr Glu Tyr
500 505 510

Asp Ala Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
515 520 525

<210> 214

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

<400> 214

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

Ser Cys Ile Arg Cys 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 Ala Ser Ile Val Pro Arg Ser Lys Leu Glu Pro Tyr Glu Tyr Asp
100 105 110

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

<210> 215
<211> 126
<212> PRT
<213> Lama glama

<400> 215

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 Ala Leu Asp Tyr Tyr
20 25 30

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

Ser Cys Ile Ser Ser Ser Asp Gly Ile Thr Tyr Tyr Val 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 Asp Ser Gly Gly Tyr Ile Asp Tyr Asp Cys Met Gly Leu Gly
100 105 110

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

<210> 216
<211> 129
<212> PRT
<213> Lama glama

<400> 216

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 Leu 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 Arg Asp Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Asp 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 Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro
100 105 110

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

Ser

<210> 217
<211> 129
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 217

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ser 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 Ala Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro
            100                 105                 110

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

Ser
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<210> 218
<211> 124
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 218

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

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ser 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 Ala Ser Ile Val Pro Arg Ser Lys Leu Glu Pro Tyr Glu Tyr Asp
            100                 105                 110
```

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

<210> 219
<211> 126
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 219

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser 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 Thr Asp Ser Gly Gly Tyr Ile Asp Tyr Asp Cys Met Gly Leu Gly
100 105 110

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

<210> 220
<211> 124
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 220

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

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ser 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 Ala Ser Ile Val Pro Arg Ser Lys Leu Glu Pro Tyr Glu Tyr Asp
100 105 110

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

<210> 221
<211> 126
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 221

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser 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 Thr Asp Ser Gly Gly Tyr Ile Asp Tyr Asp Cys Ser Gly Leu Gly
100 105 110

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

<210> 222
<211> 129
<212> PRT
<213> Artificial

<220>

<223> Mutated lama sequence

<400> 222

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ser 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 Ala Val Pro Ala Gly Arg Leu Arg Tyr Gly Glu Gln Trp Tyr Pro
            100                 105                 110

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

Ser
```

<210> 223
<211> 129
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 223

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

Lys Gly Arg Phe Thr Ile Ser Ser Asp Asn Ser 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 Ala Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro
            100                 105                 110

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

Ser
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<210> 224
<211> 5
<212> PRT
<213> Lama glama

<400> 224

```
Asp Tyr Ala Leu Gly
1               5
```

<210> 225
<211> 17
<212> PRT
<213> Lama glama

<400> 225

```
Cys Ile Arg Cys Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1               5                   10                  15

Gly
```

<210> 226
<211> 15
<212> PRT
<213> Lama glama

<400> 226

```
Ser Ile Val Pro Arg Ser Lys Leu Glu Pro Tyr Glu Tyr Asp Ala
1               5                   10                  15
```

<210> 227
<211> 5
<212> PRT
<213> Lama glama

<400> 227

```
Tyr Tyr Ala Ile Gly
1               5
```

<210> 228
<211> 17
<212> PRT

<213> Lama glama

<400> 228

Cys Ile Ser Ser Ser Asp Gly Ile Thr Tyr Tyr Val Asp Ser Val Lys
1 5 10 15

Gly

<210> 229
<211> 17
<212> PRT
<213> Lama glama

<400> 229

Asp Ser Gly Gly Tyr Ile Asp Tyr Asp Cys Met Gly Leu Gly Tyr Asp
1 5 10 15

Tyr

<210> 230
<211> 5
<212> PRT
<213> Lama glama

<400> 230

Asp Tyr Ala Ile Gly
1 5

<210> 231
<211> 17
<212> PRT
<213> Lama glama

<400> 231

Cys Ile Arg Asp Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 232
<211> 20
<212> PRT
<213> Lama glama

<400> 232

Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro Leu Tyr
1 5 10 15

Glu Tyr Asp Ala
20

<210> 233
<211> 5
<212> PRT
<213> Lama glama

<400> 233

Asp Tyr Ala Ile Gly
1 5

<210> 234
<211> 17
<212> PRT
<213> Lama glama

<400> 234

Ser Ile Arg Asp Asn Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 235
<211> 20
<212> PRT
<213> Lama glama

<400> 235

Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro Leu Tyr
1 5 10 15

Glu Tyr Asp Ala
20

<210> 236
<211> 5
<212> PRT
<213> Lama glama

<400> 236

Asp Tyr Ala Leu Gly
1 5

<210> 237
<211> 17
<212> PRT
<213> Lama glama

<400> 237

Cys Ile Arg Cys Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 238

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

<400> 238

Ser Ile Val Pro Arg Ser Lys Leu Glu Pro Tyr Glu Tyr Asp Ala
1 5 10 15

<210> 239
<211> 5
<212> PRT
<213> Lama glama

<400> 239

Tyr Tyr Ala Ile Gly
1 5

<210> 240
<211> 17
<212> PRT
<213> Lama glama

<400> 240

Cys Ile Ser Ser Ser Asp Gly Ile Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 241
<211> 17
<212> PRT
<213> Lama glama

<400> 241

Asp Ser Gly Gly Tyr Ile Asp Tyr Asp Cys Met Gly Leu Gly Tyr Asp
1 5 10 15

Tyr

<210> 242
<211> 5
<212> PRT
<213> Lama glama

<400> 242

Asp Tyr Ala Leu Gly
1 5

<210> 243
<211> 17
<212> PRT
<213> Lama glama

<400> 243

Cys Ile Arg Cys Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 244
<211> 15
<212> PRT
<213> Lama glama

<400> 244

Ser Ile Val Pro Arg Ser Lys Leu Glu Pro Tyr Glu Tyr Asp Ala
1 5 10 15

<210> 245
<211> 5
<212> PRT
<213> Lama glama

<400> 245

Tyr Tyr Ala Ile Gly
1 5

<210> 246
<211> 17
<212> PRT
<213> Lama glama

<400> 246

Cys Ile Ser Ser Ser Gly Gly Ile Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 247
<211> 17
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 247

Asp Ser Gly Gly Tyr Ile Asp Tyr Asp Cys Ser Gly Leu Gly Tyr Asp
1 5 10 15

Tyr

<210> 248
<211> 5
<212> PRT
<213> Lama glama

<400> 248

Asp Tyr Ala Ile Gly
1 5

<210> 249
<211> 17
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 249

Ala Ile Arg Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 250
<211> 20
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 250

Val Pro Ala Gly Arg Leu Arg Tyr Gly Glu Gln Trp Tyr Pro Ile Tyr
1 5 10 15

Glu Tyr Asp Ala
20

<210> 251
<211> 5
<212> PRT
<213> Lama glama

<400> 251

Asp Tyr Ala Ile Gly
1 5

<210> 252
<211> 17
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 252

Ala Ile Arg Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 253
<211> 20
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 253

Val Pro Ala Gly Arg Leu Arg Phe Gly Glu Gln Trp Tyr Pro Leu Tyr
1 5 10 15

Glu Tyr Asp Ala
20

<210> 254
<211> 115
<212> PRT
<213> Artificial

<220>
<223> Mutated lama sequence

<400> 254

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> 255
<211> 5
<212> PRT
<213> Lama glama

<400> 255

Ser Phe Gly Met Ser
1 5

<210> 256
<211> 17
<212> PRT
<213> Lama glama

<400> 256

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

Gly

<210> 257
<211> 6
<212> PRT
<213> Lama glama

<400> 257

Gly Gly Ser Leu Ser Arg
1 5

<210> 258
<211> 5
<212> PRT
<213> Lama glama

<400> 258

Leu Asn Leu Met Gly
1 5

<210> 259
<211> 16
<212> PRT
<213> Lama glama

<400> 259

Thr Ile Thr Val Gly Asp Ser Thr Asn Tyr Ala Asp Ser Val Lys Gly
1 5 10 15

<210> 260
<211> 8
<212> PRT
<213> Lama glama

<400> 260

Arg Arg Thr Trp His Ser Glu Leu
1 5

<210> 261
<211> 5

<212> PRT
<213> Lama glama

<400> 261

Ile Asn Leu Leu Gly
1 5

<210> 262
<211> 16
<212> PRT
<213> Lama glama

<400> 262

Thr Ile Thr Val Gly Asp Ser Thr Ser Tyr Ala Asp Ser Val Lys Gly
1 5 10 15

<210> 263
<211> 8
<212> PRT
<213> Lama glama

<400> 263

Arg Arg Thr Trp His Ser Glu Leu
1 5

<210> 264
<211> 5
<212> PRT
<213> Lama glama

<400> 264

Ser Phe Gly Met Ser
1 5

<210> 265
<211> 17
<212> PRT
<213> Lama glama

<400> 265

Ser Ile Asn Gly Arg Gly Asp Asp Thr Arg Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 266
<211> 7
<212> PRT
<213> Lama glama

<400> 266

Gly Arg Ser Val Ser Arg Ser
1 5

<210> 267
<211> 5
<212> PRT
<213> Lama glama

<400> 267

Ser Phe Gly Met Ser
1 5

<210> 268
<211> 17
<212> PRT
<213> Lama glama

<400> 268

Ala Ile Ser Ala Asp Ser Ser Asp Lys Arg Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 269
<211> 5
<212> PRT
<213> Lama glama

<400> 269

Gly Arg Gly Ser Pro
1 5

<210> 270
<211> 5
<212> PRT
<213> Lama glama

<400> 270

Ser Phe Gly Met Ser
1 5

<210> 271
<211> 17
<212> PRT
<213> Lama glama

<400> 271

Ala Ile Ser Ala Asp Ser Ser Asp Lys Arg Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 272
<211> 5
<212> PRT
<213> Lama glama

<400> 272

Gly Arg Gly Ser Pro
1 5

<210> 273
<211> 5
<212> PRT
<213> Lama glama

<400> 273

Asn Tyr Trp Met Tyr
1 5

<210> 274
<211> 17
<212> PRT
<213> Lama glama

<400> 274

Arg Ile Ser Thr Gly Gly Gly Tyr Ser Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

<210> 275
<211> 13
<212> PRT
<213> Lama glama

<400> 275

Asp Arg Glu Ala Gln Val Asp Thr Leu Asp Phe Asp Tyr
1 5 10