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<110> Molecular Partners AG
Baumann, Michael

<120> Designed ankyrin repeat proteins binding to platelet-derived growth factor

<130> P2414

<150> EP12174020
<151> 2012-06-28

<160> 65

<170> PatentIn version 3.5

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1 5 10 15

Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
20 25 30

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Asp Asp Glu Val Arg Ile Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
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<400> 3

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Asp Asp Glu Val Arg Glu Leu Leu Lys Ala Gly Ala Asp Val Asn Ala

20 25 30

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Gln Asp Lys Phe Gly Lys Thr Ala Phe Asp Ile Ser Ile Asp Asn Gly
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Asn Glu Asp Leu Ala Glu Ile Leu Gln Lys Leu Asn
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Gln Asp Lys Phe Gly Lys Thr Pro Phe Asp Leu Ala Ile Arg Glu Gly
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His Glu Asp Ile Ala Glu Val Leu Gln Lys Ala Ala
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Asn Glu Asp Ile Ala Glu Val Leu Gln Lys Ala Ala
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<400> 7

Gln Asp Lys Ser Gly Lys Thr Pro Ala Asp Leu Ala Ala Asp Ala Gly

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His Glu Asp Ile Ala Glu Val Leu Gln Lys Ala Ala
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<400> 8

Gln Asp Lys Phe Gly Lys Thr Pro Ala Asp Ile Ala Ala Asp Asn Gly
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His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
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Met Arg Gly Ser His His His His His His
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Gly Gly Gly Ser
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Pro Thr Pro Thr Pro Thr Thr Pro Thr Pro Thr Pro Thr Thr Pro Thr

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Pro Thr Pro Thr
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His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
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Ala

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<400> 13

Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Val Gly
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His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
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<400> 14

Lys Asp Lys Ser Gly His Thr Pro Leu His Leu Ala Ala Tyr Ser Gly
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His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
20 25 30

Ala

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<400> 15

Lys Asp Gln Glu Gly Thr Thr Pro Leu His Phe Ala Ala Ser Val Gly
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His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
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Ala

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<400> 16

Gln Asp His Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Ile Gly
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His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
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<400> 17

Lys Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
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His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
20 25 30

Ala

<210> 18
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<400> 18

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

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
20 25 30

Ala

<210> 19
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<400> 19

Lys Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr Phe Gly
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His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
20 25 30

Ala

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Xaa Asp Xaa Xaa Gly Xaa Thr Pro Leu His Leu Ala Ala Xaa Xaa Gly
1 5 10 15

His Leu Glu Ile Val Glu Val Leu Leu Lys Xaa Gly Ala Asp Val Asn
20 25 30

Ala

<210> 21
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<400> 21

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
20 25 30

Thr Asp Asn Asp Gly Tyr Thr Pro Leu His Leu Ala Ala Ser Asn Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Asn Gly Ala Asp Val Asn
50 55 60

Ala Ser Asp Leu Thr Gly Ile Thr Pro Leu His Leu Ala Ala Ala Thr
65 70 75 80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys His Gly Ala Asp Val
85 90 95

Asn Ala Tyr Asp Asn Asp Gly His Thr Pro Leu His Leu Ala Ala Lys
100 105 110

Tyr Gly His Leu Glu Ile Val Glu Val Leu Leu Lys His Gly Ala Asp
115 120 125

Val Asn Ala Gln Asp Lys Phe Gly Lys Thr Ala Phe Asp Ile Ser Ile
130 135 140

Asp Asn Gly Asn Glu Asp Leu Ala Glu Ile Leu Gln Lys Leu Asn
145 150 155

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<400> 22

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Lys Asp Gly Tyr Thr Pro Leu His Leu Ala Ala Arg Glu Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
50 55 60

Ala Lys Asp Lys Asp Gly Tyr Thr Pro Leu His Leu Ala Ala Arg Glu
65 70 75 80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
85 90 95

Asn Ala Gln Asp Lys Phe Gly Lys Thr Ala Phe Asp Ile Ser Ile Asp
100 105 110

Asn Gly Asn Glu Asp Leu Ala Glu Ile Leu Gln Lys Leu Asn
115 120 125

<210> 23
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<212> PRT
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<220>
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<400> 23

Gly Ser Asp Leu Gly Trp Lys Leu Leu Gln Ala Ala Lys Phe Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Glu Glu Gly Thr Thr Pro Leu His Tyr Ala Ala Val Trp Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
50 55 60

Ala Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Val
65 70 75 80

Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
85 90

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<400> 24

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Glu Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Glu Glu Gly Thr Thr Pro Leu His Tyr Ala Ala Val Trp Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
50 55 60

Ala Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Val
65 70 75 80

Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
85 90

<210> 25
<211> 93
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<400> 25

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Glu Glu Gly Thr Thr Pro Leu His Tyr Ala Ala Val Trp Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
50 55 60

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Ala Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Val
65                  70                  75                  80


Gly His Glu Asp Ile Ala Glu Ile Leu Gln Lys Leu Asn
                85                  90


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<400>  26

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
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Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30


Lys Asp Glu Glu Gly Thr Thr Pro Leu His Tyr Ala Ala Val Trp Gly
        35                  40                  45


His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60


Ala Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Val
65                  70                  75                  80


Gly His Glu Asp Ile Ala Glu Ile Leu Gln Lys Leu Asn
                85                  90


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<400>  27

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1               5                   10                  15


Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30


Lys Asp Glu Glu Gly Thr Thr Pro Leu His Tyr Ala Ala Val Trp Gly
        35                  40                  45


His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60
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Ala Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Val
65                  70                  75                  80


Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
                85                  90


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<400>  28

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1               5                   10                  15


Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
            20                  25                  30


Lys Asp Glu Glu Gly Thr Thr Pro Leu His Tyr Ala Ala Val Trp Gly
        35                  40                  45


His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60


Ala Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Val
65                  70                  75                  80


Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
                85                  90


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<400>  29

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1               5                   10                  15


Asp Asp Glu Val Arg Ile Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
            20                  25                  30


Lys Asp Glu Glu Gly Thr Thr Pro Leu His Tyr Ala Ala Val Trp Gly
        35                  40                  45


His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60
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Ala Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Val
65 70 75 80

Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
85 90

<210> 30
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<400> 30

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Glu Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Glu Glu Gly Thr Thr Pro Leu His Tyr Ala Ala Val Tyr Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
50 55 60

Ala Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Val
65 70 75 80

Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
85 90

<210> 31
<211> 93
<212> PRT
<213> Artificial sequence

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<400> 31

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Glu Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Glu Glu Gly Thr Thr Pro Leu His Tyr Ala Ala Val Phe Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
50 55 60

```
Ala Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Val
65                  70                  75                  80


Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
                85                  90


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<400>  32

Gly Ser Asp Leu Gly His Lys Leu Leu Gln Ala Ala Lys His Gly Gln
1               5                   10                  15


Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30


Lys Asp Asp Glu Gly Thr Thr Pro Leu His Tyr Ala Ala Val Trp Gly
        35                  40                  45


His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60


Ala Gln Asp Ala Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Phe Leu
65                  70                  75                  80


Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
                85                  90


<210>  33
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<400>  33

Gly Ser Asp Leu Gly His Lys Leu Leu Gln Ala Ala Glu Gln Gly Gln
1               5                   10                  15


Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30


Lys Asp Glu Tyr Gly Thr Thr Pro Leu His Phe Ala Ala Val Trp Gly
        35                  40                  45


His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60
```

```
Ala Gln Asp Val Phe Gly Ala Thr Pro Ala Asp Leu Ala Ala Tyr Val
65                  70                  75                  80


Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
                85                  90


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<400>  34

Gly Ser Asp Leu Gly Asp Lys Leu Leu Gln Ser Asp Leu Gly Arg Lys
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Leu Leu His Ala Ala Arg Ser Gly Gln Asp Asp Glu Val Arg Ile Leu
            20                  25                  30


Leu Ala Ala Gly Ala Asp Val Asn Ala Lys Asp Glu Asp Gly Thr Thr
        35                  40                  45


Pro Leu His Tyr Ala Ala Ala Trp Gly His Leu Glu Ile Val Glu Val
    50                  55                  60


Leu Leu Lys Ala Gly Ala Asp Val Asn Ala Gln Asp Ile Tyr Gly Ala
65                  70                  75                  80


Thr Pro Ala Asp Leu Ala Ala Tyr Ile Gly His Glu Asp Ile Ala Glu
                85                  90                  95


Val Leu Gln Lys Leu Asn
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<400>  35

Gly Ser Asp Leu Gly Gln Lys Leu Leu Tyr Ala Ala Glu His Gly Gln
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Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30


Lys Asp Gln Thr Gly Ser Thr Pro Leu His Tyr Ala Ala Val Trp Gly
        35                  40                  45
```

```
His Met Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Gln Asp Leu Trp Gly Ala Thr Pro Ala Asp Leu Ala Ala Phe Leu
65                  70                  75                  80

Gly His Glu Asp Ile Ala Val Val Leu Gln Lys Leu Asn
                85                  90
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<400> 36

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

Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30

Lys Asp Glu Glu Gly Thr Thr Pro Leu His Tyr Ala Ala Val Val Gly
        35                  40                  45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Gln Asp Ile Trp Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Val
65                  70                  75                  80

Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
                85                  90
```

<210> 37
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<400> 37

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Gly Ser Asp Leu Gly Trp Lys Leu Leu Glu Ala Ala Arg Thr Gly Gln
1               5                   10                  15

Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30

Lys Asp Ile Thr Gly Thr Thr Pro Leu His Tyr Ala Ala Ala Trp Gly
        35                  40                  45
```

```
His Met Glu Ile Val Glu Val Leu Leu Lys Thr Gly Ala Asp Val Asn
    50                  55                  60

Ala Gln Asp Leu Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Leu
65                  70                  75                  80

Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
                85                  90
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<400> 38

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Gly Ser Asp Leu Gly Asp Lys Leu Leu Trp Ala Ala Lys His Gly Gln
1               5                   10                  15

Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30

Lys Asp Asp Glu Gly Ser Thr Pro Leu His Tyr Ala Ala Val Trp Gly
        35                  40                  45

His Leu Glu Thr Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Gln Asp Ile Trp Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Leu
65                  70                  75                  80

Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
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<210> 39
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<400> 39

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Gly Ser Asp Leu Gly Asn Lys Leu Leu Ser Ala Ala Arg Leu Gly Gln
1               5                   10                  15

Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30

Lys Asp Trp Asp Gly Ser Thr Pro Leu His Tyr Ala Ala Val Trp Gly
        35                  40                  45
```

```
His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Gln Asp Leu Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Ile
65                  70                  75                  80

Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
                85                  90
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<400> 40

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

Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30

Lys Asp Tyr Ser Gly Thr Thr Pro Leu His Tyr Ala Ala Thr Trp Gly
        35                  40                  45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Ile
65                  70                  75                  80

Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
                85                  90
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<400> 41

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Gly Ser Asp Leu Gly Arg Lys Leu Leu Tyr Ala Ala Trp Ala Gly Gln
1               5                   10                  15

Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Val Asp Val Asn Ala
            20                  25                  30

Lys Asp Trp Thr Gly Phe Thr Pro Leu His Tyr Ala Ala Tyr Lys Gly
        35                  40                  45
```

```
His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Gln Asp Ala Trp Gly Ala Thr Pro Ala Asp Leu Ala Ala Phe Val
65                  70                  75                  80

Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
                85                  90
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<400> 42

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

Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30

Lys Asp Arg His Gly Arg Thr Pro Leu His Leu Ala Ala Trp Glu Gly
        35                  40                  45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Lys Asp Asp Glu Gly Thr Thr Pro Leu His Leu Leu Ala Ala Trp
65                  70                  75                  80

Glu Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp
                85                  90                  95

Val Asn Ala Gln Asp Val Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala
            100                 105                 110

Tyr Ile Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
        115                 120                 125
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<210> 43
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<400> 43

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

```
Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30

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

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Lys Asp Tyr Thr Gly Leu Thr Pro Leu His Val Ala Ala Val Trp
65                  70                  75                  80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
                85                  90                  95

Asn Ala Gln Asp Ile Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Tyr
            100                 105                 110

Ile Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
        115                 120                 125
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<210> 44
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<400> 44

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Gly Ser Asp Leu Gly Ala Lys Leu Leu His Ala Ala Val Val Gly Gln
1               5                   10                  15

Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30

Lys Asp Lys Ser Gly His Thr Pro Leu His Leu Ala Ala Tyr Ser Gly
        35                  40                  45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Lys Asp Gln Glu Gly Thr Thr Pro Leu His Phe Ala Ala Ser Val
65                  70                  75                  80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
                85                  90                  95

Asn Ala Gln Asp His Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu
            100                 105                 110

Ile Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
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115 120 125

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<223> Synthetic construct

<400> 45

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Glu Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Lys Ser Gly His Thr Pro Leu His Leu Ala Ala Tyr Ser Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
50 55 60

Ala Lys Asp Gln Glu Gly Thr Thr Pro Leu His Phe Ala Ala Ser Val
65 70 75 80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
85 90 95

Asn Ala Gln Asp His Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu
100 105 110

Ile Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
115 120 125

<210> 46
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 46

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Lys Ser Gly His Thr Pro Leu His Leu Ala Ala Tyr Ser Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn

50 55 60

Ala Lys Asp Gln Glu Gly Thr Thr Pro Leu His Phe Ala Ala Ser Val
65 70 75 80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
85 90 95

Asn Ala Gln Asp His Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu
100 105 110

Ile Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
115 120 125

<210> 47
<211> 126
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 47

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Ile Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Lys Ser Gly His Thr Pro Leu His Leu Ala Ala Tyr Ser Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
50 55 60

Ala Lys Asp Gln Glu Gly Thr Thr Pro Leu His Phe Ala Ala Ser Val
65 70 75 80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
85 90 95

Asn Ala Gln Asp His Tyr Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu
100 105 110

Ile Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
115 120 125

<210> 48
<211> 93
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 48

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

Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
            20                  25                  30

Lys Asp Ala Asp Gly Glu Thr Pro Leu His Tyr Ala Ala Val Trp Gly
        35                  40                  45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Gln Asp Ile Trp Gly Ala Thr Pro Ala Asp Leu Ala Ala Leu Ile
65                  70                  75                  80

Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
                85                  90
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<210> 49
<211> 159
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 49

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

Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
            20                  25                  30

Gln Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
        35                  40                  45

His Leu Glu Ile Val Glu Val Leu Leu Lys His Gly Ala Asp Val Asn
    50                  55                  60

Ala Gln Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
65                  70                  75                  80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Asn Gly Ala Asp Val
                85                  90                  95

Asn Ala Asn Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
            100                 105                 110

Phe Gly His Leu Glu Ile Val Asp Val Leu Leu Lys His Gly Ala Asp
        115                 120                 125
```

Val Asn Ala Gln Asp Lys Phe Gly Lys Thr Ala Phe Asp Ile Ser Ile
130 135 140

Asp Asn Gly Asn Glu Asp Leu Ala Glu Ile Leu Gln Lys Leu Asn
145 150 155

<210> 50
<211> 159
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 50

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Glu Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
50 55 60

Ala Lys Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
65 70 75 80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
85 90 95

Asn Ala Lys Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
100 105 110

Phe Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp
115 120 125

Val Asn Ala Gln Asp Lys Phe Gly Lys Thr Ala Phe Asp Ile Ser Ile
130 135 140

Asp Asn Gly Asn Glu Asp Leu Ala Glu Ile Leu Gln Lys Leu Asn
145 150 155

<210> 51
<211> 159
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 51

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


Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
            20                  25                  30


Lys Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
        35                  40                  45


His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60


Ala Lys Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
65                  70                  75                  80


Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
                85                  90                  95


Asn Ala Lys Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
            100                 105                 110


Phe Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp
        115                 120                 125


Val Asn Ala Gln Asp Lys Phe Gly Lys Thr Ala Phe Asp Ile Ser Ile
    130                 135                 140


Asp Asn Gly Asn Glu Asp Leu Ala Glu Ile Leu Gln Lys Leu Asn
145                 150                 155


<210>  52
<211>  159
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic construct

<400>  52

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1               5                   10                  15


Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
            20                  25                  30


Gln Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
        35                  40                  45


His Leu Glu Ile Val Glu Val Leu Leu Lys His Gly Ala Asp Val Asn
    50                  55                  60


Ala Gln Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
```

65 70 75 80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Asn Gly Ala Asp Val
85 90 95

Asn Ala Asn Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
100 105 110

Phe Gly His Leu Glu Ile Val Asp Val Leu Leu Lys His Gly Ala Asp
115 120 125

Val Asn Ala Gln Asp Lys Phe Gly Lys Thr Pro Ala Asp Ile Ala Ala
130 135 140

Asp Asn Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
145 150 155

<210> 53
<211> 159
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 53

Gly Ser Asp Leu Asp Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
50 55 60

Ala Lys Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
65 70 75 80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
85 90 95

Asn Ala Lys Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
100 105 110

Phe Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp
115 120 125

Val Asn Ala Gln Asp Lys Phe Gly Lys Thr Pro Ala Asp Ile Ala Ala
130 135 140

```
Asp Asn Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
145                 150                 155


<210>  54
<211>  159
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic construct

<400>  54

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1               5                   10                  15


Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
            20                  25                  30


Lys Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
        35                  40                  45


His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60


Ala Lys Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
65                  70                  75                  80


Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
                85                  90                  95


Asn Ala Lys Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
            100                 105                 110


Phe Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp
        115                 120                 125


Val Asn Ala Gln Asp Lys Ser Gly Lys Thr Pro Ala Asp Leu Ala Ala
    130                 135                 140


Asp Ala Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
145                 150                 155


<210>  55
<211>  159
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic construct

<400>  55

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

```
Asp Asp Glu Val Arg Ile Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
            20                  25                  30

Lys Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
        35                  40                  45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Lys Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
65                  70                  75                  80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
                85                  90                  95

Asn Ala Lys Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
            100                 105                 110

Phe Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp
        115                 120                 125

Val Asn Ala Gln Asp Lys Phe Gly Lys Thr Ala Phe Asp Ile Ser Ile
    130                 135                 140

Asp Asn Gly Asn Glu Asp Leu Ala Glu Ile Leu Gln Lys Leu Asn
145                 150                 155


<210>  56
<211>  159
<212>  PRT
<213>  Artificial sequence

<220>
<223>  Synthetic construct

<400>  56

Gly Ser Asp Leu Asp Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1               5                   10                  15

Asp Asp Glu Val Arg Ile Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
            20                  25                  30

Lys Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
        35                  40                  45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60

Ala Lys Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
65                  70                  75                  80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
```

85 90 95

Asn Ala Lys Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
100 105 110

Phe Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp
115 120 125

Val Asn Ala Gln Asp Lys Phe Gly Lys Thr Pro Ala Asp Ile Ala Ala
130 135 140

Asp Asn Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
145 150 155

<210> 57
<211> 159
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 57

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Ile Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
20 25 30

Lys Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
50 55 60

Ala Lys Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
65 70 75 80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
85 90 95

Asn Ala Lys Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
100 105 110

Phe Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp
115 120 125

Val Asn Ala Gln Asp Lys Ser Gly Lys Thr Pro Ala Asp Leu Ala Ala
130 135 140

Asp Ala Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
145 150 155

<210> 58
<211> 159
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 58

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


Asp Asp Glu Val Arg Glu Leu Leu Lys Ala Gly Ala Asp Val Asn Ala
            20                  25                  30


Lys Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
        35                  40                  45


His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
    50                  55                  60


Ala Lys Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
65                  70                  75                  80


Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val
                85                  90                  95


Asn Ala Lys Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
            100                 105                 110


Phe Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp
        115                 120                 125


Val Asn Ala Gln Asp Lys Ser Gly Lys Thr Pro Ala Asp Leu Ala Ala
    130                 135                 140


Asp Ala Gly His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
145                 150                 155
```

<210> 59
<211> 159
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 59

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


Gly Asp Glu Val His Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
            20                  25                  30
```

```
Gln Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
        35                  40                  45

His Leu Glu Ile Val Glu Val Leu Leu Lys His Gly Ala Asp Val Asn
    50                  55                  60

Ala Gln Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
65                  70                  75                  80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Asn Gly Ala Asp Val
                85                  90                  95

Asn Ala Asn Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
            100                 105                 110

Phe Gly His Leu Glu Ile Val Glu Val Leu Leu Lys His Gly Ala Asp
        115                 120                 125

Val Asn Ala Gln Asp Lys Phe Gly Lys Thr Ala Phe Asp Ile Ser Ile
    130                 135                 140

Asp Asn Gly Asn Glu Asp Leu Ala Glu Ile Leu Gln Lys Leu Asn
145                 150                 155
```

<210> 60
<211> 159
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 60

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

Asp Asp Glu Val His Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
            20                  25                  30

Ile Asp Asn Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
        35                  40                  45

His Leu Glu Ile Val Glu Val Leu Leu Lys His Gly Ala Asp Val Asn
    50                  55                  60

Ala Gln Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala His Val
65                  70                  75                  80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Tyr Gly Ala Asp Val
                85                  90                  95

Asn Ala Asn Asp Tyr Phe Gly Phe Thr Pro Leu His Leu Thr Thr Tyr
```

100 105 110

Phe Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Tyr Gly Ala Asp
115 120 125

Val Asn Ala Gln Asp Lys Phe Gly Lys Thr Ala Phe Asp Ile Ser Ile
130 135 140

Asp Asn Gly Asn Glu Asp Leu Ala Glu Ile Leu Gln Lys Leu Asn
145 150 155

<210> 61
<211> 167
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<400> 61

Gly Ser Asp Leu Gly Lys Lys Leu Leu Glu Ala Ala Arg Ala Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Ile Leu Met Ala Asn Gly Ala Asp Val Asn Ala
20 25 30

Gln Asp Leu Asn Gly Gln Thr Pro Leu His Leu Ala Ala Asp Ile Gly
35 40 45

His Leu Glu Ile Val Glu Val Leu Leu Lys His Gly Ala Asp Val Asn
50 55 60

Ala Gln Asp Tyr Ala Gly Ser Thr Pro Leu Arg Leu Ala Ala Trp Ala
65 70 75 80

Gly His Leu Glu Ile Val Glu Val Leu Leu Lys Asn Gly Ala Asp Val
85 90 95

Asn Ala Asn Asp Tyr Phe Gly Tyr Thr Pro Leu His Leu Ala Ala Tyr
100 105 110

Phe Gly His Leu Glu Ile Val Asp Val Leu Leu Lys His Gly Ala Asp
115 120 125

Val Asn Ala Gln Asp Lys Phe Gly Lys Thr Ala Phe Asp Ile Ser Ile
130 135 140

Asp Asn Gly Asn Glu Asp Leu Ala Glu Ile Leu Gln Lys Leu Gly Gly
145 150 155 160

Gly Ser Gly Gly Gly Ser Cys
165

<210> 62
<211> 33
<212> PRT
<213> Artificial sequence

<220>
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<220>
<221> misc_feature
<222> (3)..(4)
<223> Xaa can be any naturally occurring amino acid

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<223> Xaa can be any naturally occurring amino acid

<220>
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<222> (14)..(15)
<223> Xaa can be any naturally occurring amino acid

<400> 62

Lys Asp Xaa Xaa Gly Xaa Thr Pro Leu His Leu Ala Ala Xaa Xaa Gly
1 5 10 15

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
20 25 30

Ala

<210> 63
<211> 33
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<220>
<221> misc_feature
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<223> Xaa can be any naturally occurring amino acid

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<223> Xaa can be any naturally occurring amino acid

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<222> (11)..(11)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (14)..(15)
<223> Xaa can be any naturally occurring amino acid

<400> 63

Lys Asp Xaa Xaa Gly Xaa Thr Pro Leu His Xaa Ala Ala Xaa Xaa Gly
1 5 10 15

His Leu Glu Ile Val Glu Val Leu Leu Lys Ala Gly Ala Asp Val Asn
20 25 30

Ala

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

<220>
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<220>
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<222> (6)..(6)
<223> Xaa can be any naturally occurring amino acid

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<222> (10)..(10)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (13)..(14)
<223> Xaa can be any naturally occurring amino acid

<400> 64

Gly Ser Asp Leu Gly Xaa Lys Leu Leu Xaa Ala Ala Xaa Xaa Gly Gln
1 5 10 15

Asp Asp Glu Val Arg Ile Leu Leu Ala Ala Gly Ala Asp Val Asn Ala
20 25 30

<210> 65
<211> 28
<212> PRT
<213> Artificial sequence

<220>
<223> Synthetic construct

<220>
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<223> Xaa can be any naturally occurring amino acid

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<223> Xaa can be any naturally occurring amino acid

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<221> misc_feature
<222> (14)..(15)
<223> Xaa can be any naturally occurring amino acid

<400> 65

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Gln Asp Xaa Xaa Gly Xaa Thr Pro Ala Asp Leu Ala Ala Xaa Xaa Gly
1               5                   10                  15


His Glu Asp Ile Ala Glu Val Leu Gln Lys Leu Asn
            20                  25
```