

SEQUENCE LISTING

<110> Ablynx N.V.

<120> Amino acid sequences directed against vascular endothelial growth factor and polypeptides comprising the same for the treatment of conditions and diseases characterized by excessive and/or pathological angiogenesis or neovascularization

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<170> PatentIn version 3.4

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Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys

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

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 35 40 45

Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Thr Ala Ser
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50 Asn Arg Gly Tyr Leu His Met Asn Asn Leu Thr Pro Glu Asp Thr Ala
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Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
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 Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asp Ala Lys
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 Asn Thr Val Trp Leu His Gly Ser Thr Leu Lys Pro Glu Asp Thr Ala
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Xaa Xaa Xaa Trp Tyr Arg Gln Gly Pro Gly Asn Glu Arg Glu Leu Val
35          40          45

Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Met Asp Tyr Thr Lys
50          55          60

30  Gln Thr Val Tyr Leu His Met Asn Ser Leu Arg Pro Glu Asp Thr Gly
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Xaa Xaa Xaa Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Glu Val
35 40 45

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Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Ser Glu Lys Asp Lys
50 55 60

Asn Ser Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala
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Xaa Xaa Xaa Trp Tyr Arg Gln Tyr Pro Gly Lys Gln Arg Ala Leu Val
      35              40              45
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Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ala Arg Asp Ser Thr Lys
      50              55              60

Asp Thr Phe Cys Leu Gln Met Asn Asn Leu Lys Pro Glu Asp Thr Ala
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      20              25              30
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Xaa Xaa Xaa Trp Phe Arg Gln Ala Pro Gly Lys Pro Arg Glu Gly Val
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Ser Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Thr Asp Asn Ala Lys
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10 Asn Thr Val His Leu Leu Met Asn Arg Val Asn Ala Glu Asp Thr Ala
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Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys
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Arg Ala Ile Tyr Leu Gln Met Asn Asn Leu Lys Pro Asp Asp Thr Ala
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35 40 45

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Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Arg Asn Ala Thr Lys
50 55 60

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35 40 45

Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ala Arg Glu Asn Ala Gly
50 55 60

50 Asn Met Val Tyr Leu Gln Met Asn Asn Leu Lys Pro Asp Asp Thr Ala
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    Xaa Xaa Xaa Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Val Phe Leu
    35          40          45

    Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Ser Ala Lys
    50          55          60

40 Asn Met Met Tyr Leu Gln Met Asn Asn Leu Lys Pro Gln Asp Thr Ala
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Xaa Xaa Xaa Trp Phe Arg Gln Thr Pro Trp Gln Glu Arg Asp Phe Val
   35             40             45

30 Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Tyr Lys
   50             55             60

Asp Thr Val Leu Leu Glu Met Asn Phe Leu Lys Pro Glu Asp Thr Ala
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20  Xaa Xaa Xaa Trp Phe Arg Gln Ala Pro Gly Arg Asp Arg Glu Phe Val
      35      40      45

Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Val Ser Arg Asp Ser Ala Glu
      50      55      60

Asn Thr Val Ala Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala
      65      70      75      80

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Arg Val Thr Val Ser Ser
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10          20          25          30

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

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

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

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

10 Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Val Ser Arg Asp Asn Gly Lys
 50 55 60

Asn Thr Ala Tyr Leu Arg Met Asn Ser Leu Lys Pro Glu Asp Thr Ala
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 20 25 30

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

Ser Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
50 55 60

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala
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35 40 45

Ser Xaa Xaa Xaa Xaa Xaa Arg Phe Lys Ile Ser Arg Asp Asn Ala Lys
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35 40 45

Ala Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
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Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala
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          20          25          30

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Xaa Xaa Xaa Trp Leu Arg Gln Thr Pro Gly Lys Gly Leu Glu Trp Val
          35          40          45

Gly Xaa Xaa Xaa Xaa Xaa Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
          50          55          60

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Asn Met Leu Tyr Leu His Leu Asn Asn Leu Lys Ser Glu Asp Thr Ala
65          70          75          80

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

30 Ser Xaa Xaa Xaa Xaa Xaa Arg Phe Lys Ile Ser Arg Asp Asn Ala Lys
 50 55 60

Lys Thr Leu Tyr Leu Gln Met Asn Ser Leu Gly Pro Glu Asp Thr Ala
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<400> 29

40

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

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

50

<210> 30

<211> 30

<212> PRT

<213> Artificial

<220>

<223> KERE-class Nanobody FW1 sequence

<400> 30

60

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

Ser Leu Gln Leu Ser Cys Ser Ala Pro Gly Phe Thr Leu Asp
 20 25 30

<210> 31
 <211> 30
 <212> PRT
 <213> Artificial

10

<220>
 <223> KERE-class Nanobody FW1 sequence

<400> 31

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

20

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

<210> 32
 <211> 22
 <212> PRT
 <213> Artificial

30

<220>
 <223> KERE-class Nanobody FW1 sequence

<400> 32

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

Ser Cys Ala Ala Ser Gly
 20

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<210> 33
 <211> 22
 <212> PRT
 <213> Artificial

<220>
 <223> KERE-class Nanobody FW1 sequence

50

<400> 33

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

Ser Cys Ala Leu Thr Gly
 20

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<210> 34
 <211> 22

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<212>  PRT
<213>  Artificial

<220>
<223>  KERE-class Nanobody FW1 sequence

<400>  34

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

Ser Cys Ala Ala Ser Gly
      20

<210>  35
<211>  22
<212>  PRT
20  <213>  Artificial

<220>
<223>  KERE-class Nanobody FW1 sequence

<400>  35

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

30  Ser Cys Gln Val Ser Glu
      20

<210>  36
<211>  22
<212>  PRT
<213>  Artificial

40  <220>
<223>  KERE-class Nanobody FW1 sequence

<400>  36

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

50  Ser Cys Ala Ala Ser Gly
      20

<210>  37
<211>  22
<212>  PRT
<213>  Artificial

<220>
<223>  KERE-class Nanobody FW1 sequence

60  <400>  37

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

Ser Cys Ala Ala Ser Glu
 20

10 <210> 38
 <211> 22
 <212> PRT
 <213> Artificial
 <220>
 <223> KERE-class Nanobody FW1 sequence
 <400> 38

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

Ser Cys Ala Ser Ser Thr
 20

30 <210> 39
 <211> 22
 <212> PRT
 <213> Artificial
 <220>
 <223> KERE-class Nanobody FW1 sequence
 <400> 39

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

Ser Cys Val Ala Ser Gly
 20

50 <210> 40
 <211> 22
 <212> PRT
 <213> Artificial
 <220>
 <223> KERE-class Nanobody FW1 sequence
 <400> 40

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

60 Ser Cys Ser Ala Ser Val
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<210> 41
 <211> 14
 <212> PRT
 <213> Artificial

 <220>
 <223> KERE-class Nanobody FW2 sequence
 10
 <400> 41

 Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala
 1 5 10

 <210> 42
 <211> 14
 <212> PRT
 20 <213> Artificial

 <220>
 <223> KERE-class Nanobody FW2 sequence

 <400> 42

 Trp Phe Arg Gln Thr Pro Gly Arg Glu Arg Glu Phe Val Ala
 1 5 10

 30
 <210> 43
 <211> 14
 <212> PRT
 <213> Artificial

 <220>
 <223> KERE-class Nanobody FW2 sequence

 <400> 43
 40
 Trp Tyr Arg Gln Ala Pro Gly Lys Gln Arg Glu Met Val Ala
 1 5 10

 <210> 44
 <211> 14
 <212> PRT
 <213> Artificial

 50 <220>
 <223> KERE-class Nanobody FW2 sequence

 <400> 44

 Trp Tyr Arg Gln Gly Pro Gly Lys Gln Arg Glu Leu Val Ala
 1 5 10

 60 <210> 45
 <211> 14
 <212> PRT

<213> Artificial

<220>

<223> KERE-class Nanobody FW2 sequence

<400> 45

Trp Ile Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val Ser
1 5 10

10

<210> 46

<211> 14

<212> PRT

<213> Artificial

<220>

<223> KERE-class Nanobody FW2 sequence

20

<400> 46

Trp Phe Arg Glu Ala Pro Gly Lys Glu Arg Glu Gly Ile Ser
1 5 10

<210> 47

<211> 14

<212> PRT

<213> Artificial

30

<220>

<223> KERE-class Nanobody FW2 sequence

<400> 47

Trp Tyr Arg Gln Ala Pro Gly Lys Glu Arg Asp Leu Val Ala
1 5 10

40

<210> 48

<211> 14

<212> PRT

<213> Artificial

<220>

<223> KERE-class Nanobody FW2 sequence

<400> 48

50

Trp Phe Arg Gln Ala Pro Gly Lys Gln Arg Glu Glu Val Ser
1 5 10

<210> 49

<211> 14

<212> PRT

<213> Artificial

<220>

60

<223> KERE-class Nanobody FW2 sequence

<400> 49

Trp Phe Arg Gln Pro Pro Gly Lys Val Arg Glu Phe Val Gly
1 5 10

<210> 50

<211> 32

<212> PRT

10 <213> Artificial

<220>

<223> KERE-class Nanobody FW3 sequence

<400> 50

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
1 5 10 15

20

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Arg Cys Tyr Phe
20 25 30

<210> 51

<211> 32

<212> PRT

<213> Artificial

30

<220>

<223> KERE-class Nanobody FW3 sequence

<400> 51

Arg Phe Ala Ile Ser Arg Asp Asn Asn Lys Asn Thr Gly Tyr Leu Gln
1 5 10 15

40

Met Asn Ser Leu Glu Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
20 25 30

<210> 52

<211> 32

<212> PRT

<213> Artificial

<220>

<223> KERE-class Nanobody FW3 sequence

50

<400> 52

Arg Phe Thr Val Ala Arg Asn Asn Ala Lys Asn Thr Val Asn Leu Glu
1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
20 25 30

60

<210> 53

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

<220>
 <223> KERE-class Nanobody FW3 sequence

<400> 53

10 Arg Phe Thr Ile Ser Arg Asp Ile Ala Lys Asn Thr Val Asp Leu Leu
 1 5 10 15

Met Asn Asn Leu Glu Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

20 <210> 54
 <211> 32
 <212> PRT
 <213> Artificial

<220>
 <223> KERE-class Nanobody FW3 sequence

<400> 54

30 Arg Leu Thr Ile Ser Arg Asp Asn Ala Val Asp Thr Met Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

40 <210> 55
 <211> 32
 <212> PRT
 <213> Artificial

<220>
 <223> KERE-class Nanobody FW3 sequence

<400> 55

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 1 5 10 15

50 Met Asp Asn Val Lys Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ala Ala
 20 25 30

<210> 56
 <211> 32
 <212> PRT
 <213> Artificial

60 <220>
 <223> KERE-class Nanobody FW3 sequence

<400> 56

Arg Phe Thr Ile Ser Lys Asp Ser Gly Lys Asn Thr Val Tyr Leu Gln
1 5 10 15

Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
20 25 30

10

<210> 57
<211> 32
<212> PRT
<213> Artificial

<220>
<223> KERE-class Nanobody FW3 sequence

<400> 57

20

Arg Phe Thr Ile Ser Arg Asp Ser Ala Lys Asn Met Met Tyr Leu Gln
1 5 10 15

Met Asn Asn Leu Lys Pro Gln Asp Thr Ala Val Tyr Tyr Cys Ala Ala
20 25 30

30

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

<220>
<223> KERE-class Nanobody FW3 sequence

<400> 58

40

Arg Phe Thr Ile Ser Arg Glu Asn Asp Lys Ser Thr Val Tyr Leu Gln
1 5 10 15

Leu Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
20 25 30

50

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

<220>
<223> KERE-class Nanobody FW3 sequence

<400> 59

Arg Phe Thr Ile Ser Arg Asp Tyr Ala Gly Asn Thr Ala Tyr Leu Gln
1 5 10 15

60

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

20

25

30

<210> 60
 <211> 11
 <212> PRT
 <213> Artificial

10 <220>
 <223> KERE-class Nanobody FW4 sequence

<400> 60

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 1 5 10

20 <210> 61
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> KERE-class Nanobody FW4 sequence

<400> 61

30 Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser
 1 5 10

<210> 62
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> KERE-class Nanobody FW4 sequence

40 <400> 62

Arg Gly Gln Gly Thr Arg Val Thr Val Ser Ser
 1 5 10

50 <210> 63
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> KERE-class Nanobody FW4 sequence

<400> 63

Trp Gly Leu Gly Thr Gln Val Thr Ile Ser Ser
 1 5 10

60 <210> 64
 <211> 30

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<212>  PRT
<213>  Artificial

<220>
<223>  GLEW-class Nanobody FW1 sequence

<400>  64

10  Gln 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
      20             25             30

<210>  65
<211>  30
<212>  PRT
20  <213>  Artificial

<220>
<223>  GLEW-class Nanobody FW1 sequence

<400>  65

    Glu Val His Leu Val Glu Ser Gly Gly Gly Leu Val Arg Pro Gly Gly
    1             5             10             15

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

<210>  66
<211>  30
<212>  PRT
<213>  Artificial

40  <220>
<223>  GLEW-class Nanobody FW1 sequence

<400>  66

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

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

<210>  67
<211>  30
<212>  PRT
<213>  Artificial

<220>
<223>  GLEW-class Nanobody FW1 sequence

60  <400>  67

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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 Val Cys Val Ser Ser Gly Cys Thr
 20 25 30

10 <210> 68
 <211> 30
 <212> PRT
 <213> Artificial
 <220>
 <223> GLEW-class Nanobody FW1 sequence
 <400> 68

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

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

30 <210> 69
 <211> 22
 <212> PRT
 <213> Artificial
 <220>
 <223> GLEW-class Nanobody FW1 sequence
 <400> 69

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

Ser Cys Ala Ala Ser Gly
 20

50 <210> 70
 <211> 22
 <212> PRT
 <213> Artificial
 <220>
 <223> GLEW-class Nanobody FW1 sequence
 <400> 70

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

60 Ser Cys Val Ala Ser Gly
 20

<210> 71
 <211> 22
 <212> PRT
 <213> Artificial

 <220>
 <223> GLEW-class Nanobody FW1 sequence
 10
 <400> 71

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

 Ser Cys Val Phe Ser Gly
 20
 20
 <210> 72
 <211> 14
 <212> PRT
 <213> Artificial

 <220>
 <223> GLEW-class Nanobody FW2 sequence
 <400> 72
 30
 Trp Val Arg Gln Ala Pro Gly Lys Val Leu Glu Trp Val Ser
 1 5 10

 <210> 73
 <211> 14
 <212> PRT
 <213> Artificial
 40
 <220>
 <223> GLEW-class Nanobody FW2 sequence
 <400> 73

 Trp Val Arg Arg Pro Pro Gly Lys Gly Leu Glu Trp Val Ser
 1 5 10

 <210> 74
 <211> 14
 <212> PRT
 <213> Artificial
 50
 <220>
 <223> GLEW-class Nanobody FW2 sequence
 <400> 74

 Trp Val Arg Gln Ala Pro Gly Met Gly Leu Glu Trp Val Ser
 60 1 5 10

<210> 75
 <211> 14
 <212> PRT
 <213> Artificial

<220>
 <223> GLEW-class Nanobody FW2 sequence

10 <400> 75

Trp Val Arg Gln Ala Pro Gly Lys Glu Pro Glu Trp Val Ser
 1 5 10

<210> 76
 <211> 14
 <212> PRT
 <213> Artificial

20

<220>
 <223> GLEW-class Nanobody FW2 sequence

<400> 76

Trp Val Arg Gln Ala Pro Gly Lys Asp Gln Glu Trp Val Ser
 1 5 10

30 <210> 77

<211> 14
 <212> PRT
 <213> Artificial

<220>
 <223> GLEW-class Nanobody FW2 sequence

<400> 77

40 Trp Val Arg Gln Ala Pro Gly Lys Ala Glu Glu Trp Val Ser
 1 5 10

<210> 78
 <211> 14
 <212> PRT
 <213> Artificial

50 <220>
 <223> GLEW-class Nanobody FW2 sequence

<400> 78

Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ala
 1 5 10

60 <210> 79
 <211> 14
 <212> PRT
 <213> Artificial

<220>
 <223> GLEW-class Nanobody FW2 sequence

<400> 79

Trp Val Arg Gln Ala Pro Gly Arg Ala Thr Glu Trp Val Ser
 1 5 10

10

<210> 80
 <211> 32
 <212> PRT
 <213> Artificial

<220>
 <223> GLEW-class Nanobody FW3 sequence

<400> 80

20

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Val Lys
 20 25 30

30

<210> 81
 <211> 32
 <212> PRT
 <213> Artificial

<220>
 <223> GLEW-class Nanobody FW3 sequence

<400> 81

40

Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asp Ser Leu Ile Pro Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg
 20 25 30

50

<210> 82
 <211> 32
 <212> PRT
 <213> Artificial

<220>
 <223> GLEW-class Nanobody FW3 sequence

<400> 82

Arg Phe Thr Ser Ser Arg Asp Asn Ala Lys Ser Thr Leu Tyr Leu Gln
 1 5 10 15

60

Met Asn Asp Leu Lys Pro Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg

20

25

30

<210> 83
 <211> 32
 <212> PRT
 <213> Artificial

<220>

10 <223> GLEW-class Nanobody FW3 sequence

<400> 83

Arg Phe Ile Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Gly Pro Glu Asp Thr Ala Met Tyr Tyr Cys Gln Arg
 20 25 30

20

<210> 84
 <211> 32
 <212> PRT
 <213> Artificial

<220>

<223> GLEW-class Nanobody FW3 sequence

30 <400> 84

Arg Phe Thr Ala Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Arg Tyr Tyr Cys Ala Arg
 20 25 30

40 <210> 85

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

<220>

<223> GLEW-class Nanobody FW3 sequence

<400> 85

50 Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
1 5 10 15

Met Asp Asp Leu Gln Ser Glu Asp Thr Ala Met Tyr Tyr Cys Gly Arg
 20 25 30

60 <210> 86
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> GLEW-class Nanobody FW4 sequence

<400> 86

Gly Ser Gln Gly Thr Gln Val Thr Val Ser Ser
 1 5 10

10

<210> 87
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> GLEW-class Nanobody FW4 sequence

<400> 87

20

Leu Arg Gly Gly Thr Gln Val Thr Val Ser Ser
 1 5 10

<210> 88
 <211> 11
 <212> PRT
 <213> Artificial

30

<220>
 <223> GLEW-class Nanobody FW4 sequence

<400> 88

Arg Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 1 5 10

40

<210> 89
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> GLEW-class Nanobody FW4 sequence

<400> 89

50

Arg Ser Arg Gly Ile Gln Val Thr Val Ser Ser
 1 5 10

<210> 90
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> GLEW-class Nanobody FW4 sequence

60

<400> 90

Trp Gly Lys Gly Thr Gln Val Thr Val Ser Ser
1 5 10

<210> 91
<211> 11
<212> PRT
<213> Artificial

10

<220>
<223> GLEW-class Nanobody FW4 sequence

<400> 91

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
1 5 10

20

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

<220>
<223> P,R,S 103-class Nanobody FW1 sequence

<400> 92

30

Ala 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
20 25 30

40

<210> 93
<211> 30
<212> PRT
<213> Artificial

<220>
<223> P,R,S 103-class Nanobody FW1 sequence

<400> 93

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

50

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

<210> 94
<211> 30
<212> PRT
<213> Artificial

60

<220>

<223> P,R,S 103-class Nanobody FW1 sequence

<400> 94

Glu Val His Leu Val Glu Ser Gly Gly Gly Leu Val Arg Pro Gly Gly
1 5 10 15

10 Ser Leu Arg Leu Ser Cys Ala Ala Phe Gly Phe Ile Phe Lys
20 25 30

<210> 95

<211> 30

<212> PRT

<213> Artificial

<220>

20 <223> P,R,S 103-class Nanobody FW1 sequence

<400> 95

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

Ser Leu Lys Leu Ser Cys Ala Ala Ser Arg Thr Ile Val Ser
20 25 30

30

<210> 96

<211> 30

<212> PRT

<213> Artificial

<220>

<223> P,R,S 103-class Nanobody FW1 sequence

<400> 96

40

Gln Glu His Leu Val Glu Ser Gly Gly Gly Leu Val Asp Ile Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Glu Arg Ile Phe Ser
20 25 30

50

<210> 97

<211> 30

<212> PRT

<213> Artificial

<220>

<223> P,R,S 103-class Nanobody FW1 sequence

<400> 97

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

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

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

10

<220>
 <223> P,R,S 103-class Nanobody FW1 sequence

<400> 98

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

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

<210> 99
 <211> 30
 <212> PRT
 <213> Artificial

30 <220>
 <223> P,R,S 103-class Nanobody FW1 sequence

<400> 99

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

40

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

<210> 100
 <211> 22
 <212> PRT
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<220>
 <223> P,R,S 103-class Nanobody FW1 sequence

50 <400> 100

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

Ser Cys Ala Ala Ser Gly
 20

60 <210> 101
 <211> 22

<212> PRT
 <213> Artificial

<220>
 <223> P,R,S 103-class Nanobody FW1 sequence

<400> 101

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

Ser Cys Ala Ala Ser Arg
 20

<210> 102
 <211> 14
 <212> PRT
 20 <213> Artificial

<220>
 <223> P,R,S 103-class Nanobody FW2 sequence

<400> 102

Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala
 1 5 10

30

<210> 103
 <211> 14
 <212> PRT
 <213> Artificial

<220>
 <223> P,R,S 103-class Nanobody FW2 sequence

<400> 103

40

Trp Val Arg Gln Ala Pro Gly Lys Val Leu Glu Trp Val Ser
 1 5 10

<210> 104
 <211> 14
 <212> PRT
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50

<220>
 <223> P,R,S 103-class Nanobody FW2 sequence

<400> 104

Trp Val Arg Arg Pro Pro Gly Lys Gly Leu Glu Trp Val Ser
 1 5 10

60

<210> 105
 <211> 14
 <212> PRT

<213> Artificial
 <220>
 <223> P,R,S 103-class Nanobody FW2 sequence
 <400> 105
 Trp Ile Arg Gln Ala Pro Gly Lys Glu Arg Glu Gly Val Ser
 1 5 10
 10
 <210> 106
 <211> 14
 <212> PRT
 <213> Artificial
 <220>
 <223> P,R,S 103-class Nanobody FW2 sequence
 <400> 106
 Trp Val Arg Gln Tyr Pro Gly Lys Glu Pro Glu Trp Val Ser
 1 5 10
 20
 <210> 107
 <211> 14
 <212> PRT
 <213> Artificial
 <220>
 <223> P,R,S 103-class Nanobody FW2 sequence
 <400> 107
 Trp Phe Arg Gln Pro Pro Gly Lys Glu His Glu Phe Val Ala
 1 5 10
 30
 <210> 108
 <211> 14
 <212> PRT
 <213> Artificial
 <220>
 <223> P,R,S 103-class Nanobody FW2 sequence
 <400> 108
 Trp Tyr Arg Gln Ala Pro Gly Lys Arg Thr Glu Leu Val Ala
 1 5 10
 40
 <210> 109
 <211> 14
 <212> PRT
 <213> Artificial
 <220>
 <223> P,R,S 103-class Nanobody FW2 sequence
 <400> 109
 Trp Tyr Arg Gln Ala Pro Gly Lys Arg Thr Glu Leu Val Ala
 1 5 10
 50
 <210> 110
 <211> 14
 <212> PRT
 <213> Artificial
 <220>
 <223> P,R,S 103-class Nanobody FW2 sequence
 <400> 110
 Trp Tyr Arg Gln Ala Pro Gly Lys Arg Thr Glu Leu Val Ala
 1 5 10
 60

<400> 109

Trp Leu Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val Ser
1 5 10

<210> 110

<211> 14

<212> PRT

10 <213> Artificial

<220>

<223> P,R,S 103-class Nanobody FW2 sequence

<400> 110

Trp Leu Arg Gln Thr Pro Gly Lys Gly Leu Glu Trp Val Gly
1 5 10

20

<210> 111

<211> 14

<212> PRT

<213> Artificial

<220>

<223> P,R,S 103-class Nanobody FW2 sequence

<400> 111

30

Trp Val Arg Gln Ala Pro Gly Lys Ala Glu Glu Phe Val Ser
1 5 10

<210> 112

<211> 32

<212> PRT

<213> Artificial

40

<220>

<223> P,R,S 103-class Nanobody FW3 sequence

<400> 112

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
1 5 10 15

50

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
20 25 30

<210> 113

<211> 32

<212> PRT

<213> Artificial

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<223> P,R,S 103-class Nanobody FW3 sequence

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<400> 113

Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asp Ser Leu Ile Pro Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg
 20 25 30

10 <210> 114
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 <223> P,R,S 103-class Nanobody FW3 sequence

<400> 114

20 Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Glu Met Tyr Leu Gln
 1 5 10 15

Met Asn Asn Leu Lys Thr Glu Asp Thr Gly Val Tyr Trp Cys Gly Ala
 20 25 30

30 <210> 115
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 <223> P,R,S 103-class Nanobody FW3 sequence

<400> 115

40 Arg Phe Thr Ile Ser Ser Asp Ser Asn Arg Asn Met Ile Tyr Leu Gln
 1 5 10 15

Met Asn Asn Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

50 <210> 116
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 <223> P,R,S 103-class Nanobody FW3 sequence

<400> 116

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Met Leu Tyr Leu His
 1 5 10 15

60 Leu Asn Asn Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys Arg Arg
 20 25 30

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 <223> P,R,S 103-class Nanobody FW3 sequence
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 Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Thr Val Tyr Leu Arg
 1 5 10 15

 Leu Asn Ser Leu Asn Pro Glu Asp Thr Ala Val Tyr Ser Cys Asn Leu
 20 25 30

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 <223> P,R,S 103-class Nanobody FW3 sequence
 <400> 118

 Arg Phe Lys Ile Ser Arg Asp Asn Ala Lys Lys Thr Leu Tyr Leu Gln
 1 5 10 15

 Met Asn Ser Leu Gly Pro Glu Asp Thr Ala Met Tyr Tyr Cys Gln Arg
 20 25 30

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 <223> P,R,S 103-class Nanobody FW3 sequence
 <400> 119

 Arg Phe Thr Val Ser Arg Asp Asn Gly Lys Asn Thr Ala Tyr Leu Arg
 1 5 10 15

 Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Asp Tyr Tyr Cys Ala Val
 20 25 30

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 <223> P,R,S 103-class Nanobody FW4 sequence

<400> 120

Arg Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 1 5 10

10 <210> 121
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 <223> P,R,S 103-class Nanobody FW4 sequence

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20 Leu Arg Gly Gly Thr Gln Val Thr Val Ser Ser
 1 5 10

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30 <220>
 <223> P,R,S 103-class Nanobody FW4 sequence

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Gly Asn Lys Gly Thr Leu Val Thr Val Ser Ser
 1 5 10

40 <210> 123
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50 Ser Ser Pro Gly Thr Gln Val Thr Val Ser Ser
 1 5 10

<210> 124
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 <223> P,R,S 103-class Nanobody FW4 sequence

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

<210> 125
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10 <220>
<223> P,R,S 103-class Nanobody FW4 sequence

<400> 125

Arg Ser Arg Gly Ile Gln Val Thr Val Ser Ser
1 5 10

20 <210> 126
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<400> 126

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

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

<210> 127
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<400> 127

40 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 Gly Arg Ser Phe Ser
20 25 30

50 <210> 128
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<400> 128

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

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

<210> 129
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<400> 129

10 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 Val Ser Gly Phe Thr Met Ser
 20 25 30

<210> 130
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<400> 130

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

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

<210> 131
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<400> 131

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

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

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<400> 132

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

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

<400> 133

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

<400> 134

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

<400> 135

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

<400> 136

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

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<400> 137

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 Ala Arg Thr Phe Ser
 20 25 30

<210> 138
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 <213> -

<400> 138

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 Leu Thr Phe Ser
 20 25 30

<210> 139
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 <213> -

<400> 139

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 Leu Ala Phe Ser
 20 25 30

<210> 140
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<400> 140

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

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

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<211> 30
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<400> 141

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

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

<210> 142
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<400> 142

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

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

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

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

<210> 144
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<400> 144

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 Ile Ser
 20 25 30

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<213> -

<400> 145

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

10 Ser Leu Arg Leu Ser Cys Ala Pro Ser Gly Arg Asp Ile Ser
 20 25 30

<210> 146

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<212> PRT

<213> -

<400> 146

20

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 Arg Ala Leu Asp
 20 25 30

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<210> 147

<211> 30

<212> PRT

<213> -

<400> 147

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

40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ala Leu Asp
 20 25 30

<210> 148

<211> 30

<212> PRT

<213> -

<400> 148

50

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 Arg Ala Leu Asp
 20 25 30

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<212> PRT

<213> -

<400> 149

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

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

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<213> -

<400> 150

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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 Arg Ala Leu Asp
 20 25 30

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<211> 30

<212> PRT

<213> -

<400> 151

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

40

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

<210> 152

<211> 30

<212> PRT

<213> -

<400> 152

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Glu Val His 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 Ala Leu Asp
 20 25 30

60

<210> 153

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<212> PRT

<213> -

<400> 153

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
 20 25 30

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<210> 154

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<212> PRT

<213> -

<400> 154

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

20

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

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<400> 155

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
 20 25 30

40

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<213> -

<400> 156

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

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

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<213> -

60

<400> 157

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
 20 25 30

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

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

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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 Arg Thr Phe Ser
 20 25 30

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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 Arg Ala Leu Ser
 20 25 30

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<400> 161

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

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

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

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

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30 <400> 163

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

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

40 <210> 164
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val His Ala Gly Gly
 1 5 10 15

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

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60 <400> 165

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

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

10 <210> 166
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<400> 166

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

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

<210> 167
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30 <400> 167

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

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

40 <210> 168
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<400> 168

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

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

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60 <400> 169

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

1 5 10 15

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

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

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30 Ser Leu Ala Met Gly
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40 Asp Asn Val Met Gly
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Ser Ala Arg Met Gly
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Ser Ser Trp Met Tyr
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Ser Tyr Ser Met Ile
1 5

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Asn Tyr Trp Met Tyr
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Arg Tyr Glu Met Ser
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Ser Tyr Thr Met Tyr
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Thr Tyr Gly Met Ala
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Asn Tyr Phe Met Gly
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Ser Tyr Asp Met Gly
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Ser Tyr Ala Met Ser
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Ala Tyr Thr Met Gly
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Thr Tyr Ala Met Gly
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Asn Tyr Asn Met Gly
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Arg Tyr Asn Met Gly
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Ser Tyr Asp Met Gly
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Asn Tyr Ala Met Gly
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Ser Tyr Thr Met Gly
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Thr Tyr Thr Val Thr
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Thr Tyr Thr Val Thr
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Ser Tyr Arg Met Gly
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Ser Tyr Arg Met Gly
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Thr Tyr Ala Met Ala
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Trp Phe Arg Gln Ala Pro Gly Lys Asp Arg Glu Phe Val Val
1 5 10

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Trp Phe Arg Gln Ala Ala Gly Lys Glu Arg Glu Phe Val Ala
1 5 10

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Trp Phe Arg Gln Cys Pro Gly Lys Glu Arg Glu Phe Val Ala
1 5 10

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10 Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
 1 5 10

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20 Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
 1 5 10

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<400> 221

30 Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Ser Val Ser
 1 5 10

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40 <400> 222

Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
 1 5 10

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50 <400> 223

Trp Ala Arg Gln Ala Pro Gly Lys Glu Leu Glu Trp Val Ser
 1 5 10

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<400> 224

Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala
 1 5 10

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Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala
 1 5 10

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Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala
 1 5 10

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Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Asp Phe Val Ala
 1 5 10

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Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ser
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Trp Phe Arg Gln Ala Pro Gly Lys Asp Arg Glu Met Val Ile
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Trp Phe Arg Gln Ala Gln Gly Lys Asp Arg Glu Leu Val Ala
 1 5 10

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Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala
 1 5 10

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30 Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Ala Leu Val Ala
 1 5 10

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<400> 233

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Trp Phe Arg Gln Ala Pro Gly Gln Glu Arg Glu Ile Leu Ser
 1 5 10

<210> 234
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50 <400> 234

Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala
 1 5 10

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Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Thr Ala
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Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val Ala
 1 5 10

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Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val Ser
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1 5 10

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Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ser
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Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ser
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Trp Phe Arg Gln Ser Pro Lys Asn Glu Arg Glu Phe Val Ala
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Val Val Ser Gly Ser Gly Gly Thr Thr Lys Tyr Ala Asp Ser Val Lys
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Gly

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His Ile Ser Arg Gly Gly Ser Arg Thr Glu Tyr Ala Asp Ser Val Lys
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Gly

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Ala Ile Ser Trp Ser Asn Asp Ile Thr Tyr Tyr Glu Asp Ser Val Lys
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Gly

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Ser Ile Ser Pro Gly Gly Leu Phe Pro Tyr Tyr Val Asp Ser Val Lys
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Gly

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Glu Ile Ser Ser Gly Gly Gly Trp Thr Ser Tyr Ala Asp Ser Val Lys
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Gly

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

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Gly Ile Ser Thr Gly Gly Gly Trp Arg Thr Tyr Ala Asp Ser Val Lys
 1 5 10 15

Gly

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Ile Ile Phe Thr Asn Gly Glu Gly Thr Tyr Tyr Ser Asp Ser Val Lys
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 Gly

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Ile Asn Arg Ser Thr Gly Thr Ile Tyr Tyr Ala Asp Ser Val Lys Gly
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Thr Ile Gly Trp Ser Gly Thr Asp Tyr Ala Asp Ser Val Lys Gly
 1 5 10 15

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Ala	Ile	Ser	Thr	Gly	Gly	Gly	Trp	Arg	Arg	Tyr	Ala	Asp	Ser	Val	Lys
1				5				10						15	

Gly

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<210>	272
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<213>	-

<400> 272

Val	Ile	Asn	Trp	Ser	Gly	Gly	Ser	Thr	Tyr	Tyr	Ala	Asp	Ser	Val	Lys
1				5				10						15	

20

Gly

<210>	273
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30

<400> 273

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

Gly

40

<210>	274
<211>	17
<212>	PRT
<213>	-

<400> 274

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

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Gly

<210>	275
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<400> 275

Ala Ile Arg Trp Ser Glu Asp Arg Val Trp Tyr Leu Gly Ser Val Arg
 1 5 10 15

Gly

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<400> 276

Ala Ala His Trp Ser Gly Gly Arg Met Trp Tyr Lys Asp Ser Val Lys
 1 5 10 15

20 Gly

<210> 277
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 <212> PRT
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30 <400> 277

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

Gly

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<400> 278

Ser Ile Thr Arg Thr Asp Asn Ile Thr Tyr Tyr Glu Asp Ser Val Lys
 1 5 10 15

50 Gly

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60 <400> 279

Ala Gly Thr Trp Ser Thr Ser Val Thr Glu Tyr Ala Asp Ser Val Lys
 1 5 10 15

Gly

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Asp Ile Asn Trp Asn Gly Ser Trp Arg Phe Tyr Ala Glu Ser Val Asn
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20 Gly

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30 Ser Asn Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys Gly
 1 5 10 15

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40 <400> 282

Ser Ile Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys Gly
 1 5 10 15

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

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

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Ser Ile Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys Gly
1 5 10 15

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

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

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<400> 288

Cys Ile Ser Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
1 5 10 15

50 Gly

<210> 289

<211> 17

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60 <400> 289

Cys Ile Ser Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys
 1 5 10 15

Gly

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<400> 290

Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys
 1 5 10 15

20 Gly

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<400> 291

30 Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys
 1 5 10 15

Gly

40 <210> 292
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Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys
 1 5 10 15

50 Gly

<210> 293
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<400> 293

60 Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys

295

1 5 10 15

Gly

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Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys
1 5 10 15

20 Gly

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30 Ala Ile Ser Trp Ser Val Pro Tyr Tyr Ala Asp Ser Val Lys Gly
1 5 10 15

<210> 296
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<400> 296

40 Leu Ile Asn Trp Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val Lys
1 5 10 15

Gly

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<211> 17
<212> PRT
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<400> 297

Leu Ile Asn Trp Ser Ser Gly Thr Thr Ile Tyr Ala Asp Ser Val Lys
1 5 10 15

60 Gly

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10 Leu Ile Asn Trp Ser Ser Gly Thr Thr Ile Tyr Ala Asp Ser Val Lys
 1 5 10 15

Gly

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20 Leu Ile Asn Trp Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val Lys
 1 5 10 15

Gly

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 1 5 10 15

Gly

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50 Leu Ile Asn Trp Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val Lys
 1 5 10 15

Gly

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10 Leu Ile Asn Trp Ser Ser Gly Ile Thr Val Tyr Leu Asp Ser Val Lys
 1 5 10 15

Gly

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Leu Ile Asn Trp Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val Lys
 1 5 10 15

Gly

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 1 5 10 15

Gly

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<400> 305

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

Gly

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Arg Phe Thr Ile Ser Arg Asp Asn Asn Lys Asn Ala Val Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
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<400> 307

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Thr Val Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

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<400> 308

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ala Thr Val Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Leu Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

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<400> 309

Arg Phe Ser Ile Ser Thr Asp Asn Ala Asn Asn Ile Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Ser Cys Ala Lys
 20 25 30

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<400> 310

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

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Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Val Gln
 20 25 30

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20 <400> 311

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys
 20 25 30

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Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

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Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Leu Asn
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50 <400> 313

Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg
 20 25 30

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<400> 314

Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Leu	Tyr	Leu	Gln
1				5					10					15	

10	Met	Asn	Ser	Leu	Lys	Pro	Gly	Asp	Thr	Ala	Leu	Tyr	Tyr	Cys	Ala	Ala
				20					25					30		

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Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Val	Tyr	Leu	Gln
1				5					10					15	

Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Ala
			20					25					30		

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<213> -

<400> 316

Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Gly	Lys	Asn	Thr	Met	Tyr	Leu	Gln
1				5					10					15	

40	Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Gln
				20					25					30		

<210> 317

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<213> -

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Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Val	Tyr	Leu	Glu
1				5					10					15	

Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Ser
			20					25					30		

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Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Val	Asp	Leu	Gln
1				5					10					15	

10	Met	Asn	Asn	Leu	Lys	Pro	Gly	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Ala
			20					25						30		

<210> 319

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<213> -

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	1				5					10					15	

Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Ala
			20					25					30		

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Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Val	Tyr	Leu	Gln
1				5					10					15	

40	Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Ala	Tyr	Tyr	Cys	Ala	Ala
			20					25						30		

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50	Arg	Phe	Thr	Met	Ser	Arg	Asp	Asn	Asn	Lys	Asn	Thr	Val	Tyr	Leu	Gln
	1				5					10					15	

Met	Asn	Ser	Leu	Lys	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Ala
			20					25					30		

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<213> -

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Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Ser Leu Gln
 1 5 10 15

Met Ser Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

10

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<211> 32

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<213> -

<400> 323

Arg Phe Thr Ile Val Arg Asp Thr Ala Lys Asn Thr Val Tyr Leu Gln
 1 5 10 15

20

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

<210> 324

<211> 32

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<400> 324

Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Thr Leu Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

40

<210> 325

<211> 32

<212> PRT

<213> -

<400> 325

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 1 5 10 15

50

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

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<400> 326

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

10

<210> 327
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<400> 327

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 1 5 10 15

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Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ala Ala
 20 25 30

<210> 328
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<400> 328

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

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<400> 329

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 1 5 10 15

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Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

<210> 330
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Arg Phe Thr Met Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

10 <210> 331
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Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 1 5 10 15

20 Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

<210> 332
 <211> 32
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30 <400> 332

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

40 <210> 333
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Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 1 5 10 15

50 Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 20 25 30

<210> 334
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Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Ala Ala Val Tyr Tyr Cys Ala Ala
20 25 30

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<400> 335

Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln
1 5 10 15

20 Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
20 25 30

<210> 336
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<400> 336

30 Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln
1 5 10 15

Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
20 25 30

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Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln
1 5 10 15

50 Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
20 25 30

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60 Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val
 20 25 30

<210> 343
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<400> 343

Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val
 20 25 30

20

<210> 344
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<400> 344

Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu
 1 5 10 15

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Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val
 20 25 30

<210> 345
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<400> 345

Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val
 20 25 30

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<210> 346
 <211> 32
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<400> 346

Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu
 1 5 10 15

60

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val
 20 25 30

<210> 347
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<400> 347

Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu
 1 5 10 15

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val
 20 25 30

20

<210> 348
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Ser Arg Gly Val Ala Leu Ala Thr Ala Arg Pro Tyr Asp Tyr
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Ser Trp Arg Ser Ser Ile Trp Ile Pro Ala Glu Ser Asp Ser Tyr Asp
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Phe

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Tyr

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Ser

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Ser

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Ser

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Ser

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Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
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Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
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1 5 10

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Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser
 1 5 10

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Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser
 1 5 10

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Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 1 5 10

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Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser
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Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser
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Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 1 5 10

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 1 5 10

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Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
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Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
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Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
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1 5 10

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1 5 10

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Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
1 5 10

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<213> -

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Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
1 5 10

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Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser

1 5 10

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

1 5 10 15

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Leu

20 25 30

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

35 40 45

Val Val Val Ser Gly Ser Gly Gly Thr Thr Lys Tyr Ala Asp Ser Val

50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Asn Lys Asn Ala 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

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Ala Ala Asp Pro Ser Arg Tyr Phe Ile Thr Thr Asp Arg Arg Gly Tyr

100 105 110

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser

115 120 125

50 <210> 442

<211> 123

<212> PRT

<213> -

<400> 442

Lys Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly

1 5 10 15

60 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 Asp Ser Val
 50 55 60

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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys 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

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Ala Ala Ser Arg Gly 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> 443
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<400> 443

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

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

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

50

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

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

Ala Ala Ser Trp Arg Ser Ser Ile Trp Ile Pro Ala Glu Ser Asp Ser
 100 105 110

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

<210> 444
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10 <400> 444

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
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Ser Leu Arg Leu Ala Cys Ala Val Ser Gly Phe Thr Met Ser Ser Ser
 20 25 30

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

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

30 Lys Gly Arg Phe Ser Ile Ser Thr Asp Asn Ala Asn Asn Ile 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

40 Val Thr Val Ser Ser
 115

<210> 445
 <211> 114
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50 <400> 445

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

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

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

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

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

Val Gln Ser His Arg Thr Pro Arg Ser Gln Gly Thr Gln Val Thr Val
100 105 110

Ser Ser

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<210> 446
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<400> 446

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

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

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

40

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

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

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

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

Val Ser Ser
115

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<211> 121
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Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Gly
 1 5 10 15

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

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

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

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

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

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

Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120

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<210> 448
 <211> 115
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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 Phe Thr Val Ser Ser Tyr
 20 25 30

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

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

60

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

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

10 Ala Arg Asp Pro Phe Gly Lys Leu Lys Gly Gln Gly Thr Gln Val Thr
 100 105 110

Val Ser Ser
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<210> 449
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Ser
 1 5 10 15

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

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

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

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

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

Ala Asp Val Phe Phe Ser Gly Ala His Arg Tyr Glu Ala Ser Gln Trp
 100 105 110

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

<210> 450
 <211> 123
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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 Val Arg Thr Phe Ser Asn Tyr
 20 25 30
 10 Phe Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Thr Ile Gly Trp Ser Gly Thr Asp Tyr Ala Asp Ser Val Lys Gly
 50 55 60
 Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 65 70 75 80
 20 Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 85 90 95
 Gly Tyr Phe Lys Arg Leu Gly Pro Thr Ser Pro Arg Asp Tyr Thr Tyr
 100 105 110
 30 Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120
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 <211> 118
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 1 5 10 15
 Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Arg Thr Phe Gly Ser Tyr
 20 25 30
 50 Asp Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Ala Ile Ser Thr Gly Gly Gly Trp Arg Arg Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Gly Lys Asn Thr Met Tyr
 65 70 75 80
 60 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys

85

90

95

Ala Gln Gly Trp Ser Leu Ala Glu Phe Arg Ser Trp Gly Gln Gly Thr
 100 105 110

Gln Val Thr Val Ser Ser
 115

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<210> 452
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<400> 452

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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 Ala Arg Thr Phe Ser Ser Tyr
 20 25 30

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

30

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

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

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

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

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

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<210> 453
 <211> 123
 <212> PRT
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<400> 453

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

60

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

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

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

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

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

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

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

30 <210> 454
 <211> 128
 <212> PRT
 <213> -
 <400> 454

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

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

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

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

50 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn 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

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

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

<210> 455
 <211> 124
 <212> PRT
 <213> -

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<400> 455

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

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

20

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

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

30

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 Pro Glu Asp Thr Ala Ala Tyr Tyr Cys
 85 90 95

Ala Ala Gln Asp Arg Arg Arg Gly Asp Tyr Tyr Thr Pro Asp Tyr His
 100 105 110

40

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

<210> 456
 <211> 126
 <212> PRT
 <213> -

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<400> 456

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

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

60

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

	35		40		45														
	Ala	Ala	Ala	His	Trp	Ser	Gly	Gly	Arg	Met	Trp	Tyr	Lys	Asp	Ser	Val			
	50						55					60							
	Lys	Gly	Arg	Phe	Thr	Met	Ser	Arg	Asp	Asn	Asn	Lys	Asn	Thr	Val	Tyr			
	65					70				75					80				
10	Leu	Gln	Met	Asn	Ser	Leu	Lys	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys			
				85					90						95				
	Ala	Ala	Asp	Ser	Gly	Ala	Trp	Gly	Gly	Ser	Tyr	Tyr	Arg	Ala	Glu	Glu			
				100				105						110					
20	Tyr	Val	Tyr	Trp	Gly	Gln	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser					
			115					120					125						
	<210>	457																	
	<211>	125																	
	<212>	PRT																	
	<213>	-																	
	<400>	457																	
30	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Ala	Gly	Ala			
	1			5						10					15				
	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Arg	Thr	Phe	Ser	Ser	Tyr			
				20					25					30					
40	Asp	Met	Gly	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Glu	Arg	Ala	Leu	Val			
			35					40					45						
	Ala	Ala	Ile	Thr	Ser	Ser	Gly	Gly	Arg	Arg	Trp	Tyr	Ala	Asp	Ser	Val			
	50						55					60							
	Leu	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Val	Ser			
	65					70				75					80				
50	Leu	Gln	Met	Ser	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys			
				85					90						95				
	Ala	Ala	Arg	Gly	Arg	Val	Asp	Tyr	Asn	Tyr	Tyr	Asn	Lys	Asp	Ala	Tyr			
				100				105						110					
60	Thr	Tyr	Trp	Gly	Gln	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser						
			115					120					125						

<210> 458
 <211> 123
 <212> PRT
 <213> -

<400> 458

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

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

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

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

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

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

 Ala Ala Ala Met Thr His Phe Ala Val Leu Glu Arg Glu Tyr Gly Tyr
 100 105 110

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

40 <210> 459
 <211> 126
 <212> PRT
 <213> -

<400> 459

50 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 Ile Ser Ser Tyr
 20 25 30

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

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

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

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

10

Ala Ala Glu Pro Tyr Ile Pro Val Arg Thr Met Arg His Met Thr Phe
 100 105 110

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

20

<210> 460
 <211> 119
 <212> PRT
 <213> -
 <400> 460

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

30

Ser Leu Arg Leu Ser Cys Ala Pro Ser Gly Arg Asp Ile Ser Ser Tyr
 20 25 30

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

40

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

Asn 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

50

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

Thr Gln Val Thr Val Ser Ser
 115

60

<210> 461
 <211> 120
 <212> PRT
 <213> -

<400> 461

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 Arg Ala Leu Asp Thr Tyr
 20 25 30

10

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

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

20

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

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

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

30

Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 462

<211> 120

<212> PRT

<213> -

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<400> 462

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 Gly Arg Ala Leu Asp Thr Tyr
 20 25 30

50

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

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

60

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

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

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
100 105 110

10 Gly Thr Gln Val Thr Val Ser Ser
115 120

<210>	463
<211>	120
<212>	PRT
<213>	-

<400> 463

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 Arg Ala Leu Asp Thr Tyr
20 25 30

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

Ala Ser Asn Arg Trp Asn Ala Lys Pro Tyr Val Thr 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

40
Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
100 105 110

50 Gly Thr Gln Val Thr Val Ser Ser
115 120

<210>	464
<211>	120
<212>	PRT
<213>	-

<400> 464

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

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

10

Ala Ser Asp Arg Trp Asn Ala Lys Pro Tyr Thr Thr 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

20

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

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Phe Trp Gly Gln
 100 105 110

Gly Thr Gln Val Thr Val Ser Ser
 115 120

30

<210> 465
 <211> 120
 <212> PRT
 <213> -

<400> 465

40

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 Ala Leu Asp Thr Tyr
 20 25 30

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

50

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

Gly Arg Phe Thr Met 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

60

Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

Gly Thr Gln Val Thr Val Ser Ser
 115 120

10 <210> 466
 <211> 120
 <212> PRT
 <213> -

<400> 466

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

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

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

30 Ala Ser Val Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys
 50 55 60

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

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

40 Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

Gly Thr Gln Val Thr Val Ser Ser
 115 120

50 <210> 467
 <211> 120
 <212> PRT
 <213> -

<400> 467

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

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

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

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

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

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

20 Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

Gly Thr Gln Val Thr Val Ser Ser
 115 120

<210> 468
 <211> 126
 <212> PRT
 <213> -

30 <400> 468

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

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

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

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

50 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 Gln Lys Gly Thr Pro Pro Leu Gly Cys Pro Ala Tyr Tyr Gly
 100 105 110

60 Met Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser

115 120 125

<210> 469
 <211> 126
 <212> PRT
 <213> -

<400> 469

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

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

20
 Gly Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val
 35 40 45

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

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

30
 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Ala Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Gln Lys Gly Thr Pro Pro Leu Gly Cys Pro Ala Tyr Tyr Gly
 100 105 110

40
 Met Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser
 115 120 125

<210> 470
 <211> 126
 <212> PRT
 <213> -

<400> 470

50
 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 Gly Val
 20 25 30

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

60

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

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

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

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

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

20

<210> 471
<211> 126
<212> PRT
<213> -

<400> 471

30

Glu Val Pro Met 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 Gly Val
20 25 30

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

40

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

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

50

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

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

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

60

<210> 472
<211> 126

<212> PRT

<213> -

<400> 472

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

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

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

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

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

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

30 Ala Thr Gly Arg Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile
 100 105 110

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

<210> 473

<211> 126

<212> PRT

<213> -

<400> 473

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

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

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

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

60

Lys Gly Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr

65 70 75 80
 Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Gly Arg Ala Ser Ser Thr Ser Asp Tyr Tyr Thr Asp Arg Ile
 100 105 110
 Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 115 120 125
 <210> 474
 <211> 126
 <212> PRT
 <213> -
 <400> 474
 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 Gly Val
 20 25 30
 Asp Val Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Gly Asn Pro Asn Asp Thr Val Tyr
 65 70 75 80
 Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Gly Arg Ala Tyr Arg Gly Ser Asp Tyr Tyr Thr Asp Arg Ile
 100 105 110
 Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 115 120 125
 <210> 475
 <211> 123
 <212> PRT
 <213> -
 <400> 475

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 Ala Leu Ser Ser Tyr
 20 25 30

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

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

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

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

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

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

<210> 476
 <211> 125
 <212> PRT
 <213> -

<400> 476

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

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

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

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

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

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

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

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

10

<210> 477
 <211> 125
 <212> PRT
 <213> -

<400> 477

20

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

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

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

30

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

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

40

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

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

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

50

<210> 478
 <211> 125
 <212> PRT
 <213> -

<400> 478

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

60

Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr

	20		25		30
	Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val				
	35		40		45
10	Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr Ile Tyr Ala Asp Ser Val				
	50		55		60
	Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr				
	65		70		75 80
	Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys				
		85		90	95
20	Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr				
		100		105	110
	Gln Tyr Trp Gly Lys Gly Thr Gln Val Thr Val Ser Ser				
		115		120	125
30	<210> 479				
	<211> 125				
	<212> PRT				
	<213> -				
	<400> 479				
	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val His Ala Gly Gly				
	1	5		10	15
40	Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ala Phe Glu Thr Tyr				
		20		25	30
	Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val				
	35		40		45
	Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val				
	50		55		60
50	Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr				
	65		70		75 80
	Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys				
		85		90	95
60	Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr				
		100		105	110

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

<210> 480
 <211> 125
 <212> PRT
 <213> -

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<400> 480

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

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

20

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

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

30

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

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

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

40

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

<210> 481
 <211> 125
 <212> PRT
 <213> -

50

<400> 481

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

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

60

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

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

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

10

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

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

20

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

<210> 482
 <211> 125
 <212> PRT
 <213> -

<400> 482

30

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

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

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

40

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

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

50

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

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

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

60

<210> 483
 <211> 125
 <212> PRT
 <213> -

<400> 483

10 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 Val Ser Gly Arg Thr Phe Glu Ser Tyr
 20 25 30

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

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

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

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

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

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

40 <210> 484
 <211> 125
 <212> PRT
 <213> -

<400> 484

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

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

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

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

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

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

10 Ala Val Gly Arg Ala Trp Ser Gly Ser His Tyr Ser Ala Leu Ala Tyr
 100 105 110

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

<210> 485
 <211> 126
 20 <212> PRT
 <213> -

<400> 485

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

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

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

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

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

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

50 Ala Ala Asp Arg Trp Phe Ser Tyr Thr Thr Tyr Asp Ala Thr Asp Thr
 100 105 110

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

<210> 486
 <211> 259
 <212> PRT
 60 <213> -

<400> 486

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 Leu
20 25 30

10

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

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

20

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

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

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

30

Asp 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

40

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

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

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

50

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

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

60

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

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

Val Ser Ser

10 <210> 487
 <211> 255
 <212> PRT
 <213> -

<400> 487

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

20 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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys 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

40 Ala Ala Ser Arg Gly 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 Gly Gly Gly Gly Ser
 115 120 125

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

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

Phe Ser Asp Asn Val Met Gly Trp Phe Arg Gln Ala Ala Gly Lys Glu
 165 170 175

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

180 185 190

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

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

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

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

20 <210> 488
<211> 261
<212> PRT
<213> -

<400> 488

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

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

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

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

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

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

50 Ala Ala Ser Trp Arg Ser Ser Ile Trp Ile Pro Ala Glu Ser Asp Ser
100 105 110

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

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

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

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

10 Gly Lys Glu Arg Glu Phe Val Ala Ala Ile Ser Trp Ser Asn Asp Ile
 180 185 190

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

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

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

Ile Pro Ala Glu Ser Asp Ser Tyr Asp Phe Trp Ala Gln Gly Thr Gln
 245 250 255

30 Val Thr Val Ser Ser
 260

<210> 489
 <211> 243
 <212> PRT
 <213> -

<400> 489

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

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

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

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

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

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

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

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

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

Val Gln Ser His Arg Thr Pro Arg Ser Gln Gly Thr Gln Val Thr Val
 100 105 110

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

20 Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser
 130 135 140

Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Ser Met Ile Trp Val
 145 150 155 160

30 Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Glu Ile Ser Ser
 165 170 175

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

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

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

Thr Pro Arg Ser Gln Gly Thr Gln Val Thr Val Ser Ser
 225 230 235

50 <210> 491
 <211> 239
 <212> PRT
 <213> -
 <400> 491

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

60 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr

	20		25		30
	Trp Met Tyr Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Ser Val				
	35		40		45
10	Ser Ser Ile Asn Thr Gly Gly Ala Arg Thr Phe Tyr Ala Asp Ser Val				
	50		55		60
	Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr				
	65		70		80
	Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys				
		85		90	95
20	Ala Lys Asp Ala Ala Gly Arg Thr Arg 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
30	Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu				
		130		135	140
	Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr Trp Met Tyr Trp				
	145		150		155
	Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Ser Val Ser Ser Ile Asn				
		165		170	175
40	Thr Gly Gly Ala Arg Thr Phe Tyr Ala Asp Ser Val Lys Gly Arg Phe				
		180		185	190
	Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn				
		195		200	205
50	Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys Asp Ala				
		210		215	220
	Ala Gly Arg Thr Arg Gly Gln Gly Thr Gln Val Thr Val Ser Ser				
	225		230		235
	<210> 492				
	<211> 251				
	<212> PRT				
	<213> -				
60	<400> 492				

Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Arg Tyr
 20 25 30
 10 Glu Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Gly Ile Ser Thr Gly Gly Gly Trp Arg Thr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80
 20 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Leu Asn Arg Asp Tyr Gly Thr Ser Trp Ala Asp Phe Pro Ser Trp Gly
 100 105 110
 30 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 Asp Leu Val Gln Pro
 130 135 140
 Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
 145 150 155 160
 40 Arg Tyr Glu Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu
 165 170 175
 Trp Val Ser Gly Ile Ser Thr Gly Gly Gly Trp Arg Thr Tyr Ala Asp
 180 185 190
 50 Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr
 195 200 205
 Leu Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr
 210 215 220
 Tyr Cys Leu Asn Arg Asp Tyr Gly Thr Ser Trp Ala Asp Phe Pro Ser
 225 230 235 240
 60

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

<210> 493
<211> 239
<212> PRT
<213> -

10 <400> 493

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 Val Ser Ser Tyr
20 25 30

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

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

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

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

Ala Arg Asp Pro Phe Gly Lys Leu Lys Gly Gln Gly Thr Gln Val Thr
100 105 110

40 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 Pro Gly Gly Ser Leu Arg Leu
130 135 140

50 Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Tyr Thr Met Tyr Trp
145 150 155 160

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

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

60 Thr Val Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn
195 200 205

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

Phe Gly Lys Leu Lys Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 225 230 235

10

<210> 494
 <211> 259
 <212> PRT
 <213> -

<400> 494

20

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

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

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

30

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

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

40

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

Ala Asp Val Phe Phe Ser Gly Ala His Arg Tyr Glu Ala Ser Gln Trp
 100 105 110

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

50

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

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

60

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

Lys Glu Arg Glu Phe Val Ala Ile Asn Arg Ser Thr Gly Thr Ile Tyr
 180 185 190
 Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 195 200 205
 10 Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Lys Pro Gly Asp Thr
 210 215 220
 Ala Leu Tyr Tyr Cys Ala Ala Asp Val Phe Phe Ser Gly Ala His Arg
 225 230 235 240
 Tyr Glu Ala Ser Gln Trp His Tyr Trp Gly Gln Gly Thr Gln Val Thr
 245 250 255
 20 Val Ser Ser
 <210> 495
 <211> 255
 <212> PRT
 <213> -
 30 <400> 495
 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 Val Arg Thr Phe Ser Asn Tyr
 20 25 30
 40 Phe Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Thr Ile Gly Trp Ser Gly Thr Asp Tyr Ala Asp Ser Val Lys Gly
 50 55 60
 Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 65 70 75 80
 50 Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 85 90 95
 Gly Tyr Phe Lys Arg Leu Gly Pro Thr Ser Pro Arg Asp Tyr Thr Tyr
 100 105 110
 60 Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser
 115 120 125

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

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

10

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

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

20

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

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

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

30

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

<210> 496
 <211> 245
 <212> PRT
 <213> -

40

<400> 496

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 Arg Thr Phe Gly Ser Tyr
 20 25 30

50

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

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

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

60

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

Ala Gln Gly Trp Ser Leu Ala Glu Phe Arg Ser Trp Gly Gln Gly Thr
 100 105 110

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

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

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

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

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

30 Gly Arg Phe Thr Ile Ser Arg Asp Asn Gly Lys Asn Thr Met Tyr Leu
 195 200 205

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

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

40 Val Thr Val Ser Ser
 245

<210> 497
 <211> 259
 <212> PRT
 <213> -

50 <400> 497

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 Ala Arg Thr Phe Ser Ser Tyr
 20 25 30

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

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

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

10

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

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

20

Asp 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 Ala
 145 150 155 160

30

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

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

40

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 Glu Met Asn Ser Leu Lys Pro Glu Asp
 210 215 220

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

50

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

Val Ser Ser

60

<210> 498
 <211> 255
 <212> PRT

<213> -

<400> 498

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

10

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

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

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

20

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

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

30

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

40

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

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

50

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

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

Asn Thr Val Asp Leu Gln Met Asn Asn Leu Lys Pro Gly Asp Thr Ala
 210 215 220

60

Val Tyr Tyr Cys Ala Ala Lys Ser Arg Pro Gly Tyr Gly Gly Thr Leu

	225		230		235		240
	Asp Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser						
			245		250		255
10	<210> 499						
	<211> 265						
	<212> PRT						
	<213> -						
	<400> 499						
	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ser Gly Gly						
	1		5		10		15
20	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Leu Ala Phe Ser Thr Tyr						
			20		25		30
	Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Asp Arg Glu Met Val						
			35		40		45
	Ile Ala Leu Asn Trp Ser Gly Asp Arg Thr Trp Tyr Leu Asn Ser Val						
			50		55		60
30	Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn 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
40	Ala Ala Lys Ala Ser Gly Thr Ile Arg Gly Gly Ser Tyr Tyr Asp Ser						
			100		105		110
	Ala Gly Tyr Ser His Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser						
			115		120		125
	Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser						
			130		135		140
50	Gly Gly Gly Leu Val Gln Ser Gly Gly Ser Leu Arg Leu Ser Cys Ala						
			145		150		155
							160
	Ala Ser Gly Leu Ala Phe Ser Thr Tyr Ala Met Gly Trp Phe Arg Gln						
			165		170		175
60	Ala Pro Gly Lys Asp Arg Glu Met Val Ile Ala Leu Asn Trp Ser Gly						
			180		185		190

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

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

10 Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Lys Ala Ser Gly Thr
 225 230 235 240

Ile Arg Gly Gly Ser Tyr Tyr Asp Ser Ala Gly Tyr Ser His Trp Gly
 245 250 255

Gln Gly Thr Gln Val Thr Val Ser Ser
 260 265

20 <210> 500
 <211> 257
 <212> PRT
 <213> -
 <400> 500

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

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

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

40 Ala Ala Ile Arg Trp Ser Glu Asp Arg Val Trp Tyr Leu Gly 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

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

Ala Ala Gln Asp Arg Arg Arg Gly Asp Tyr Tyr Thr Pro Asp Tyr His
 100 105 110

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

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

130 135 140
 Val Gln Ala Gly Val Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg
 145 150 155 160
 Thr Phe Gly Asn Tyr Asn Met Gly Trp Phe Arg Gln Ala Gln Gly Lys
 165 170 175
 10
 Asp Arg Glu Leu Val Ala Ala Ile Arg Trp Ser Glu Asp Arg Val Trp
 180 185 190
 Tyr Leu Gly Ser Val Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 195 200 205
 20
 Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr
 210 215 220
 Ala Ala Tyr Tyr Cys Ala Ala Gln Asp Arg Arg Arg Gly Asp Tyr Tyr
 225 230 235 240
 Thr Pro Asp Tyr His Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser
 245 250 255
 30
 Ser
 <210> 501
 <211> 261
 <212> PRT
 <213> -
 40
 <400> 501
 Glu Val Gln Leu Val Glu Ser Gly Gly Arg Leu Val Gln Ala Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Gly Ile Phe Ser Arg Tyr
 20 25 30
 50
 Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Ala Ala His Trp Ser Gly Gly Arg Met Trp Tyr Lys Asp Ser Val
 50 55 60
 60
 Lys Gly Arg Phe Thr Met Ser Arg Asp Asn Asn Lys Asn Thr Val Tyr
 65 70 75 80

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

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

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

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

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

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

Gly Lys Glu Arg Glu Phe Val Ala Ala Ala His Trp Ser Gly Gly Arg
 180 185 190

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

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

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

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

Val Thr Val Ser Ser
 260

50 <210> 502
 <211> 259
 <212> PRT
 <213> -
 <400> 502

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

60 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr

	20		25		30
	Asp Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Ala Leu Val				
	35		40		45
10	Ala Ala Ile Thr Ser Ser Gly Gly Arg Arg Trp Tyr Ala Asp Ser Val				
	50		55		60
	Leu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Ser				
	65		70		75 80
	Leu Gln Met Ser Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys				
		85		90	95
20	Ala Ala Arg Gly Arg Val Asp Tyr Asn Tyr Tyr Asn Lys Asp Ala Tyr				
		100		105	110
	Thr Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly				
		115		120	125
30	Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly				
		130		135	140
	Leu Val Gln Ala Gly Ala Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly				
		145		150	155 160
	Arg Thr Phe Ser Ser Tyr Asp Met Gly Trp Phe Arg Gln Ala Pro Gly				
		165		170	175
40	Lys Glu Arg Ala Leu Val Ala Ala Ile Thr Ser Ser Gly Gly Arg Arg				
		180		185	190
	Trp Tyr Ala Asp Ser Val Leu Gly Arg Phe Thr Ile Ser Arg Asp Asn				
		195		200	205
50	Ala Lys Asn Thr Val Ser Leu Gln Met Ser Ser Leu Arg Pro Glu Asp				
		210		215	220
	Thr Ala Val Tyr Tyr Cys Ala Ala Arg Gly Arg Val Asp Tyr Asn Tyr				
		225		230	235 240
	Tyr Asn Lys Asp Ala Tyr Thr Tyr Trp Gly Gln Gly Thr Gln Val Thr				
		245		250	255
60	Val Ser Ser				

<210> 503
 <211> 255
 <212> PRT
 <213> -

<400> 503

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

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

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

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

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

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

Ala Ala Ala Met Thr His Phe Ala Val Leu Glu Arg Glu Tyr Gly Tyr
 100 105 110

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

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

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

50 Val Arg Asn Tyr Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Gln Glu
 165 170 175

Arg Glu Ile Leu Ser Ser Ile Thr Arg Thr Asp Asn Ile Thr Tyr Tyr
 180 185 190

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

60

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

Val Tyr Tyr Cys Ala Ala Ala Met Thr His Phe Ala Val Leu Glu Arg
 225 230 235 240

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

<210> 504

<211> 261

<212> PRT

<213> -

<400> 504

20 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 Ile Ser Ser Tyr
 20 25 30

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

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

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

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

Ala Ala Glu Pro Tyr Ile Pro Val Arg Thr Met Arg His Met Thr Phe
 100 105 110

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

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

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

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

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

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

10

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

Asp Thr Ala Val Tyr Tyr Cys Ala Ala Glu Pro Tyr Ile Pro Val Arg
 225 230 235 240

20

Thr Met Arg His Met Thr Phe Leu Thr Tyr Trp Gly Gln Gly Thr Gln
 245 250 255

Val Thr Val Ser Ser
 260

<210> 505
 <211> 247
 <212> PRT
 <213> -

30

<400> 505

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 Pro Ser Gly Arg Asp Ile Ser Ser Tyr
 20 25 30

40

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

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

50

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

60

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

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

10 Ser Leu Arg Leu Ser Cys Ala Pro Ser Gly Arg Asp Ile Ser Ser Tyr
 145 150 155 160

Ile Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Thr
 165 170 175

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

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

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

30 Ala Ala Lys Glu Arg Gly Ser Gly Ala Tyr Asp Tyr Trp Gly Gln Gly
 225 230 235 240

Thr Gln Val Thr Val Ser Ser
 245

<210> 506
 <211> 249
 <212> PRT
 40 <213> -

<400> 506

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 Arg Ala Leu Asp Thr Tyr
 20 25 30

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

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

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

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

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

10

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

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

20

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

Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe
 165 170 175

Val Ala Ser Asn Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val
 180 185 190

30

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

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

40

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

Gln Gly Thr Gln Val Thr Val Ser Ser
 245

50

<210> 507
 <211> 249
 <212> PRT
 <213> -

<400> 507

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

60

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

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

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

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

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

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

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

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

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

Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe
 165 170 175

Val Ala Ser Ile Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val
 180 185 190

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

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

50 Ala Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly
 225 230 235 240

Gln Gly Thr Gln Val Thr Val Ser Ser
 245

<210> 508
 <211> 249
 <212> PRT
 60 <213> -

<400> 508

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 Arg Ala Leu Asp Thr Tyr
20 25 30

10

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

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

20

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

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

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
100 105 110

30

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

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

40

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

Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe
165 170 175

Val Ala Ser Asn Arg Trp Asn Ala Lys Pro Tyr Val Thr Asp Ser Val
180 185 190

50

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

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

60

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

Gln Gly Thr Gln Val Thr Val Ser Ser
245

<210> 509
<211> 249
<212> PRT
<213> -

10

<400> 509

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 Ala Leu Asp Thr Tyr
20 25 30

20

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

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

30

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

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

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Phe Trp Gly Gln
100 105 110

40

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

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

50

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

Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe
165 170 175

Val Ala Ser Asp Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val
180 185 190

60

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

	195		200		205														
	Leu	Gln	Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys			
	210						215					220							
	Ala	Ala	Asp	Leu	Thr	Thr	Trp	Ala	Asp	Gly	Pro	Tyr	Arg	Phe	Trp	Gly			
	225					230					235					240			
10																			
	Gln	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser										
					245														
	<210>	510																	
	<211>	249																	
	<212>	PRT																	
	<213>	-																	
20																			
	<400>	510																	
	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	Ala	Leu	Asp	Thr	Tyr			
				20					25					30					
30																			
	Thr	Val	Thr	Trp	Phe	Arg	Gln	Thr	Pro	Gly	Lys	Gly	Arg	Glu	Phe	Leu			
			35					40					45						
	Ala	Ser	Ile	Arg	Trp	Asn	Ala	Lys	Pro	Tyr	Thr	Thr	Asp	Ser	Val	Lys			
	50						55					60							
	Gly	Arg	Phe	Thr	Met	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Val	Tyr	Leu			
40	65					70				75					80				
	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala			
					85					90					95				
	Ala	Asp	Pro	Thr	Thr	Trp	Ala	Asp	Gly	Pro	Tyr	Arg	Tyr	Trp	Gly	Gln			
				100					105					110					
50																			
	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly			
			115					120					125						
	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Ala	Gly			
	130						135					140							
	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Arg	Ala	Leu	Asp	Thr			
60	145					150				155					160				

Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Gly Arg Glu Phe
 165 170 175

Leu Ala Ser Ile Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val
 180 185 190

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

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

20 Ala Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly
 225 230 235 240

Gln Gly Thr Gln Val Thr Val Ser Ser
 245

<210> 511
 <211> 249
 <212> PRT
 <213> -

30 <400> 511

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 Ala Leu Asp Thr Tyr
 20 25 30

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

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

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

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

Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

60 Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly

115 120 125
 Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
 130 135 140
 Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ala Leu Asp Thr
 145 150 155 160
 10 Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Thr Arg Glu Phe
 165 170 175
 Val Ala Ser Val Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val
 180 185 190
 20 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 195 200 205
 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 210 215 220
 Ala Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly
 225 230 235 240
 30 Gln Gly Thr Gln Val Thr Val Ser Ser
 245
 <210> 512
 <211> 249
 <212> PRT
 <213> -
 40 <400> 512
 Glu Val His 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 Ala Leu Asp Thr Tyr
 20 25 30
 50 Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Thr Arg Glu Phe Val
 35 40 45
 Ala Ser Val Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys
 50 55 60
 60 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

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

Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

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

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

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

20 Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Thr Arg Glu Phe
 165 170 175

Val Ala Ser Val Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val
 180 185 190

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

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

Ala Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly
 225 230 235 240

40 Gln Gly Thr Gln Val Thr Val Ser Ser
 245

<210> 513
 <211> 261
 <212> PRT
 <213> -

50 <400> 513

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

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

60 Gly Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val

[illegible]

<212> PRT

<213> -

<400> 514

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

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

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

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

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

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

30 Ala Ala Gln Lys Gly Thr Pro Pro Leu Gly Cys Pro Ala Tyr Tyr Gly
 100 105 110

Met Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly
 115 120 125

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

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

Gly Phe Thr Leu Asp Tyr Tyr Gly Ile Gly Trp Phe Arg Gln Ala Pro
 165 170 175

50 Gly Lys Glu Arg Glu Trp Val Ser Cys Ile Ser Ser Ser Gly Gly Ser
 180 185 190

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

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

60

Asp Ala Ala Val Tyr Tyr Cys Ala Ala Gln Lys Gly Thr Pro Pro Leu
 225 230 235 240

Gly Cys Pro Ala Tyr Tyr Gly Met Asp Tyr Trp Gly Lys Gly Thr Leu
 245 250 255

10 Val Thr Val Ser Ser
 260

<210> 515
 <211> 261
 <212> PRT
 <213> -
 <400> 515

20 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 Gly Val
 20 25 30

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

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

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

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

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

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

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

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

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

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

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

10

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

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

20

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

Val Thr Val Ser Ser
 260

<210> 516
 <211> 261
 <212> PRT
 <213> -

30

<400> 516

Glu Val Pro Met 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 Gly Val
 20 25 30

40

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

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

50

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

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

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

60

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

Gly Gly Ser Gly Gly Gly Ser Glu Val Pro Met Val Glu Ser Gly Gly
 130 135 140

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

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

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

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

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

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

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

Val Thr Val Ser Ser
 260

40 <210> 517
 <211> 261
 <212> PRT
 <213> -
 <400> 517

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

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

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

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

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

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

10

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

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

20

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

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

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

30

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

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

40

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

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

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

50

Val Thr Val Ser Ser
 260

<210> 518
 <211> 261
 <212> PRT
 <213> -

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<400> 518

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 Gly Val
 20 25 30
 10 Asp Val Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr
 65 70 75 80
 20 Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Gly Arg Ala Ser Ser Thr Ser Asp Tyr Tyr Thr Asp Arg Ile
 100 105 110
 30 Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser Gly Gly
 115 120 125
 Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
 130 135 140
 Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser
 145 150 155 160
 40 Gly Arg Thr Phe Ser Gly Val Asp Val Ala Trp Phe Arg Gln Ala Pro
 165 170 175
 Gly Lys Glu Arg Glu Phe Val Ala Ala Leu Ala Trp Ser Gly Ile Arg
 180 185 190
 50 Thr Tyr Tyr Ala Val Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Gly
 195 200 205
 Asp Pro Asn Asp Thr Val Tyr Leu Gln Met Thr Ser Leu Lys Pro Glu
 210 215 220
 Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Arg Ala Ser Ser Thr Ser
 225 230 235 240
 60 Asp Tyr Tyr Thr Asp Arg Ile Tyr Asp Ser Trp Gly Gln Gly Ala Gln

245

250

255

Val Thr Val Ser Ser
260

10

<210> 519
<211> 261
<212> PRT
<213> -

<400> 519

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

20

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

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

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

30

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

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

40

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

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

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

50

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

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

60

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

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

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

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

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

Val Thr Val Ser Ser
 260

20 <210> 520
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30 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

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

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

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

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

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

Asp Ser Leu Tyr Trp Arg Ser Ser Arg Met Ala Thr Asp 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

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

	130		135		140	
	Gln Pro Gly Gly Ser	Leu Arg Leu Ser Cys	Ala Ala Ser Gly Arg Ala			
	145	150	155	160		
10	Leu Ser Ser Tyr Ser	Val Gly Trp Phe Arg	Gln Ala Pro Gly Lys Glu			
	165	170	175			
	Arg Glu Phe Val Thr	Ala Ile Ser Trp Ser	Val Pro Tyr Tyr Ala Asp			
	180	185	190			
	Ser Val Lys Gly Arg	Phe Thr Ile Ser Arg	Asp Asn Ala Lys Asn Thr			
	195	200	205			
20	Val Tyr Leu Gln Met	Asn Ser Leu Lys Pro	Glu Asp Thr Ala Val Tyr			
	210	215	220			
	Tyr Cys Ala Ala Asp	Ser Leu Tyr Trp Arg	Ser Ser Arg Met Ala Thr			
	225	230	235	240		
30	Asp Tyr Asp Tyr Trp	Gly Gln Gly Thr Gln	Val Thr Val Ser Ser			
	245	250	255			
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	<211> 259					
	<212> PRT					
	<213> -					
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	1	5	10	15		
	Ala Leu Arg Leu Ser	Cys Ala Ala Ser Gly	Arg Thr Phe Glu Thr Tyr			
	20	25	30			
	Arg Met Gly Trp Phe	Arg Gln Ala Pro Gly	Lys Glu Arg Glu Phe Val			
	35	40	45			
50	Ala Leu Ile Asn Trp	Ser Ser Gly Thr Thr	Val Tyr Ala Asp Ser Val			
	50	55	60			
	Lys Gly Arg Phe Thr	Ile Ser Gly Asp Asn	Ala Lys Asp Thr Val Tyr			
	65	70	75	80		
60	Leu Glu Met Asn Ser	Leu Lys Pro Glu Asp	Thr Ala Val Tyr Tyr Cys			
	85	90	95			

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

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

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

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

20 Lys Glu Arg Glu Phe Val Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr
180 185 190

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

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

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

Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr
245 250 255

40 Val Ser Ser

<210> 522
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<212> PRT
<213> -

50 <400> 522

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

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

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

35

40

45

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

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

10

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

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

20

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

30

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

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

40

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

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

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

50

Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr
245 250 255

Val Ser Ser

60

<210> 523
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<212> PRT

<213> -

<400> 523

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10	Ala	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Arg	Thr	Phe	Glu	Thr	Tyr	
				20					25					30			
	Arg	Met	Gly	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Glu	Arg	Glu	Phe	Val	
			35					40					45				
	Ala	Leu	Ile	Asn	Trp	Ser	Ser	Gly	Thr	Thr	Ile	Tyr	Ala	Asp	Ser	Val	
20		50					55					60					
	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Gly	Asp	Asn	Ala	Lys	Asp	Thr	Val	Tyr	
	65					70					75				80		
	Leu	Glu	Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	
					85					90					95		
30	Ala	Val	Gly	Arg	Arg	Trp	Ser	Gly	Ser	Tyr	Tyr	Ser	Ala	Leu	Ala	Tyr	
				100					105					110			
	Gln	Tyr	Trp	Gly	Lys	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	
40		130					135					140					
	Leu	Val	Gln	Ala	Gly	Gly	Ala	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	
	145					150					155					160	
	Arg	Thr	Phe	Glu	Thr	Tyr	Arg	Met	Gly	Trp	Phe	Arg	Gln	Ala	Pro	Gly	
					165					170					175		
50	Lys	Glu	Arg	Glu	Phe	Val	Ala	Leu	Ile	Asn	Trp	Ser	Ser	Gly	Thr	Thr	
				180					185					190			
	Ile	Tyr	Ala	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Gly	Asp	Asn	
		195						200					205				
	Ala	Lys	Asp	Thr	Val	Tyr	Leu	Glu	Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	
60		210					215					220					

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

Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Lys Gly Thr Gln Val Thr
 245 250 255

Val Ser Ser

10

<210> 524
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 <212> PRT
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<400> 524

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

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

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

30

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

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

40

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

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

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

50

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

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

60

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

Lys Glu Arg Glu Phe Val Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr
 180 185 190
 Val Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn
 195 200 205
 10 Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser Leu Lys Pro Glu Asp
 210 215 220
 Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr
 225 230 235 240
 20 Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr
 245 250 255
 Val Ser Ser
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 30 <213> -
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 1 5 10 15
 Ala Leu Arg Pro Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr
 20 25 30
 40 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val
 50 55 60
 50 Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80
 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110
 60

Gln 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

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

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

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

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

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

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

Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr
 245 250 255

Val Ser Ser

40 <210> 526
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 1 5 10 15

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

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

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

Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80
 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 10 Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110
 Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 20 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 Ala Leu Arg Leu Ser Cys Ala Val Ser Gly
 145 150 155 160
 Arg Thr Phe Glu Ser Tyr Arg Met Gly Trp Phe Arg Gln Ala Pro Gly
 165 170 175
 30 Lys Glu Arg Glu Phe Val Ser Leu Ile Asn Trp Ser Ser Gly Lys Thr
 180 185 190
 Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn
 195 200 205
 40 Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser Leu Lys Pro Glu Asp
 210 215 220
 Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr
 225 230 235 240
 Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr
 245 250 255
 50 Val Ser Ser
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
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 Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr
 20 25 30
 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 10 35 40 45
 Ala Leu Ile Asn Trp Ser Ser Gly Ile Thr Val Tyr Leu Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80
 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110
 Gln 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 Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly
 145 150 155 160
 Arg Thr Phe Glu Thr Tyr Arg Met Gly Trp Phe Arg Gln Ala Pro Gly
 165 170 175
 Lys Glu Arg Glu Phe Val Ala Leu Ile Asn Trp Ser Ser Gly Ile Thr
 180 185 190
 Val Tyr Leu Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn
 195 200 205
 Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser Leu Lys Pro Glu Asp
 210 215 220
 Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr
 225 230 235 240
 Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr
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245

250

255

Val Ser Ser

<210> 528

<211> 259

10 <212> PRT

<213> -

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

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

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

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

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

40 Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110

Gln 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 Met Glu Ser Gly Gly Gly
 130 135 140

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

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

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

Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn
 195 200 205
 Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser Leu Lys Pro Glu Asp
 210 215 220
 10 Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr
 225 230 235 240
 Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr
 245 250 255
 Val Ser Ser
 20
 <210> 529
 <211> 259
 <212> PRT
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 30 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Ser Val Gln Ala Gly Gly
 1 5 10 15
 Ala Leu Arg Leu Ser Cys Ala Val Ser Gly Arg Thr Phe Glu Ser Tyr
 20 25 30
 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 40 Ser Leu Ile Asn Trp Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80
 50 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Val Gly Arg Ala Trp Ser Gly Ser His Tyr Ser Ala Leu Ala Tyr
 100 105 110
 Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 60 Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly

130 135 140
 Ser Val Gln Ala Gly Gly Ala Leu Arg Leu Ser Cys Ala Val Ser Gly
 145 150 155 160
 Arg Thr Phe Glu Ser Tyr Arg Met Gly Trp Phe Arg Gln Ala Pro Gly
 165 170 175
 10
 Lys Glu Arg Glu Phe Val Ser Leu Ile Asn Trp Ser Ser Gly Lys Thr
 180 185 190
 Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn
 195 200 205
 20
 Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser Leu Lys Pro Glu Asp
 210 215 220
 Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Ala Trp Ser Gly Ser His
 225 230 235 240
 Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr
 245 250 255
 30
 Val Ser Ser
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 <211> 261
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 <400> 530
 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 Gly Thr Tyr
 20 25 30
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 Ala Met Ala Trp Phe Arg Gln Ser Pro Lys Asn Glu Arg Glu Phe Val
 35 40 45
 Ala Thr Leu Arg Trp Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60
 60
 Lys Gly Arg Phe Thr Ile Ala Gly Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

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

Ala Ala Asp Arg Trp Phe Ser Tyr Thr Thr Tyr Asp Ala Thr Asp Thr
 100 105 110

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

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

Gly Leu Val Gln Thr Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser
 20 145 150 155 160

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

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

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

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

Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Arg Trp Phe Ser Tyr Thr
 40 225 230 235 240

Thr Tyr Asp Ala Thr Asp Thr Trp His Tyr Trp Gly Gln Gly Thr Gln
 245 250 255

Val Thr Val Ser Ser
 260

50 <210> 531
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

60 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Leu

		20						25						30			
	Ala	Met	Gly	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Asp	Arg	Glu	Phe	Val	
		35						40					45				
10	Val	Val	Val	Ser	Gly	Ser	Gly	Gly	Thr	Thr	Lys	Tyr	Ala	Asp	Ser	Val	
		50					55					60					
	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Asn	Lys	Asn	Ala	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		
20	Ala	Ala	Asp	Pro	Ser	Arg	Tyr	Phe	Ile	Thr	Thr	Asp	Arg	Arg	Gly	Tyr	
				100						105					110		
	Asp	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	
30		130					135						140				
	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Glu	Val	Gln	Leu	Val	
	145					150					155					160	
	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Ala	Gly	Gly	Ser	Leu	Arg	Leu	Ser	
					165					170						175	
40	Cys	Ala	Ala	Ser	Gly	Arg	Thr	Phe	Ser	Ser	Leu	Ala	Met	Gly	Trp	Phe	
				180					185					190			
	Arg	Gln	Ala	Pro	Gly	Lys	Asp	Arg	Glu	Phe	Val	Val	Val	Val	Ser	Gly	
		195						200						205			
	Ser	Gly	Gly	Thr	Thr	Lys	Tyr	Ala	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	
50		210					215					220					
	Ile	Ser	Arg	Asp	Asn	Asn	Lys	Asn	Ala	Val	Tyr	Leu	Gln	Met	Asn	Ser	
	225					230					235					240	
	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Ala	Asp	Pro	Ser	
					245					250					255		
60	Arg	Tyr	Phe	Ile	Thr	Thr	Asp	Arg	Arg	Gly	Tyr	Asp	Tyr	Trp	Gly	Gln	
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Gly Thr Gln Val Thr Val Ser Ser
 275 280

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 10 <213> -

<400> 532

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

20 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 Asp Ser Val
 50 55 60

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

40 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

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

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

Ala Ser Gly Arg Ser Phe Ser Asp Asn Val Met Gly Trp Phe Arg Gln
 180 185 190

60

Ala Ala Gly Lys Glu Arg Glu Phe Val Ala His Ile Ser Arg Gly Gly
195 200 205

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

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

Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Ser Arg Gly Val Ala
245 250 255

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

20 Thr Val Ser Ser
275

<210> 533
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<212> PRT
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30 <400> 533

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

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

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

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

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

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

Ala Ala Ser Trp Arg Ser Ser Ile Trp Ile Pro Ala Glu Ser Asp Ser
100 105 110

60 Tyr Asp Phe Trp Ala Gln Gly Thr Gln Val Thr Val Ser 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

10

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

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

20

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

Trp Ser Asn Asp Ile Thr Tyr Tyr Glu Asp Ser Val Lys Gly Arg Phe
 210 215 220

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

30

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

Arg Ser Ser Ile Trp Ile Pro Ala Glu Ser Asp Ser Tyr Asp Phe Trp
 260 265 270

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Ala Gln Gly Thr Gln Val Thr Val Ser Ser
 275 280

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 <212> PRT
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<400> 534

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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 Ala Cys Ala Val Ser Gly Phe Thr Met 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

60

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

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

10 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

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

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

30 Pro Gly Gly Ser Leu Arg Leu Ala Cys Ala Val Ser Gly Phe Thr Met
 165 170 175

Ser Ser Ser Trp Met Tyr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 180 185 190

Glu Trp Val Ser Ser Ile Ser Pro Gly Gly Leu Phe Pro Tyr Tyr Val
 195 200 205

40 Asp Ser Val Lys Gly Arg Phe Ser Ile Ser Thr Asp Asn Ala Asn Asn
 210 215 220

Ile Leu Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu
 225 230 235 240

50 Tyr Ser Cys Ala Lys Gly Gly Ala Pro Asn Tyr Thr Pro Arg Gly Arg
 245 250 255

Gly Thr Gln Val Thr Val Ser Ser
 260

<210> 535
 <211> 258
 <212> PRT
 60 <213> -

<400> 535

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

10

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

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

20

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

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

Val Gln Ser His Arg Thr Pro Arg Ser Gln Gly Thr Gln Val Thr Val
100 105 110

30

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly 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

40

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

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
165 170 175

Ser Met Ile Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
180 185 190

50

Ser Glu Ile Ser Ser Gly Gly Gly Trp Thr Ser Tyr Ala Asp Ser Val
195 200 205

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
210 215 220

60

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
225 230 235 240

Val Gln Ser His Arg Thr Pro Arg Ser Gln Gly Thr Gln Val Thr Val
 245 250 255

Ser Ser

10 <210> 536
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<400> 536

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

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

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

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

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

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

40 Ala Lys Asp Ala Ala Gly Arg Thr Arg 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

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

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

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn
 165 170 175

60 Tyr Trp Met Tyr Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Ser

	180		185		190
	Val Ser Ser Ile Asn Thr Gly Gly Ala Arg Thr Phe Tyr Ala Asp Ser				
	195		200		205
10	Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu				
	210		215		220
	Tyr Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr				
	225		230		235
	Cys Ala Lys Asp Ala Ala Gly Arg Thr Arg Gly Gln Gly Thr Gln Val				
		245		250	255
20	Thr Val Ser Ser				
		260			
	<210> 537				
	<211> 272				
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	<213> -				
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30	Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Gly				
	1	5		10	15
	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Arg Tyr				
		20		25	30
40	Glu Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val				
	35		40		45
	Ser Gly Ile Ser Thr Gly Gly Gly Trp Arg Thr Tyr Ala Asp Ser Val				
	50		55		60
	Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr				
	65		70		75
50	Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys				
		85		90	95
	Leu Asn Arg Asp Tyr Gly Thr Ser Trp Ala Asp Phe Pro Ser Trp Gly				
		100		105	110
60	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 Glu Val Gln Leu Val Glu Ser Gly Gly
 145 150 155 160

10 Asp Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser
 165 170 175

Gly Phe Thr Phe Ser Arg Tyr Glu Met Ser Trp Val Arg Gln Ala Pro
 180 185 190

Gly Lys Gly Leu Glu Trp Val Ser Gly Ile Ser Thr Gly Gly Gly Trp
 195 200 205

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

Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu
 225 230 235 240

30 Asp Thr Ala Val Tyr Tyr Cys Leu Asn Arg Asp Tyr Gly Thr Ser Trp
 245 250 255

Ala Asp Phe Pro Ser Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 260 265 270

<210> 538
 <211> 260
 40 <212> PRT
 <213> -

<400> 538

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

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

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

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

60 Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr

65 70 75 80
 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Tyr Cys
 85 90 95
 Ala Arg Asp Pro Phe Gly Lys Leu Lys Gly Gln Gly Thr Gln Val Thr
 100 105 110
 10 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
 20 Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
 145 150 155 160
 Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser
 165 170 175
 Tyr Thr Met Tyr Trp Ala Arg Gln Ala Pro Gly Lys Glu Leu Glu Trp
 180 185 190
 30 Val Ser Ile Ile Phe Thr Asn Gly Glu Gly Thr Tyr Tyr Ser Asp Ser
 195 200 205
 Val Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Thr Leu
 210 215 220
 40 Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Tyr
 225 230 235 240
 Cys Ala Arg Asp Pro Phe Gly Lys Leu Lys Gly Gln Gly Thr Gln Val
 245 250 255
 Thr Val Ser Ser
 260
 50
 <210> 539
 <211> 280
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 60 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Ser
 1 5 10 15

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

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

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

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

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

20 Ala Asp Val Phe Phe Ser Gly Ala His Arg Tyr Glu Ala Ser Gln Trp
 100 105 110

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

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

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

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

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

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

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

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

Lys Pro Gly Asp Thr Ala Leu Tyr Tyr Cys Ala Ala Asp Val Phe Phe
 245 250 255

60

Ser Gly Ala His Arg Tyr Glu Ala Ser Gln Trp His Tyr Trp Gly Gln
 260 265 270

Gly Thr Gln Val Thr Val Ser Ser
 275 280

10 <210> 540
 <211> 276
 <212> PRT
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<400> 540

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

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

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

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

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

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

40 Gly Tyr Phe Lys Arg Leu Gly Pro Thr Ser Pro Arg Asp Tyr Thr Tyr
 100 105 110

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

50 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 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala
 165 170 175

60 Ala Ser Val Arg Thr Phe Ser Asn Tyr Phe Met Gly Trp Phe Arg Gln
 180 185 190

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

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

10 Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu
225 230 235 240

Asp Thr Ala Val Tyr Tyr Cys Ala Ala Gly Tyr Phe Lys Arg Leu Gly
245 250 255

20 Pro Thr Ser Pro Arg Asp Tyr Thr Tyr Trp Gly Gln Gly Thr Gln Val
260 265 270

Thr Val Ser Ser
275

<210> 541
<211> 266
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30 <213> -

<400> 541

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 Arg Thr Phe Gly Ser Tyr
20 25 30

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

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

50 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Gly 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 Gln Gly Trp Ser Leu Ala Glu Phe Arg Ser Trp Gly Gln Gly Thr
100 105 110

60

Gln Val Thr Val Ser 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

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

Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Arg Thr
 165 170 175

Phe Gly Ser Tyr Asp Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu
 180 185 190

20 Arg Glu Phe Val Ala Ala Ile Ser Thr Gly Gly Gly Trp Arg Arg Tyr
 195 200 205

Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Gly Lys
 210 215 220

30 Asn Thr Met Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala
 225 230 235 240

Val Tyr Tyr Cys Ala Gln Gly Trp Ser Leu Ala Glu Phe Arg Ser Trp
 245 250 255

Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 260 265

40 <210> 542
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80
 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 10
 Ala Ser Thr Ala Phe Arg Arg Arg Thr Tyr Tyr Thr Pro Glu Ser Trp
 100 105 110
 Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 20
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 130 135 140
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val
 145 150 155 160
 Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser
 165 170 175
 30
 Cys Ala Ala Ser Ala Arg Thr Phe Ser Ser Tyr Ala Met Ser Trp Phe
 180 185 190
 Arg Gln Ala Pro Gly Lys Glu Arg Asp Phe Val Ala Val Ile Asn Trp
 195 200 205
 40
 Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr
 210 215 220
 Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Glu Met Asn Ser
 225 230 235 240
 Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser Thr Ala Phe
 245 250 255
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 Arg Arg Arg Thr Tyr Tyr Thr Pro Glu Ser Trp Asp Tyr Trp Gly Gln
 260 265 270
 Gly Thr Gln Val Thr Val Ser Ser
 275 280
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 <210> 543
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<213> -

<400> 543

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

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

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

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

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

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

30 Ala Ala Lys Ser Arg Pro Gly Tyr Gly Gly Thr Leu Asp 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

40 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 Ala Gly Asp Ser Leu Arg Leu Ser Cys Ala
 165 170 175

50 Ala Ser Gly Leu Thr Phe Ser Ala Tyr Thr Met Gly Trp Phe Arg Gln
 180 185 190

Ala Pro Gly Lys Glu Arg Glu Phe Val Ser Ala Thr Ser Arg Ser Gly
 195 200 205

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

60 Arg Asp Asn Ala Lys Asn Thr Val Asp Leu Gln Met Asn Asn Leu Lys

225 230 235 240
 Pro Gly Asp Thr Ala Val Tyr Tyr Cys Ala Ala Lys Ser Arg Pro Gly
 245 250 255
 Tyr Gly Gly Thr Leu Asp Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val
 260 265 270
 10 Thr Val Ser Ser
 275
 <210> 544
 <211> 286
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 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 Leu Ala Phe Ser Thr Tyr
 20 25 30
 30 Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Asp Arg Glu Met Val
 35 40 45
 Ile Ala Leu Asn Trp Ser Gly Asp Arg Thr Trp Tyr Leu Asn Ser Val
 50 55 60
 40 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn 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 Lys Ala Ser Gly Thr Ile Arg Gly Gly Ser Tyr Tyr Asp Ser
 100 105 110
 50 Ala Gly Tyr Ser His Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 115 120 125
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140
 60 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val
 145 150 155 160

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

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

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

Leu Asn Trp Ser Gly Asp Arg Thr Trp Tyr Leu Asn Ser Val Lys Gly
 210 215 220

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

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

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

30 Tyr Ser His Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 275 280 285

<210> 545
 <211> 278
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<400> 545

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

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

50 Asn Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Asp Arg Glu Leu Val
 35 40 45

Ala Ala Ile Arg Trp Ser Glu Asp Arg Val Trp Tyr Leu Gly 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

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

				85					90					95			
	Ala	Ala	Gln	Asp	Arg	Arg	Arg	Gly	Asp	Tyr	Tyr	Thr	Pro	Asp	Tyr	His	
				100					105					110			
	Tyr	Trp	Gly	Gln	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	
			115					120					125				
10	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	Glu	Val	Gln	Leu	Val	Glu	
	145					150					155					160	
20	Ser	Gly	Gly	Gly	Leu	Val	Gln	Ala	Gly	Val	Ser	Leu	Arg	Leu	Ser	Cys	
					165					170					175		
	Ala	Ala	Ser	Gly	Arg	Thr	Phe	Gly	Asn	Tyr	Asn	Met	Gly	Trp	Phe	Arg	
				180					185					190			
	Gln	Ala	Gln	Gly	Lys	Asp	Arg	Glu	Leu	Val	Ala	Ala	Ile	Arg	Trp	Ser	
			195					200					205				
30	Glu	Asp	Arg	Val	Trp	Tyr	Leu	Gly	Ser	Val	Arg	Gly	Arg	Phe	Thr	Ile	
		210					215					220					
	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Val	Tyr	Leu	Gln	Met	Asn	Ser	Leu	
	225					230					235					240	
40	Lys	Pro	Glu	Asp	Thr	Ala	Ala	Tyr	Tyr	Cys	Ala	Ala	Gln	Asp	Arg	Arg	
					245					250					255		
	Arg	Gly	Asp	Tyr	Tyr	Thr	Pro	Asp	Tyr	His	Tyr	Trp	Gly	Gln	Gly	Thr	
			260						265					270			
	Gln	Val	Thr	Val	Ser	Ser											
			275														
50																	
	<210>	546															
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60	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Arg	Leu	Val	Gln	Ala	Gly	Gly	
	1				5					10					15		

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Gly Ile Phe Ser Arg Tyr
 20 25 30
 Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 10 Ala Ala Ala His Trp Ser Gly Gly Arg Met Trp Tyr Lys Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Met Ser Arg Asp Asn Asn Lys Asn Thr Val Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 20 Ala Ala Asp Ser Gly Ala Trp Gly Gly Ser Tyr Tyr Arg Ala Glu Glu
 100 105 110
 Tyr Val Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly
 115 120 125
 30 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 Arg Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 165 170 175
 40 Ser Cys Ala Ala Ser Gly Gly Ile Phe Ser Arg Tyr Asn Met Gly Trp
 180 185 190
 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Ala His
 195 200 205
 50 Trp Ser Gly Gly Arg Met Trp Tyr Lys Asp Ser Val Lys Gly Arg Phe
 210 215 220
 Thr Met Ser Arg Asp Asn Asn Lys Asn Thr Val Tyr Leu Gln Met Asn
 225 230 235 240
 Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Ser
 245 250 255
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Gly Ala Trp Gly Gly Ser Tyr Tyr Arg Ala Glu Glu Tyr Val Tyr Trp
 260 265 270

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

10 <210> 547
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Ala
 1 5 10 15

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

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

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

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

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

40 Ala Ala Arg Gly Arg Val Asp Tyr Asn Tyr Tyr Asn Lys Asp Ala Tyr
 100 105 110

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

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

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

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

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

Arg Gln Ala Pro Gly Lys Glu Arg Ala Leu Val Ala Ala Ile Thr Ser
 195 200 205

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

10

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

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

20

Val Asp Tyr Asn Tyr Tyr Asn Lys Asp Ala Tyr Thr Tyr Trp Gly Gln
 260 265 270

Gly Thr Gln Val Thr Val Ser Ser
 275 280

<210> 548
 <211> 276
 <212> PRT
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<400> 548

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

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

40

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

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

50

Lys Gly Arg Phe Thr Ile Val Arg Asp Thr 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 Met Thr His Phe Ala Val Leu Glu Arg Glu Tyr Gly Tyr
 100 105 110

60

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

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

Gly Gly Arg Leu Val Gln Ala Gly Asp Ser Leu Arg Leu Ser Cys Ala
165 170 175

Ala Ser Gly Gly Thr Val Arg Asn Tyr Ala Met Gly Trp Phe Arg Gln
180 185 190

20
Ala Pro Gly Gln Glu Arg Glu Ile Leu Ser Ser Ile Thr Arg Thr Asp
195 200 205

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

	Arg	Asp	Thr	Ala	Lys	Asn	Thr	Val	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Lys
30	225					230					235					240

Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Ala Met Thr His Phe
245 250 255

Ala Val Leu Glu Arg Glu Tyr Gly Tyr Trp Gly Gln Gly Thr Gln Val
260 265 270

40 Thr Val Ser Ser
275

<210>	549
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50 <400> 549

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Ile Ser Ser Tyr
20 25 30

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

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

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

10

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

Ala Ala Glu Pro Tyr Ile Pro Val Arg Thr Met Arg His Met Thr Phe
 100 105 110

20

Leu Thr Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser 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

30

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

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

40

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

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

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

50

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

Tyr Ile Pro Val Arg Thr Met Arg His Met Thr Phe Leu Thr Tyr Trp
 260 265 270

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

<211> 268

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Ser Leu Arg Leu Ser Cys Ala Pro Ser Gly Arg Asp Ile Ser Ser Tyr
20 25 30

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

20
Ala Asp Ile Asn Trp Asn Gly Ser Trp Arg Phe Tyr Ala Glu Ser Val
50 55 60

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

	med	can	res	men	sci	edu	eng	his	stud	natl	ind	val	zoo	zoo	zoo
30					85				90					95	

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

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

40
Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
130 135 140

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

50	165	170	175
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Asp Ile Ser Ser Tyr Ile Met Gly Trp Phe Arg Gln Ala Pro Gly Lys
180 185 190

Glu Arg Glu Phe Thr Ala Asp Ile Asn Trp Asn Gly Ser Trp Arg Phe
195 200 205

60 Tyr Ala Glu Ser Val Asn Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala

210 215 220
 Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr
 225 230 235 240
 Ala Val Tyr Tyr Cys Ala Ala Lys Glu Arg Gly Ser Gly Ala Tyr Asp
 245 250 255
 10 Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 260 265
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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 Thr Ala Ser Gly Arg Ala Leu Asp Thr Tyr
 20 25 30
 30 Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Ser Asn Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys
 50 55 60
 40 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80
 Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110
 50 Gly Thr Gln Val Thr Val Ser 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
 60 Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 145 150 155 160

Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly
 165 170 175

Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly
 180 185 190

10 Lys Glu Arg Glu Phe Val Ala Ser Asn Arg Trp Asn Ala Lys Pro Tyr
 195 200 205

Thr Thr Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 210 215 220

Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr
 225 230 235 240

20 Ala Val Tyr Tyr Cys Ala Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro
 245 250 255

Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 260 265 270

30 <210> 552
 <211> 270
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Lys Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

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

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

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

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

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

60 Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln

	100		105		110
	Gly Thr Gln Val Thr Val Ser 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
10	Ser Gly Gly Gly Gly Ser Lys Val Gln Leu Val Glu Ser Gly Gly Gly				
	145		150		155
	Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly				
		165		170	175
20	Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly				
		180		185	190
	Lys Glu Arg Glu Phe Val Ala Ser Ile Arg Trp Asn Ala Lys Pro Tyr				
		195		200	205
	Thr Thr Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala				
		210		215	220
30	Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr				
		225		230	235
	Ala Ile Tyr Tyr Cys Ala Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro				
		245		250	255
40	Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser				
		260		265	270
	<210> 553				
	<211> 270				
	<212> PRT				
	<213> -				
	<400> 553				
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	1		5		10
					15
	Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Arg Ala Leu Asp Thr Tyr				
		20		25	30
60	Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val				
		35		40	45

Ala Ser Asn Arg Trp Asn Ala Lys Pro Tyr Val Thr 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

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

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

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

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

30 Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly
 165 170 175

Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly
 180 185 190

Lys Glu Arg Glu Phe Val Ala Ser Asn Arg Trp Asn Ala Lys Pro Tyr
 195 200 205

40 Val Thr Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 210 215 220

Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr
 225 230 235 240

50 Ala Val Tyr Tyr Cys Ala Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro
 245 250 255

Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 260 265 270

<210> 554
 <211> 270
 60 <212> PRT
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<400> 554

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 Ala Leu Asp Thr Tyr
 20 25 30

10

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

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

20

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

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

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Phe Trp Gly Gln
 100 105 110

30

Gly Thr Gln Val Thr Val Ser 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

40

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

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

Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly
 180 185 190

50

Lys Glu Arg Glu Phe Val Ala Ser Asp Arg Trp Asn Ala Lys Pro Tyr
 195 200 205

Thr Thr Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 210 215 220

60

Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr
 225 230 235 240

Ala Val Tyr Tyr Cys Ala Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro
245 250 255

Tyr Arg Phe Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
260 265 270

10

<210> 555
<211> 270
<212> PRT
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<400> 555

20

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 Ala Leu Asp Thr Tyr
20 25 30

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

30

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

Gly Arg Phe Thr Met 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

40

Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
100 105 110

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

50

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

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

60

Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly
 180 185 190

Lys Gly Arg Glu Phe Leu Ala Ser Ile Arg Trp Asn Ala Lys Pro Tyr
 195 200 205

10 Thr Thr Asp Ser Val Lys Gly Arg Phe Thr Met Ser Arg Asp Asn Ala
 210 215 220

Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr
 225 230 235 240

Ala Val Tyr Tyr Cys Ala Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro
 245 250 255

20 Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 260 265 270

<210> 556
 <211> 270
 <212> PRT
 <213> -

30 <400> 556

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 Ala Leu Asp Thr Tyr
 20 25 30

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

Ala Ser Val Arg Trp Asn Ala Lys Pro Tyr Thr Thr 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

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

Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

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

10

Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 165 170 175

Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly
 180 185 190

20

Lys Thr Arg Glu Phe Val Ala Ser Val Arg Trp Asn Ala Lys Pro Tyr
 195 200 205

Thr Thr Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 210 215 220

Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr
 225 230 235 240

30

Ala Val Tyr Tyr Cys Ala Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro
 245 250 255

Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 260 265 270

40

<210> 557
 <211> 270
 <212> PRT
 <213> -
 <400> 557

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

50

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

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

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

60

	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Val	Tyr	Leu	
	65					70					75					80	
	Gln	Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	
					85					90					95		
10	Ala	Asp	Pro	Thr	Thr	Trp	Ala	Asp	Gly	Pro	Tyr	Arg	Tyr	Trp	Gly	Gln	
				100					105					110			
	Gly	Thr	Gln	Val	Thr	Val	Ser	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				
20	Ser	Gly	Gly	Gly	Gly	Ser	Glu	Val	His	Leu	Val	Glu	Ser	Gly	Gly	Gly	
	145					150					155					160	
	Leu	Val	Gln	Ala	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	
					165					170						175	
30	Arg	Ala	Leu	Asp	Thr	Tyr	Thr	Val	Thr	Trp	Phe	Arg	Gln	Thr	Pro	Gly	
				180						185					190		
	Lys	Thr	Arg	Glu	Phe	Val	Ala	Ser	Val	Arg	Trp	Asn	Ala	Lys	Pro	Tyr	
			195						200				205				
	Thr	Thr	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	
		210					215						220				
40	Lys	Asn	Thr	Val	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	
	225					230					235					240	
	Ala	Val	Tyr	Tyr	Cys	Ala	Ala	Asp	Pro	Thr	Thr	Trp	Ala	Asp	Gly	Pro	
					245					250					255		
50	Tyr	Arg	Tyr	Trp	Gly	Gln	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser			
				260					265					270			
	<210>					558											
	<211>					282											
	<212>					PRT											
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	<400>					558											
60	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly	
	1				5					10					15		

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

Gly Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val
 35 40 45

10

Ser Cys Ile Ser Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

20

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Gln Lys Gly Thr Pro Pro Leu Gly Cys Pro Ala Tyr Tyr Gly
 100 105 110

Met Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly
 115 120 125

30

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

40

Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu
 165 170 175

Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Tyr Tyr Gly Ile Gly Trp
 180 185 190

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val Ser Cys Ile Ser
 195 200 205

50

Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
 210 215 220

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn
 225 230 235 240

60

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Gln Lys
 245 250 255

Gly Thr Pro Pro Leu Gly Cys Pro Ala Tyr Tyr Gly Met Asp Tyr Trp
 260 265 270

Gly Lys Gly Thr Leu Val Thr Val Ser Ser
 275 280

10 <210> 559
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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

20 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Tyr Tyr
 20 25 30

Gly Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val
 35 40 45

30 Ser Cys Ile Ser Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Ala Ala Val Tyr Tyr Cys
 85 90 95

40 Ala Ala Gln Lys Gly Thr Pro Pro Leu Gly Cys Pro Ala Tyr Tyr Gly
 100 105 110

Met Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly
 115 120 125

50 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 Pro Gly Gly Ser Leu Arg Leu
 165 170 175

60 Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Tyr Tyr Gly Ile Gly Trp

180 185 190

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val Ser Cys Ile Ser
195 200 205

Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
210 215 220

10 Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn
225 230 235 240

Ser Leu Lys Pro Glu Asp Ala Ala Val Tyr Tyr Cys Ala Ala Gln Lys
245 250 255

20 Gly Thr Pro Pro Leu Gly Cys Pro Ala Tyr Tyr Gly Met Asp Tyr Trp
260 265 270

Gly Lys Gly Thr Leu Val Thr Val Ser Ser
275 280

30 <210> 560
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<212> PRT
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<400> 560

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val
20 25 30

Asp Val Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val
50 55 60

50 Lys Gly Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr
65 70 75 80

Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

60 Ala Thr Gly Arg Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile
100 105 110

Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser 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

10 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 Ala Gly Gly Ser Leu Arg Leu
 165 170 175

Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val Asp Val Ala Trp
 180 185 190

20 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Leu Ala
 195 200 205

Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys Gly Arg Phe
 210 215 220

30 Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln Met Thr
 225 230 235 240

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Arg
 245 250 255

Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile Tyr Asp Ser Trp
 260 265 270

40 Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 275 280

<210> 561
 <211> 282
 <212> PRT
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50 <400> 561

Glu Val Pro Met 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 Gly Val
 20 25 30

60 Asp Val Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val

	35		40		45	
	Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val					
	50		55		60	
10	Lys Gly Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr					
	65		70		75	80
	Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys					
		85		90		95
	Ala Thr Gly Arg Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile					
		100		105		110
20	Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser 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
30	Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Pro Met					
		145		150		155
	Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu					
		165		170		175
	Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val Asp Val Ala Trp					
		180		185		190
40	Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Leu Ala					
		195		200		205
	Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys Gly Arg Phe					
		210		215		220
50	Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln Met Thr					
		225		230		235
	Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Arg					
		245		250		255
	Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile Tyr Asp Ser Trp					
		260		265		270
60	Gly Gln Gly Ala Gln Val Thr Val Ser Ser					
		275		280		

<210> 562

<211> 282

<212> PRT

<213> -

<400> 562

10 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val
20 25 30

20 Asp Val Ala Trp Phe Arg Gln Ala Thr Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr
65 70 75 80

30 Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Thr Gly Arg Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile
100 105 110

40 Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser 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

50 Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
165 170 175

Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val Asp Val Ala Trp
180 185 190

Phe Arg Gln Ala Thr Gly Lys Glu Arg Glu Phe Val Ala Ala Leu Ala
195 200 205

60

Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys Gly Arg Phe
 210 215 220

Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln Met Thr
 225 230 235 240

10 Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Arg
 245 250 255

Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile Tyr Asp Ser Trp
 260 265 270

Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 275 280

20 <210> 563
 <211> 282
 <212> PRT
 <213> -
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30 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 Gly Val
 20 25 30

Asp Val Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

40 Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr
 65 70 75 80

50 Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Thr Gly Arg Ala Ser Ser Thr Ser Asp Tyr Tyr Thr Asp Arg Ile
 100 105 110

Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser Gly Gly
 115 120 125

60 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 Ala Gly Gly Ser Leu Arg Leu
165 170 175

10

Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val Asp Val Ala Trp
180 185 190

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Leu Ala
195 200 205

20

Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys Gly Arg Phe
210 215 220

Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln Met Thr
225 230 235 240

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Arg
245 250 255

30

Ala Ser Ser Thr Ser Asp Tyr Tyr Thr Asp Arg Ile Tyr Asp Ser Trp
260 265 270

Gly Gln Gly Ala Gln Val Thr Val Ser Ser
275 280

40

<210> 564
<211> 282
<212> PRT
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<400> 564

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

50

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val
20 25 30

Asp Val Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val
50 55 60

60

Lys Gly Arg Phe Thr Ile Ser Arg Gly Asn Pro Asn Asp Thr Val Tyr
 65 70 75 80
 Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 10 Ala Thr Gly Arg Ala Tyr Arg Gly Ser Asp Tyr Tyr Thr Asp Arg Ile
 100 105 110
 Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser 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
 20 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 Ala Gly Gly Ser Leu Arg Leu
 165 170 175
 30 Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val Asp Val Ala Trp
 180 185 190
 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Leu Ala
 195 200 205
 Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys Gly Arg Phe
 210 215 220
 40 Thr Ile Ser Arg Gly Asn Pro Asn Asp Thr Val Tyr Leu Gln Met Thr
 225 230 235 240
 Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Arg
 245 250 255
 50 Ala Tyr Arg Gly Ser Asp Tyr Tyr Thr Asp Arg Ile Tyr Asp Ser Trp
 260 265 270
 Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 275 280
 <210> 565
 <211> 276
 <212> PRT
 60 <213> -

<400> 565

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 Ala Leu Ser Ser Tyr
 20 25 30

10

Ser Val Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Thr Ala Ile Ser Trp Ser Val Pro Tyr Tyr Ala Asp Ser Val Lys Gly
 50 55 60

20

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 65 70 75 80

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 85 90 95

Asp Ser Leu Tyr Trp Arg Ser Ser Arg Met Ala Thr Asp Tyr Asp Tyr
 100 105 110

30

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

40

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 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala
 165 170 175

Ala Ser Gly Arg Ala Leu Ser Ser Tyr Ser Val Gly Trp Phe Arg Gln
 180 185 190

50

Ala Pro Gly Lys Glu Arg Glu Phe Val Thr Ala Ile Ser Trp Ser Val
 195 200 205

Pro Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
 210 215 220

60

Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu
 225 230 235 240

Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Ser Leu Tyr Trp Arg Ser
245 250 255

Ser Arg Met Ala Thr Asp Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val
260 265 270

10 Thr Val Ser Ser
275

<210> 566
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<212> PRT
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20 <400> 566

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr
20 25 30

30 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
65 70 75 80

40 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
100 105 110

50 Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val
145 150 155 160

60 Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ala Leu Arg Leu Ser

165 170 175
 Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr Arg Met Gly Trp Phe
 180 185 190
 Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Leu Ile Asn Trp
 195 200 205
 10 Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr
 210 215 220
 Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser
 225 230 235 240
 20 Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Arg
 245 250 255
 Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln
 260 265 270
 Gly Thr Gln Val Thr Val Ser Ser
 275 280
 30 <210> 567
 <211> 280
 <212> PRT
 <213> -
 <400> 567
 40 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15
 Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr
 20 25 30
 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 50 Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr Ile Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80
 60 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
100 105 110

Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
115 120 125

10 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val
145 150 155 160

Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ala Leu Arg Leu Ser
165 170 175

20 Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr Arg Met Gly Trp Phe
180 185 190

Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Leu Ile Asn Trp
195 200 205

30 Ser Ser Gly Thr Thr Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr
210 215 220

Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser
225 230 235 240

Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Arg
245 250 255

40 Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln
260 265 270

Gly Thr Gln Val Thr Val Ser Ser
275 280

50 <210> 568
<211> 280
<212> PRT
<213> -

<400> 568

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

60 Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr

	20		25		30
	Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val				
	35		40		45
10	Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr Ile Tyr Ala Asp Ser Val				
	50		55		60
	Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr				
	65		70		75 80
	Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys				
		85		90	95
20	Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr				
		100		105	110
	Gln Tyr Trp Gly Lys Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly				
		115		120	125
30	Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly				
		130		135	140
	Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val				
		145		150	155 160
	Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ala Leu Arg Leu Ser				
		165		170	175
40	Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr Arg Met Gly Trp Phe				
		180		185	190
	Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Leu Ile Asn Trp				
		195		200	205
50	Ser Ser Gly Thr Thr Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr				
		210		215	220
	Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser				
		225		230	235 240
	Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Arg				
		245		250	255
60	Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Lys				
		260		265	270

Gly Thr Gln Val Thr Val Ser Ser
 275 280

<210> 569
 <211> 280
 <212> PRT
 <213> -

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<400> 569

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val His Ala Gly Gly
 1 5 10 15

Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ala Phe Glu Thr Tyr
 20 25 30

20

Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val
 50 55 60

30

Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80

Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110

40

Gln 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

50

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 His Ala Gly Gly Ala Leu Arg Leu Ser
 165 170 175

Cys Ala Ala Ser Gly Arg Ala Phe Glu Thr Tyr Arg Met Gly Trp Phe
 180 185 190

60

Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Leu Ile Asn Trp
 195 200 205
 Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr
 210 215 220
 10 Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser
 225 230 235 240
 Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Arg
 245 250 255
 Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln
 260 265 270
 20 Gly Thr Gln Val Thr Val Ser Ser
 275 280
 <210> 570
 <211> 280
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 30 <400> 570
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15
 Ala Leu Arg Pro Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr
 20 25 30
 40 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80
 50 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110
 60 Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val
 145 150 155 160

10

Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ala Leu Arg Pro Ser
 165 170 175

Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr Arg Met Gly Trp Phe
 180 185 190

20

Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Leu Ile Asn Trp
 195 200 205

Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr
 210 215 220

Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser
 225 230 235 240

30

Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Arg
 245 250 255

Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln
 260 265 270

40

Gly Thr Gln Val Thr Val Ser Ser
 275 280

<210> 571
 <211> 280
 <212> PRT
 <213> -

<400> 571

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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

Ala Leu Arg Leu Ser Cys Ala Val Ser Gly Arg Thr Phe Glu Ser Tyr
 20 25 30

Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

60

Ser Leu Ile Asn Trp Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80

10 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110

Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

20 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

30 Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ala Leu Arg Leu Ser
 165 170 175

Cys Ala Val Ser Gly Arg Thr Phe Glu Ser Tyr Arg Met Gly Trp Phe
 180 185 190

Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ser Leu Ile Asn Trp
 195 200 205

40 Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr
 210 215 220

Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser
 225 230 235 240

50 Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Ala
 245 250 255

Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln
 260 265 270

Gly Thr Gln Val Thr Val Ser Ser
 275 280

60 <210> 572

<211> 280

<212> PRT

<213> -

<400> 572

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

10

Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr
 20 25 30

Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

20

Ala Leu Ile Asn Trp Ser Ser Gly Ile Thr Val Tyr Leu Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80

Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

30

Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110

Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

40

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val
 145 150 155 160

Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ala Leu Arg Leu Ser
 165 170 175

50

Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr Arg Met Gly Trp Phe
 180 185 190

Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Leu Ile Asn Trp
 195 200 205

60

Ser Ser Gly Ile Thr Val Tyr Leu Asp Ser Val Lys Gly Arg Phe Thr
 210 215 220

Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser
 225 230 235 240
 Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Ala
 245 250 255
 10 Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln
 260 265 270
 Gly Thr Gln Val Thr Val Ser Ser
 275 280
 <210> 573
 <211> 280
 20 <212> PRT
 <213> -
 <400> 573
 Glu Val Gln Leu Met Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15
 30 Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Arg Thr Phe Glu Ser Tyr
 20 25 30
 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ser Leu Ile Asn Trp Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val
 50 55 60
 40 Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80
 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 50 Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110
 Gln 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
 60 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Met

145 150 155 160
 Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser
 165 170 175
 Cys Ala Val Ser Gly Arg Thr Phe Glu Ser Tyr Arg Met Gly Trp Phe
 180 185 190
 10 Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ser Leu Ile Asn Trp
 195 200 205
 Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr
 210 215 220
 20 Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser
 225 230 235 240
 Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Ala
 245 250 255
 Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln
 260 265 270
 30 Gly Thr Gln Val Thr Val Ser Ser
 275 280
 <210> 574
 <211> 280
 <212> PRT
 <213> -
 40 <400> 574
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Ser Val Gln Ala Gly Gly
 1 5 10 15
 Ala Leu Arg Leu Ser Cys Ala Val Ser Gly Arg Thr Phe Glu Ser Tyr
 20 25 30
 50 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ser Leu Ile Asn Trp Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val
 50 55 60
 60 Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80

Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Val Gly Arg Ala Trp Ser Gly Ser His Tyr Ser Ala Leu Ala Tyr
 100 105 110

10 Gln 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

20 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 Ser Val Gln Ala Gly Gly Ala Leu Arg Leu Ser
 165 170 175

Cys Ala Val Ser Gly Arg Thr Phe Glu Ser Tyr Arg Met Gly Trp Phe
 180 185 190

30 Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ser Leu Ile Asn Trp
 195 200 205

Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr
 210 215 220

40 Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn Ser
 225 230 235 240

Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg Ala
 245 250 255

Trp Ser Gly Ser His Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly Gln
 260 265 270

50 Gly Thr Gln Val Thr Val Ser Ser
 275 280

<210> 575
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<400> 575

60 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Gly

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Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Arg	Thr	Phe	Gly	Thr	Tyr	
	20							25					30			
Ala	Met	Ala	Trp	Phe	Arg	Gln	Ser	Pro	Lys	Asn	Glu	Arg	Glu	Phe	Val	
	35						40					45				
Ala	Thr	Leu	Arg	Trp	Ser	Asp	Gly	Ser	Thr	Tyr	Tyr	Ala	Asp	Ser	Val	
	50					55					60					
Lys	Gly	Arg	Phe	Thr	Ile	Ala	Gly	Asp	Asn	Ala	Lys	Asn	Thr	Val	Tyr	
65					70					75					80	
20	Leu	Gln	Met	Asn	Asn	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90					95	
Ala	Ala	Asp	Arg	Trp	Phe	Ser	Tyr	Thr	Thr	Tyr	Asp	Ala	Thr	Asp	Thr	
			100						105					110		
Trp	His	Tyr	Trp	Gly	Gln	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser	Gly	Gly	
		115					120					125				
30	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	
40	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Thr	Gly	Gly	Ser	Leu	Arg	Leu
				165						170					175	
Ser	Cys	Ala	Ala	Ser	Gly	Arg	Thr	Phe	Gly	Thr	Tyr	Ala	Met	Ala	Trp	
			180					185					190			
Phe	Arg	Gln	Ser	Pro	Lys	Asn	Glu	Arg	Glu	Phe	Val	Ala	Thr	Leu	Arg	
		195					200					205				
50	Trp	Ser	Asp	Gly	Ser	Thr	Tyr	Tyr	Ala	Asp	Ser	Val	Lys	Gly	Arg	Phe
	210						215					220				
Thr	Ile	Ala	Gly	Asp	Asn	Ala	Lys	Asn	Thr	Val	Tyr	Leu	Gln	Met	Asn	
225					230					235					240	
60	Asn	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Ala	Asp	Arg
				245						250					255	

Trp Phe Ser Tyr Thr Thr Tyr Asp Ala Thr Asp Thr Trp His Tyr Trp
 260 265 270

Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 275 280

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<210> 576
 <211> 249
 <212> PRT
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<400> 576

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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 Arg Thr Phe Ser Ser Leu
 20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Asp Arg Glu Phe Val
 35 40 45

30

Val Val Val Ser Gly Ser Gly Gly Thr Thr Lys Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Asn Lys Asn Ala 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

40

Ala Ala Asp Pro Ser Arg Tyr Phe Ile Thr Thr Asp Arg Arg Gly Tyr
 100 105 110

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

50

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

60

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

10 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
 245

20 <210> 577
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<400> 577

30 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

40 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

50 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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

60 Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Leu Ala Met Gly Trp
 145 150 155 160

Phe Arg Gln Ala Pro Gly Lys Asp Arg Glu Phe Val Val Val Val Ser
 165 170 175

10

Gly Ser Gly Gly Thr Thr Lys Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Asn Lys Asn Ala Val Tyr Leu Gln Met Asn
 195 200 205

20

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Pro
 210 215 220

Ser Arg Tyr Phe Ile Thr Thr Asp Arg Arg Gly Tyr Asp Tyr Trp Gly
 225 230 235 240

Gln Gly Thr Gln Val Thr Val Ser Ser
 245

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<210> 578
 <211> 247
 <212> PRT
 <213> -

 <400> 578

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Lys Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
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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

50

Ala His Ile Ser Arg Gly Gly Ser Arg Thr Glu Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Thr Val Tyr
 65 70 75 80

60

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Ser Arg Gly 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 Gly Gly Gly Gly Ser
 115 120 125

10 Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
 130 135 140

Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr
 145 150 155 160

Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly
 165 170 175

20 Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr
 180 185 190

Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
 195 200 205

30 Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
 210 215 220

Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly
 225 230 235 240

Thr Leu Val Thr Val Ser Ser
 245

40 <210> 579
 <211> 247
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 <213> ~
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50 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

60 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
 10 Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110
 Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Lys Val Gln Leu
 115 120 125
 20 Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140
 Ser Cys Ala Ala Ser Gly Arg Ser Phe Ser Asp Asn Val Met Gly Trp
 145 150 155 160
 Phe Arg Gln Ala Ala Gly Lys Glu Arg Glu Phe Val Ala His Ile Ser
 165 170 175
 30 Arg Gly Gly Ser Arg Thr Glu Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190
 Thr Ile Ser Arg Asp Asn Ala Lys Lys Thr Val Tyr Leu Gln Met Asn
 195 200 205
 40 Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Ser Arg
 210 215 220
 Gly Val Ala Leu Ala Thr Ala Arg Pro Tyr Asp Tyr Trp Gly Gln Gly
 225 230 235 240
 Thr Gln Val Thr Val Ser Ser
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 50 <210> 580
 <211> 250
 <212> PRT
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 60 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Val Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Ala
 20 25 30
 Arg Met Gly Trp Phe Arg Gln Cys Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 10 Ala Ala Ile Ser Trp Ser Asn Asp Ile Thr Tyr Tyr Glu Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ala Thr Val Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Lys Leu Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 20 Ala Ala Ser Trp Arg Ser Ser Ile Trp Ile Pro Ala Glu Ser Asp Ser
 100 105 110
 Tyr Asp Phe Trp Ala Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly
 115 120 125
 30 Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
 130 135 140
 Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser
 145 150 155 160
 Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro
 165 170 175
 40 Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp
 180 185 190
 Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
 195 200 205
 50 Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
 210 215 220
 Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser
 225 230 235 240
 Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 245 250
 60 <210> 581

<211> 250

<212> PRT

<213> -

<400> 581

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15

10

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

20

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

30

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

40

Val Glu Ser Gly Gly Gly Leu Val Gln Val Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Ala Arg Met Gly Trp
 145 150 155 160

Phe Arg Gln Cys Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Ile Ser
 165 170 175

50

Trp Ser Asn Asp Ile Thr Tyr Tyr Glu Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Ala Thr Val Tyr Leu Gln Met Asn
 195 200 205

60

Ser Leu Lys Leu Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Ser Trp
 210 215 220

Arg Ser Ser Ile Trp Ile Pro Ala Glu Ser Asp Ser Tyr Asp Phe Trp
 225 230 235 240

Ala Gln Gly Thr Gln Val Thr Val Ser Ser
 245 250

10 <210> 582
 <211> 241
 <212> PRT
 <213> -

<400> 582

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

20 Ser Leu Arg Leu Ala Cys Ala Val Ser Gly Phe Thr Met 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

30 Ser Ser Ile Ser Pro Gly Gly Leu Phe Pro Tyr Tyr Val Asp Ser Val
 50 55 60

Lys Gly Arg Phe Ser Ile Ser Thr Asp Asn Ala Asn Asn Ile 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

40 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

50 Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn Ser Leu
 130 135 140

Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly Met
 145 150 155 160

Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser
 165 170 175

60 Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val Lys Gly

180

185

190

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu Gln
 195 200 205

Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Thr Ile
 210 215 220

10

Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser
 225 230 235 240

Ser

20

<210> 583
 <211> 241
 <212> PRT
 <213> -

<400> 583

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15

30

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

40

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

50

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

60

Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu
 130 135 140

Ala Cys Ala Val Ser Gly Phe Thr Met Ser Ser Ser Trp Met Tyr Trp
 145 150 155 160
 Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser
 165 170 175
 10 Pro Gly Gly Leu Phe Pro Tyr Tyr Val Asp Ser Val Lys Gly Arg Phe
 180 185 190
 Ser Ile Ser Thr Asp Asn Ala Asn Asn Ile Leu Tyr Leu Gln Met Asn
 195 200 205
 Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Ser Cys Ala Lys Gly Gly
 210 215 220
 20 Ala Pro Asn Tyr Thr Pro Arg Gly Arg Gly Thr Gln Val Thr Val Ser
 225 230 235 240
 Ser
 30 <210> 584
 <211> 238
 <212> PRT
 <213> -
 <400> 584
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15
 40 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30
 Ser Met Ile Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 50 Ser Glu Ile Ser Ser Gly Gly Gly Trp Thr Ser Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 60 Val Gln Ser His Arg Thr Pro Arg Ser Gln Gly Thr Gln Val Thr Val

	100		105		110
	Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val				
	115		120		125
10	Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser				
	130		135		140
	Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val				
	145		150		155
	Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly				
		165		170	175
20	Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr				
		180		185	190
	Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser				
		195		200	205
30	Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser				
		210		215	220
	Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser				
	225		230		235
	<210> 585				
	<211> 238				
	<212> PRT				
	<213> -				
40	<400> 585				
	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
50	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
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

10 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 Pro Gly Gly Ser Leu Arg Leu
 130 135 140

20 Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Ser Met Ile Trp
 145 150 155 160

Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Glu Ile Ser
 165 170 175

Ser Gly Gly Gly Trp Thr Ser Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

30 Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn
 195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Val Gln Ser His
 210 215 220

40 Arg Thr Pro Arg Ser Gln Gly Thr Gln Val Thr Val Ser Ser
 225 230 235

<210> 586
 <211> 239
 <212> PRT
 <213> -

<400> 586

50 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 Asn Tyr
 20 25 30

Trp Met Tyr Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Ser Val
 35 40 45

60 Ser Ser Ile Asn Thr Gly Gly Ala Arg Thr Phe Tyr Ala Asp Ser Val

	50		55		60
	Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr				
	65		70		75 80
	Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys				
		85		90	95
10	Ala Lys Asp Ala Ala Gly Arg Thr Arg 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
20	Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu				
		130		135	140
	Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp				
		145		150	155 160
	Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser				
		165		170	175
30	Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe				
		180		185	190
	Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn				
		195		200	205
40	Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly				
		210		215	220
	Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser				
		225		230	235
50	<210> 587				
	<211> 239				
	<212> PRT				
	<213> -				
	<400> 587				
	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn				
		1		5	10 15
60	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

10 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

20 Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu 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 Pro Gly Gly Ser Leu Arg Leu
 130 135 140

30 Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr Trp Met Tyr Trp
 145 150 155 160

Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Ser Val Ser Ser Ile Asn
 165 170 175

40 Thr Gly Gly Ala Arg Thr Phe Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn
 195 200 205

Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys Asp Ala
 210 215 220

50 Ala Gly Arg Thr Arg Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 225 230 235

<210> 588
 <211> 245
 <212> PRT
 <213> -

60 <400> 588
 Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Gly

1	5	10	15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Arg Tyr	20	25	30
Glu Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val	35	40	45
10			
Ser Gly Ile Ser Thr Gly Gly Gly Trp Arg Thr Tyr Ala Asp Ser Val	50	55	60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr	65	70	75
20			
Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys	85	90	95
Leu Asn Arg Asp Tyr Gly Thr Ser Trp Ala Asp Phe Pro Ser Trp Gly	100	105	110
Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly	115	120	125
30			
Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro	130	135	140
Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser	145	150	155
40			
Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu	165	170	175
Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp	180	185	190
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr	195	200	205
50			
Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr	210	215	220
Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu	225	230	235
60			
Val Thr Val Ser Ser	245		

<210> 589

<211> 245

<212> PRT

<213> -

<400> 589

10 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

20 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

30 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

40 Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
115 120 125

Val Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Gly Ser Leu Arg Leu
130 135 140

Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Arg Tyr Glu Met Ser Trp
145 150 155 160

50 Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Gly Ile Ser
165 170 175

Thr Gly Gly Gly Trp Arg Thr Tyr Ala Asp Ser Val Lys Gly Arg Phe
180 185 190

60 Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn
195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Leu Asn Arg Asp
 210 215 220

Tyr Gly Thr Ser Trp Ala Asp Phe Pro Ser Trp Gly Gln Gly Thr Gln
 225 230 235 240

10 Val Thr Val Ser Ser
 245

<210> 590
 <211> 239
 <212> PRT
 <213> -
 <400> 590

20 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Tyr
 20 25 30

Thr Met Tyr Trp Ala Arg Gln Ala Pro Gly Lys Glu Leu Glu Trp Val
 35 40 45

30 Ser Ile Ile Phe Thr Asn Gly Glu Gly Thr Tyr Tyr Ser Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80

40 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Tyr Cys
 85 90 95

Ala Arg Asp Pro Phe Gly Lys Leu 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

50 Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp
 145 150 155 160

60 Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser
 165 170 175

Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe
180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn
195 200 205

10

Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly
210 215 220

Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser
225 230 235

20

<210> 591
<211> 239
<212> PRT
<213> -

<400> 591

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
1 5 10 15

30

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

40

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

50

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
115 120 125

60

Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu
130 135 140

Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Tyr Thr Met Tyr Trp
 145 150 155 160
 Ala Arg Gln Ala Pro Gly Lys Glu Leu Glu Trp Val Ser Ile Ile Phe
 165 170 175
 10 Thr Asn Gly Glu Gly Thr Tyr Tyr Ser Asp Ser Val Lys Gly Arg Phe
 180 185 190
 Thr Val Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn
 195 200 205
 Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg Asp Pro
 210 215 220
 20 Phe Gly Lys Leu Lys Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 225 230 235
 <210> 592
 <211> 249
 <212> PRT
 <213> -
 30 <400> 592
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Ser
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Arg Ser Val Ser Thr Tyr
 20 25 30
 40 Gly Met Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Ile Asn Arg Ser Thr Gly Thr Ile Tyr Tyr Ala Asp Ser Val Lys
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu
 65 70 75 80
 50 Gln Met Asn Ser Leu Lys Pro Gly Asp Thr Ala Leu Tyr Tyr Cys Ala
 85 90 95
 Ala Asp Val Phe Phe Ser Gly Ala His Arg Tyr Glu Ala Ser Gln Trp
 100 105 110
 60 His Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 130 135 140

Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 145 150 155 160

10

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

20

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

30

Gln Gly Thr Leu Val Thr Val Ser Ser
 245

<210> 593
 <211> 249
 <212> PRT
 <213> -

40

<400> 593

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

50

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

60

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

10 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 Ala Gly Ser Ser Leu Arg Leu
 130 135 140

Ser Cys Val Ala Ser Gly Arg Ser Val Ser Thr Tyr Gly Met Ala Trp
 145 150 155 160

20 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ile Asn Arg
 165 170 175

Ser Thr Gly Thr Ile Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr
 180 185 190

30 Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser
 195 200 205

Leu Lys Pro Gly Asp Thr Ala Leu Tyr Tyr Cys Ala Ala Asp Val Phe
 210 215 220

Phe Ser Gly Ala His Arg Tyr Glu Ala Ser Gln Trp His Tyr Trp Gly
 225 230 235 240

40 Gln Gly Thr Gln Val Thr Val Ser Ser
 245

<210> 594
 <211> 247
 <212> PRT
 <213> -

50 <400> 594

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 Val Arg Thr Phe Ser Asn Tyr
 20 25 30

60 Phe Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ala Thr Ile Gly Trp Ser Gly Thr Asp Tyr Ala Asp Ser Val Lys Gly
 50 55 60

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 65 70 75 80

10

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 85 90 95

Gly Tyr Phe Lys Arg Leu Gly Pro Thr Ser Pro Arg Asp Tyr Thr Tyr
 100 105 110

20

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser
 115 120 125

Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
 130 135 140

Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr
 145 150 155 160

30

Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly
 165 170 175

Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr
 180 185 190

40

Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
 195 200 205

Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
 210 215 220

Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly
 225 230 235 240

50

Thr Leu Val Thr Val Ser Ser
 245

<210> 595
 <211> 247
 <212> PRT
 <213> -

60

<400> 595

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 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 Pro Gly Gly Ser Leu Arg Leu
 130 135 140
 Ser Cys Ala Ala Ser Val Arg Thr Phe Ser Asn Tyr Phe Met Gly Trp
 145 150 155 160
 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Thr Ile Gly
 165 170 175
 Trp Ser Gly Thr Asp Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile
 180 185 190
 Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu
 195 200 205
 Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Gly Tyr Phe Lys
 210 215 220
 Arg Leu Gly Pro Thr Ser Pro Arg Asp Tyr Thr Tyr Trp Gly Gln Gly
 225 230 235 240
 Thr Gln Val Thr Val Ser Ser

245

<210> 596
 <211> 242
 <212> PRT
 <213> -

<400> 596

10

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Arg Thr Phe Gly Ser Tyr
 20 25 30

20

Asp Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ala Ala Ile Ser Thr Gly Gly Gly Trp Arg Arg Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Gly Lys Asn Thr Met Tyr
 65 70 75 80

30

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Gln Gly Trp Ser Leu Ala Glu Phe Arg Ser Trp Gly Gln Gly Thr
 100 105 110

40

Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu
 115 120 125

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn Ser
 130 135 140

Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly
 145 150 155 160

50

Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
 165 170 175

Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser Val Lys
 180 185 190

60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu
 195 200 205

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Thr
 210 215 220

Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val
 225 230 235 240

10 Ser Ser

<210> 597
 <211> 242
 <212> PRT
 <213> -

20 <400> 597

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

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

40 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

50 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 Ala Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Val Ala Ser Gly Arg Thr Phe Gly Ser Tyr Asp Met Gly Trp
 145 150 155 160

60 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Ile Ser

165

170

175

Thr Gly Gly Gly Trp Arg Arg Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Gly Lys Asn Thr Met Tyr Leu Gln Met Asn
 195 200 205

10

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gln Gly Trp
 210 215 220

Ser Leu Ala Glu Phe Arg Ser Trp Gly Gln Gly Thr Gln Val Thr Val
 225 230 235 240

20 Ser Ser

<210> 598
 <211> 249
 <212> PRT
 <213> -

<400> 598

30

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 Ala Arg Thr Phe Ser Ser Tyr
 20 25 30

40

Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Asp Phe Val
 35 40 45

Ala Val Ile Asn Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

50

Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ser Thr Ala Phe Arg Arg Arg Thr Tyr Tyr Thr Pro Glu Ser Trp
 100 105 110

60

Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 130 135 140

Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 145 150 155 160

10 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

20 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

30 Gln Gly Thr Leu Val Thr Val Ser Ser
 245

<210> 599
 <211> 249
 <212> PRT
 <213> -

<400> 599

40 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

60 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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

10

Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Ala Ser Ala Arg Thr Phe Ser Ser Tyr Ala Met Ser Trp
 145 150 155 160

20

Phe Arg Gln Ala Pro Gly Lys Glu Arg Asp Phe Val Ala Val Ile Asn
 165 170 175

Trp Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Glu Met Asn
 195 200 205

30

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ser Thr Ala
 210 215 220

Phe Arg Arg Arg Thr Tyr Tyr Thr Pro Glu Ser Trp Asp Tyr Trp Gly
 225 230 235 240

40

Gln Gly Thr Gln Val Thr Val Ser Ser
 245

<210> 600

<211> 247

<212> PRT

<213> -

<400> 600

50

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 Leu Thr Phe Ser Ala Tyr
 20 25 30

60

Thr Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ser Ala Thr Ser Arg Ser Gly Gly Ala Thr Leu Tyr Thr Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Asp
 65 70 75 80

10 Leu Gln Met Asn Asn Leu Lys Pro Gly Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Lys Ser Arg Pro Gly Tyr Gly Gly Thr Leu Asp 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

20 Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
 130 135 140

Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr
 145 150 155 160

30 Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly
 165 170 175

Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr
 180 185 190

Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
 195 200 205

40 Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
 210 215 220

Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly
 225 230 235 240

50 Thr Leu Val Thr Val Ser Ser
 245

<210> 601
 <211> 247
 <212> PRT
 <213> -

<400> 601

60 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
10	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
20	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	Gly Gly Gly Gly Ser Gly Gly Gly Ser	Glu Val Gln Leu	
	115	120	125
30	Val Glu Ser	Gly Gly Gly Leu Val Gln Ala Gly Asp Ser Leu Arg Leu	
	130	135	140
Ser Cys Ala	Ala Ser Gly Leu Thr Phe Ser Ala Tyr Thr Met Gly Trp		
145	150	155	160
40	Phe Arg Gln	Ala Pro Gly Lys Glu Arg Glu Phe Val Ser Ala Thr Ser	
	165	170	175
Arg Ser Gly	Gly Ala Thr Leu Tyr Thr Asp Ser Val Lys Gly Arg Phe		
	180	185	190
Thr Ile Ser	Arg Asp Asn Ala Lys Asn Thr Val Asp Leu Gln Met Asn		
	195	200	205
50	Asn Leu Lys	Pro Gly Asp Thr Ala Val Tyr Tyr Cys Ala Ala Lys Ser	
	210	215	220
Arg Pro Gly	Tyr Gly Gly Thr Leu Asp Tyr Asp Tyr Trp Gly Gln Gly		
225	230	235	240
60	Thr Gln Val	Thr Val Ser Ser	
	245		

<210> 602

<211> 252

<212> PRT

<213> -

<400> 602

10 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 Leu Ala Phe Ser Thr Tyr
20 25 30

20 Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Asp Arg Glu Met Val
35 40 45

Ile Ala Leu Asn Trp Ser Gly Asp Arg Thr Trp Tyr Leu Asn Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Ser
65 70 75 80

30 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Lys Ala Ser Gly Thr Ile Arg Gly Gly Ser Tyr Tyr Asp Ser
100 105 110

40 Ala Gly Tyr Ser His Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser
130 135 140

Gly Gly Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala
145 150 155 160

50 Ala Ser Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln
165 170 175

Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly
180 185 190

60 Ser Asp Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser
195 200 205

Arg Asp Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg
 210 215 220

Pro Glu Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser
 225 230 235 240

10 Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 245 250

<210> 603
 <211> 252
 <212> PRT
 <213> -
 <400> 603

20 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

30 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

40 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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

50 Val Glu Ser Gly Gly Gly Leu Val Gln Ser Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Ala Ser Gly Leu Ala Phe Ser Thr Tyr Ala Met Gly Trp
 145 150 155 160

60 Phe Arg Gln Ala Pro Gly Lys Asp Arg Glu Met Val Ile Ala Leu Asn
 165 170 175

Trp Ser Gly Asp Arg Thr Trp Tyr Leu Asn Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Ser Leu Gln Met Asn
 195 200 205

10

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Lys Ala
 210 215 220

Ser Gly Thr Ile Arg Gly Gly Ser Tyr Tyr Asp Ser Ala Gly Tyr Ser
 225 230 235 240

20

His Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 245 250

<210> 604
 <211> 248
 <212> PRT
 <213> -

<400> 604

30

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Val
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Gly Asn Tyr
 20 25 30

Asn Met Gly Trp Phe Arg Gln Ala Gln Gly Lys Asp Arg Glu Leu Val
 35 40 45

40

Ala Ala Ile Arg Trp Ser Glu Asp Arg Val Trp Tyr Leu Gly 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

50

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Ala Tyr Tyr Cys
 85 90 95

Ala Ala Gln Asp Arg Arg Arg Gly Asp Tyr Tyr Thr Pro Asp Tyr His
 100 105 110

Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

60

Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 130 135 140

Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 145 150 155 160

10 Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys
 165 170 175

Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu
 180 185 190

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 195 200 205

20 Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr
 210 215 220

Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln
 225 230 235 240

30 Gly Thr Leu Val Thr Val Ser Ser
 245

<210> 605
 <211> 248
 <212> PRT
 <213> -

<400> 605

40 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

50 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

60 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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125
 10 Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Val Ser Leu Arg Leu
 130 135 140
 Ser Cys Ala Ala Ser Gly Arg Thr Phe Gly Asn Tyr Asn Met Gly Trp
 145 150 155 160
 20 Phe Arg Gln Ala Gln Gly Lys Asp Arg Glu Leu Val Ala Ala Ile Arg
 165 170 175
 Trp Ser Glu Asp Arg Val Trp Tyr Leu Gly Ser Val Arg Gly Arg Phe
 180 185 190
 Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn
 195 200 205
 30 Ser Leu Lys Pro Glu Asp Thr Ala Ala Tyr Tyr Cys Ala Ala Gln Asp
 210 215 220
 Arg Arg Arg Gly Asp Tyr Tyr Thr Pro Asp Tyr His Tyr Trp Gly Gln
 225 230 235 240
 40 Gly Thr Gln Val Thr Val Ser Ser
 245
 <210> 606
 <211> 250
 <212> PRT
 <213> -
 <400> 606
 50 Glu Val Gln Leu Val Glu Ser Gly Gly Arg Leu Val Gln Ala Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Gly Ile Phe Ser Arg Tyr
 20 25 30
 Asn Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 60

Ala Ala Ala His Trp Ser Gly Gly Arg Met Trp Tyr Lys Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Met Ser Arg Asp Asn Asn Lys Asn Thr Val Tyr
65 70 75 80

10 Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ala Asp Ser Gly Ala Trp Gly Gly Ser Tyr Tyr Arg Ala Glu Glu
100 105 110

Tyr Val Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly
115 120 125

20 Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
130 135 140

Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser
145 150 155 160

30 Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro
165 170 175

Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp
180 185 190

Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
195 200 205

40 Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
210 215 220

Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser
225 230 235 240

50 Ser Gln Gly Thr Leu Val Thr Val Ser Ser
245 250

<210> 607
<211> 250
<212> PRT
<213> -

<400> 607

60 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

10

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

20

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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

30

Val Glu Ser Gly Gly Arg Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Ala Ser Gly Gly Ile Phe Ser Arg Tyr Asn Met Gly Trp
 145 150 155 160

40

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Ala His
 165 170 175

Trp Ser Gly Gly Arg Met Trp Tyr Lys Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Met Ser Arg Asp Asn Asn Lys Asn Thr Val Tyr Leu Gln Met Asn
 195 200 205

50

Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Ser
 210 215 220

Gly Ala Trp Gly Gly Ser Tyr Tyr Arg Ala Glu Glu Tyr Val Tyr Trp
 225 230 235 240

60

Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 245 250

<210> 608
 <211> 249
 <212> PRT
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<400> 608

10 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Ala
 1 5 10 15

 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr
 20 25 30

 Asp Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Ala Leu Val
 35 40 45

20 Ala Ala Ile Thr Ser Ser Gly Gly Arg Arg Trp Tyr Ala Asp Ser Val
 50 55 60

 Leu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Ser
 65 70 75 80

30 Leu Gln Met Ser Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Ala Arg Gly Arg Val Asp Tyr Asn Tyr Tyr Asn Lys Asp Ala Tyr
 100 105 110

 Thr Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

40 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

50 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

60 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
 245
 10

 <210> 609
 <211> 249
 <212> PRT
 <213> -

 <400> 609

 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 20 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
 30
 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
 40 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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125
 50
 Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Ala Ser Leu Arg Leu
 130 135 140

 Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Ser Tyr Asp Met Gly Trp
 145 150 155 160

 Phe Arg Gln Ala Pro Gly Lys Glu Arg Ala Leu Val Ala Ala Ile Thr
 60 165 170 175

Ser Ser Gly Gly Arg Arg Trp Tyr Ala Asp Ser Val Leu Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Ser Leu Gln Met Ser
 195 200 205

10 Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Arg Gly
 210 215 220

Arg Val Asp Tyr Asn Tyr Tyr Asn Lys Asp Ala Tyr Thr Tyr Trp Gly
 225 230 235 240

Gln Gly Thr Gln Val Thr Val Ser Ser
 245

20

<210> 610
 <211> 247
 <212> PRT
 <213> -

<400> 610

30 Glu Val Gln Leu Val Glu Ser Gly Gly Arg Leu Val Gln Ala Gly Asp
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Gly Thr Val Arg Asn Tyr
 20 25 30

Ala Met Gly Trp Phe Arg Gln Ala Pro Gly Gln Glu Arg Glu Ile Leu
 35 40 45

40 Ser Ser Ile Thr Arg Thr Asp Asn Ile Thr Tyr Tyr Glu Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Val Arg Asp Thr Ala Lys Asn Thr Val Tyr
 65 70 75 80

50 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Ala Met Thr His Phe Ala Val Leu Glu Arg Glu Tyr Gly Tyr
 100 105 110

Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser
 115 120 125

60 Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val

130 135 140
 Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr
 145 150 155 160
 Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly
 165 170 175
 10 Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr
 180 185 190
 Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
 195 200 205
 20 Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
 210 215 220
 Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly
 225 230 235 240
 Thr Leu Val Thr Val Ser Ser
 245
 30 <210> 611
 <211> 247
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 <213> -
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 40 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
 50 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
 60 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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125
 10 Val Glu Ser Gly Gly Arg Leu Val Gln Ala Gly Asp Ser Leu Arg Leu
 130 135 140
 Ser Cys Ala Ala Ser Gly Gly Thr Val Arg Asn Tyr Ala Met Gly Trp
 145 150 155 160
 Phe Arg Gln Ala Pro Gly Gln Glu Arg Glu Ile Leu Ser Ser Ile Thr
 165 170 175
 20 Arg Thr Asp Asn Ile Thr Tyr Tyr Glu Asp Ser Val Lys Gly Arg Phe
 180 185 190
 Thr Ile Val Arg Asp Thr Ala Lys Asn Thr Val Tyr Leu Gln Met Asn
 195 200 205
 30 Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Ala Met
 210 215 220
 Thr His Phe Ala Val Leu Glu Arg Glu Tyr Gly Tyr Trp Gly Gln Gly
 225 230 235 240
 Thr Gln Val Thr Val Ser Ser
 245
 40
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 <211> 250
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 50 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 Ile Ser Ser Tyr
 20 25 30
 Thr Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 60 Ala Ala Gly Thr Trp Ser Thr Ser Val Thr Glu Tyr Ala Asp Ser Val

50

55

60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

10

Ala Ala Glu Pro Tyr Ile Pro Val Arg Thr Met Arg His Met Thr Phe
100 105 110

Leu Thr Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly
115 120 125

20

Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
130 135 140

Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser
145 150 155 160

Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro
165 170 175

30

Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp
180 185 190

Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
195 200 205

40

Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
210 215 220

Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser
225 230 235 240

Ser Gln Gly Thr Leu Val Thr Val Ser Ser
245 250

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<210> 613
<211> 250
<212> PRT
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<400> 613

60

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
 10 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
 20 Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110
 Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125
 30 Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140
 Ser Cys Ala Ala Ser Gly Arg Thr Ile Ser Ser Tyr Thr Met Gly Trp
 145 150 155 160
 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Gly Thr
 165 170 175
 40 Trp Ser Thr Ser Val Thr Glu Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190
 Thr Ile Ser Arg Asp Thr Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn
 195 200 205
 50 Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Glu Pro
 210 215 220
 Tyr Ile Pro Val Arg Thr Met Arg His Met Thr Phe Leu Thr Tyr Trp
 225 230 235 240
 Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 245 250
 60

<210>	614
<211>	243
<212>	PRT
<213>	-

<400> 614

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 Pro Ser Gly Arg Asp Ile Ser Ser Tyr
20 25 30

Ile Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Thr
35 40 45

Ala Asp Ile Asn Trp Asn Gly Ser Trp Arg Phe Tyr Ala Glu Ser Val
50 55 60

Asn 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 Lys Glu Arg Gly Ser Gly Ala Tyr Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
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

10

<210> 615
 <211> 243
 <212> PRT
 <213> -

<400> 615

20

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

30

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

40

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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

50

Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Pro Ser Gly Arg Asp Ile Ser Ser Tyr Ile Met Gly Trp
 145 150 155 160

60

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Thr Ala Asp Ile Asn
 165 170 175

Trp Asn Gly Ser Trp Arg Phe Tyr Ala Glu Ser Val Asn Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn
 195 200 205

10 Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Lys Glu
 210 215 220

Arg Gly Ser Gly Ala Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr
 225 230 235 240

Val Ser Ser

20 <210> 616
 <211> 244
 <212> PRT
 <213> -
 <400> 616

30 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 Arg Ala Leu Asp Thr Tyr
 20 25 30

Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

40 Ala Ser Asn Arg Trp Asn Ala Lys Pro Tyr Thr Thr 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

50 Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

60 Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
 130 135 140

Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser
145 150 155 160

Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
165 170 175

10

Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser
180 185 190

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu
195 200 205

20

Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr
210 215 220

Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val
225 230 235 240

Thr Val Ser Ser

30

<210> 617
<211> 244
<212> PRT
<213> -

<400> 617

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
1 5 10 15

40

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

50

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

60

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

10 Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Thr Ala Ser Gly Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp
 145 150 155 160

Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val Ala Ser Asn Arg
 165 170 175

20 Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys Gly Arg Phe Thr
 180 185 190

Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser
 195 200 205

30 Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Leu Thr
 210 215 220

Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val
 225 230 235 240

Thr Val Ser Ser

40 <210> 618
 <211> 244
 <212> PRT
 <213> -
 <400> 618

50 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 Gly Arg Ala Leu Asp Thr Tyr
 20 25 30

Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

60 Ala Ser Ile Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys
 50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ala
 85 90 95

10

Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

20

Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
 130 135 140

Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser
 145 150 155 160

Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
 165 170 175

30

Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser
 180 185 190

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu
 195 200 205

40

Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr
 210 215 220

Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val
 225 230 235 240

Thr Val Ser Ser

50

<210> 619
 <211> 244
 <212> PRT
 <213> -

<400> 619

60

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
 10 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
 20 Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110
 Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Lys Val Gln Leu
 115 120 125
 30 Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140
 Ser Cys Ala Ala Ser Gly Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp
 145 150 155 160
 Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val Ala Ser Ile Arg
 165 170 175
 40 Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys Gly Arg Phe Thr
 180 185 190
 Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser
 195 200 205
 50 Leu Lys Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ala Ala Asp Leu Thr
 210 215 220
 Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val
 225 230 235 240
 Thr Val Ser Ser
 60 <210> 620

<211> 244
 <212> PRT
 <213> -

<400> 620

	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Ala	Gly	Gly	
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10	Ser	Leu	Arg	Leu	Ser	Cys	Thr	Ala	Ser	Gly	Arg	Ala	Leu	Asp	Thr	Tyr	
				20					25					30			
	Thr	Val	Thr	Trp	Phe	Arg	Gln	Thr	Pro	Gly	Lys	Glu	Arg	Glu	Phe	Val	
			35					40					45				
20	Ala	Ser	Asn	Arg	Trp	Asn	Ala	Lys	Pro	Tyr	Val	Thr	Asp	Ser	Val	Lys	
		50					55					60					
	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Val	Tyr	Leu	
	65				70						75					80	
	Gln	Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	
					85					90					95		
30	Ala	Asp	Leu	Thr	Thr	Trp	Ala	Asp	Gly	Pro	Tyr	Arg	Tyr	Trp	Gly	Gln	
				100					105					110			
	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	
			115						120				125				
40	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	
		130					135					140					
	Asn	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	
	145					150					155					160	
	Phe	Gly	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	
					165					170					175		
50	Val	Ser	Ser	Ile	Ser	Gly	Ser	Gly	Ser	Asp	Thr	Leu	Tyr	Ala	Asp	Ser	
				180					185					190			
	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Thr	Thr	Leu	
			195					200					205				
60	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	
		210					215					220					

Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val
 225 230 235 240

Thr Val Ser Ser

10 <210> 621
 <211> 244
 <212> PRT
 <213> -

<400> 621

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15

20

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

30

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

40

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

50

Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Thr Ala Ser Gly Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp
 145 150 155 160

Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val Ala Ser Asn Arg
 165 170 175

60

Trp Asn Ala Lys Pro Tyr Val Thr Asp Ser Val Lys Gly Arg Phe Thr

180 185 190

Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser
195 200 205

Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Leu Thr
210 215 220

10 Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val
225 230 235 240

Thr Val Ser Ser

20 <210> 622
<211> 244
<212> PRT
<213> -

<400> 622

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

30 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ala Leu Asp Thr Tyr
20 25 30

Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

40 Ala Ser Asp Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

50 Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Phe Trp Gly Gln
100 105 110

Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

60 Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
130 135 140

Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser
145 150 155 160

Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
165 170 175

10 Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser
180 185 190

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu
195 200 205

20 Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr
210 215 220

Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val
225 230 235 240

Thr Val Ser Ser

30 <210> 623
<211> 244
<212> PRT
<213> -

<400> 623

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
1 5 10 15

40 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

50 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

60 Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr

	100	105	110
	Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu		
	115	120	125
10	Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu		
	130	135	140
	Ser Cys Ala Ala Ser Gly Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp		
	145	150	155 160
	Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val Ala Ser Asp Arg		
	165	170	175
20	Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys Gly Arg Phe Thr		
	180	185	190
	Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser		
	195	200	205
30	Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Leu Thr		
	210	215	220
	Thr Trp Ala Asp Gly Pro Tyr Arg Phe Trp Gly Gln Gly Thr Gln Val		
	225	230	235 240
	Thr Val Ser Ser		
40	<210> 624		
	<211> 244		
	<212> PRT		
	<213> -		
	<400> 624		
	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly		
	1	5	10 15
50	Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ala Leu Asp Thr Tyr		
	20	25	30
	Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Gly Arg Glu Phe Leu		
	35	40	45
60	Ala Ser Ile Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys		
	50	55	60

Gly Arg Phe Thr Met 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

10 Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
 130 135 140

20 Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser
 145 150 155 160

Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
 165 170 175

30 Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser
 180 185 190

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu
 195 200 205

Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr
 210 215 220

40 Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val
 225 230 235 240

Thr Val Ser Ser

50 <210> 625
 <211> 244
 <212> PRT
 <213> -
 <400> 625

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15

60 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 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 Ala Gly Gly Ser Leu Arg Leu
130 135 140

Ser Cys Ala Ala Ser Gly Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp
145 150 155 160

Phe Arg Gln Thr Pro Gly Lys Gly Arg Glu Phe Leu Ala Ser Ile Arg
165 170 175

Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys Gly Arg Phe Thr
180 185 190

Met Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser
195 200 205

Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Pro Thr
210 215 220

Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val
225 230 235 240

Thr Val Ser Ser

<210> 626
<211> 244

<212> PRT

<213> -

<400> 626

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ala Leu Asp Thr Tyr
 20 25 30

Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Thr Arg Glu Phe Val
 35 40 45

20 Ala Ser Val Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys
 50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

30 Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

40 Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
 130 135 140

Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser
 145 150 155 160

Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
 165 170 175

50 Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser
 180 185 190

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu
 195 200 205

60 Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr
 210 215 220

Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val
 225 230 235 240

Thr Val Ser Ser

10 <210> 627
 <211> 244
 <212> PRT
 <213> -

<400> 627

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15

20 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

30 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

40 Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

50 Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Ala Ser Gly Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp
 145 150 155 160

Phe Arg Gln Thr Pro Gly Lys Thr Arg Glu Phe Val Ala Ser Val Arg
 165 170 175

60 Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys Gly Arg Phe Thr
 180 185 190

Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser
 195 200 205

Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Pro Thr
 210 215 220

10

Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val
 225 230 235 240

Thr Val Ser Ser

20

<210> 628
 <211> 244
 <212> PRT
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<400> 628

Glu Val His Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ala Leu Asp Thr Tyr
 20 25 30

Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Thr Arg Glu Phe Val
 35 40 45

40

Ala Ser Val Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys
 50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

50

Ala Asp Pro Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln
 100 105 110

Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
 130 135 140

60

Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser
 145 150 155 160

Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
 165 170 175

10 Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr Ala Asp Ser
 180 185 190

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Thr Thr Leu
 195 200 205

Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr
 210 215 220

20 Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val
 225 230 235 240

Thr Val Ser Ser

30 <210> 629
 <211> 244
 <212> PRT
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 <400> 629

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15

40 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

50 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

60 Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val His Leu
 115 120 125

Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140

10

Ser Cys Ala Ala Ser Gly Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp
 145 150 155 160

Phe Arg Gln Thr Pro Gly Lys Thr Arg Glu Phe Val Ala Ser Val Arg
 165 170 175

20

Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys Gly Arg Phe Thr
 180 185 190

Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser
 195 200 205

Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Pro Thr
 210 215 220

30

Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val
 225 230 235 240

Thr Val Ser Ser

40

<210> 630
 <211> 250
 <212> PRT
 <213> -

 <400> 630

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 Phe Thr Leu Asp Tyr Tyr
 20 25 30

Gly Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val
 35 40 45

Ser Cys Ile Ser Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

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
 10 Ala Ala Gln Lys Gly Thr Pro Pro Leu Gly Cys Pro Ala Tyr Tyr Gly
 100 105 110
 Met Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly
 115 120 125
 Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
 130 135 140
 20 Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser
 145 150 155 160
 Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro
 165 170 175
 30 Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp
 180 185 190
 Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
 195 200 205
 Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
 210 215 220
 40 Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser
 225 230 235 240
 Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 245 250
 50 <210> 631
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 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15
 60 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

10

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

20

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu 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 Pro Gly Gly Ser Leu Arg Leu
 130 135 140

30

Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Tyr Tyr Gly Ile Gly Trp
 145 150 155 160

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val Ser Cys Ile Ser
 165 170 175

40

Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn
 195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Gln Lys
 210 215 220

50

Gly Thr Pro Pro Leu Gly Cys Pro Ala Tyr Tyr Gly Met Asp Tyr Trp
 225 230 235 240

Gly Lys Gly Thr Leu Val Thr Val Ser Ser
 245 250

60

<210> 632
 <211> 250
 <212> PRT

<213> -

<400> 632

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

10 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Tyr Tyr
 20 25 30

Gly Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val
 35 40 45

Ser Cys Ile Ser Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

20 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 Ala Ala Val Tyr Tyr Cys
 85 90 95

30 Ala Ala Gln Lys Gly Thr Pro Pro Leu Gly Cys Pro Ala Tyr Tyr Gly
 100 105 110

Met Asp Tyr Trp Gly Lys Gly Thr Leu Val Thr Val Ser Ser Gly Gly
 115 120 125

Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
 130 135 140

40 Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser
 145 150 155 160

Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro
 165 170 175

50 Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp
 180 185 190

Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
 195 200 205

Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
 210 215 220

60 Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser

225 230 235 240
 Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 245 250

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 10 <212> PRT
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 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15

 20 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
 30
 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

 40 Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu 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 Pro Gly Gly Ser Leu Arg Leu
 130 135 140
 50
 Ser Cys Ala Ala Ser Gly Phe Thr Leu Asp Tyr Tyr Gly Ile Gly Trp
 145 150 155 160

 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Trp Val Ser Cys Ile Ser
 165 170 175

 60 Ser Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn
 195 200 205

Ser Leu Lys Pro Glu Asp Ala Ala Val Tyr Tyr Cys Ala Ala Gln Lys
 210 215 220

10 Gly Thr Pro Pro Leu Gly Cys Pro Ala Tyr Tyr Gly Met Asp Tyr Trp
 225 230 235 240

Gly Lys Gly Thr Leu Val Thr Val Ser Ser
 245 250

<210> 634
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 20 <212> PRT
 <213> -

<400> 634

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
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30 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val
 20 25 30

Asp Val Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val
 50 55 60

40 Lys Gly Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr
 65 70 75 80

Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

50 Ala Thr Gly Arg Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile
 100 105 110

Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser Gly Gly
 115 120 125

Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
 130 135 140

60 Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser

145 150 155 160
 Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro
 165 170 175
 Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp
 180 185 190
 10 Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
 195 200 205
 Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
 210 215 220
 20 Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser
 225 230 235 240
 Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 245 250
 <210> 635
 <211> 250
 30 <212> PRT
 <213> -
 <400> 635
 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
 40 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
 50 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
 60 Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu 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 Ala Gly Gly Ser Leu Arg Leu
 130 135 140

10 Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val Asp Val Ala Trp
 145 150 155 160

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Leu Ala
 165 170 175

Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys Gly Arg Phe
 180 185 190

20 Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln Met Thr
 195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Arg
 210 215 220

30 Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile Tyr Asp Ser Trp
 225 230 235 240

Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 245 250

<210> 636
 <211> 250
 <212> PRT
 <213> -

<400> 636

Glu Val Pro Met Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

50 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val
 20 25 30

Asp Val Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val
 50 55 60

60 Lys Gly Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr

	65		70		75		80									
	Leu	Gln	Met	Thr	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
					85					90					95	
	Ala	Thr	Gly	Arg	Ala	Ser	Arg	Thr	Ser	Asp	Tyr	Tyr	Thr	Asp	Arg	Ile
				100					105					110		
10	Tyr	Asp	Ser	Trp	Gly	Gln	Gly	Ala	Gln	Val	Thr	Val	Ser	Ser	Gly	Gly
			115					120					125			
	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly
		130					135					140				
20	Gly	Leu	Val	Gln	Pro	Gly	Asn	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser
	145					150					155					160
	Gly	Phe	Thr	Phe	Ser	Ser	Phe	Gly	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro
					165					170					175	
	Gly	Lys	Gly	Leu	Glu	Trp	Val	Ser	Ser	Ile	Ser	Gly	Ser	Gly	Ser	Asp
30				180						185				190		
	Thr	Leu	Tyr	Ala	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp
			195						200				205			
	Asn	Ala	Lys	Thr	Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu
		210					215					220				
40	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Thr	Ile	Gly	Gly	Ser	Leu	Ser	Arg	Ser
	225					230					235					240
	Ser	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser						
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50	<210>	637														
	<211>	250														
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	<213>	-														
	<400>	637														
	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Asn
	1				5					10					15	
60	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

10 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

20 Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Pro Met
 115 120 125

Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140

30 Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val Asp Val Ala Trp
 145 150 155 160

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Leu Ala
 165 170 175

Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys Gly Arg Phe
 180 185 190

40 Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln Met Thr
 195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Arg
 210 215 220

50 Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile Tyr Asp Ser Trp
 225 230 235 240

Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 245 250

60 <210> 638
 <211> 250
 <212> PRT
 <213> -

<400> 638

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 Gly Val
 20 25 30
 Asp Val Ala Trp Phe Arg Gln Ala Thr Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr
 65 70 75 80
 Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Gly Arg Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile
 100 105 110
 Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser Gly Gly
 115 120 125
 Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
 130 135 140
 Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser
 145 150 155 160
 Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro
 165 170 175
 Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp
 180 185 190
 Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
 195 200 205
 Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
 210 215 220
 Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser
 225 230 235 240

Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 245 250

<210> 639
 <211> 250
 <212> PRT
 10 <213> -

<400> 639

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

20 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

30 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

40 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 Ala Gly Gly Ser Leu Arg Leu
 130 135 140

50 Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val Asp Val Ala Trp
 145 150 155 160

Phe Arg Gln Ala Thr Gly Lys Glu Arg Glu Phe Val Ala Ala Leu Ala
 165 170 175

Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys Gly Arg Phe
 180 185 190

60

Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln Met Thr
 195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Arg
 210 215 220

10 Ala Ser Arg Thr Ser Asp Tyr Tyr Thr Asp Arg Ile Tyr Asp Ser Trp
 225 230 235 240

Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 245 250

<210> 640
 <211> 250
 <212> PRT
 20 <213> -

<400> 640

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 Gly Val
 20 25 30

30 Asp Val Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val
 50 55 60

40 Lys Gly Arg Phe Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr
 65 70 75 80

Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Thr Gly Arg Ala Ser Ser Thr Ser Asp Tyr Tyr Thr Asp Arg Ile
 100 105 110

50 Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser Gly Gly
 115 120 125

Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
 130 135 140

60 Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser
 145 150 155 160

Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro
 165 170 175

Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp
 180 185 190

10

Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
 195 200 205

Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
 210 215 220

20

Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser
 225 230 235 240

Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 245 250

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<210> 641
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 <212> PRT
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<400> 641

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15

40

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

50

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

60

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu 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 Ala Gly Gly Ser Leu Arg Leu
 130 135 140

10 Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val Asp Val Ala Trp
 145 150 155 160

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Leu Ala
 165 170 175

Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys Gly Arg Phe
 180 185 190

20 Thr Ile Ser Arg Gly Asp Pro Asn Asp Thr Val Tyr Leu Gln Met Thr
 195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Arg
 210 215 220

30 Ala Ser Ser Thr Ser Asp Tyr Tyr Thr Asp Arg Ile Tyr Asp Ser Trp
 225 230 235 240

Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 245 250

<210> 642
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 40 <213> -

<400> 642

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 Gly Val
 20 25 30

50 Asp Val Ala Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ala Ala Leu Ala Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val
 50 55 60

60 Lys Gly Arg Phe Thr Ile Ser Arg Gly Asn Pro Asn Asp Thr Val Tyr
 65 70 75 80

Leu Gln Met Thr Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Thr Gly Arg Ala Tyr Arg Gly Ser Asp Tyr Tyr Thr Asp Arg Ile
 100 105 110

10

Tyr Asp Ser Trp Gly Gln Gly Ala Gln Val Thr Val Ser Ser Gly Gly
 115 120 125

Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
 130 135 140

20

Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser
 145 150 155 160

Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro
 165 170 175

Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp
 180 185 190

30

Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
 195 200 205

Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
 210 215 220

40

Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser
 225 230 235 240

Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 245 250

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<210> 643
 <211> 250
 <212> PRT
 <213> -

<400> 643

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15

60

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
 10 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
 20 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 Ala Gly Gly Ser Leu Arg Leu
 130 135 140
 30 Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Gly Val Asp Val Ala Trp
 145 150 155 160
 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Ala Leu Ala
 165 170 175
 Trp Ser Gly Ile Arg Thr Tyr Tyr Ala Val Ser Val Lys Gly Arg Phe
 180 185 190
 40 Thr Ile Ser Arg Gly Asn Pro Asn Asp Thr Val Tyr Leu Gln Met Thr
 195 200 205
 Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Gly Arg
 210 215 220
 50 Ala Tyr Arg Gly Ser Asp Tyr Tyr Thr Asp Arg Ile Tyr Asp Ser Trp
 225 230 235 240
 Gly Gln Gly Ala Gln Val Thr Val Ser Ser
 245 250
 <210> 644
 <211> 247
 <212> PRT
 60 <213> -

<400> 644

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 Ala Leu Ser Ser Tyr
 20 25 30

10

Ser Val Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Thr Ala Ile Ser Trp Ser Val Pro Tyr Tyr Ala Asp Ser Val Lys Gly
 50 55 60

20

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln
 65 70 75 80

Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala
 85 90 95

Asp Ser Leu Tyr Trp Arg Ser Ser Arg Met Ala Thr Asp Tyr Asp Tyr
 100 105 110

30

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

40

Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr
 145 150 155 160

Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly
 165 170 175

Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu Tyr
 180 185 190

50

Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys
 195 200 205

Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
 210 215 220

60

Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly
 225 230 235 240

Thr Leu Val Thr Val Ser Ser
245

<210> 645
<211> 247
<212> PRT
<213> -

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<400> 645

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

20

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

30

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

40

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 Pro Gly Gly Ser Leu Arg Leu
130 135 140

50

Ser Cys Ala Ala Ser Gly Arg Ala Leu Ser Ser Tyr Ser Val Gly Trp
145 150 155 160

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Thr Ala Ile Ser
165 170 175

Trp Ser Val Pro Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile
180 185 190

60

Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu

	195		200		205											
	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Ala	Asp	Ser	Leu	Tyr
	210						215					220				
10	Trp	Arg	Ser	Ser	Arg	Met	Ala	Thr	Asp	Tyr	Asp	Tyr	Trp	Gly	Gln	Gly
	225					230					235					240
	Thr	Gln	Val	Thr	Val	Ser	Ser									
						245										
20	<210>	646														
	<211>	249														
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	<213>	-														
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	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Ala	Gly	Gly
	1				5					10					15	
30	Ala	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Arg	Thr	Phe	Glu	Thr	Tyr
				20					25					30		
	Arg	Met	Gly	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Glu	Arg	Glu	Phe	Val
			35					40				45				
	Ala	Leu	Ile	Asn	Trp	Ser	Ser	Gly	Thr	Thr	Val	Tyr	Ala	Asp	Ser	Val
		50					55					60				
40	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Gly	Asp	Asn	Ala	Lys	Asp	Thr	Val	Tyr
	65					70					75				80	
	Leu	Glu	Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85						90					95	
	Ala	Val	Gly	Arg	Arg	Trp	Ser	Gly	Ser	Tyr	Tyr	Ser	Ala	Leu	Ala	Tyr
				100					105					110		
50	Gln	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				
60	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

10 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
 20 225 230 235 240

Gln Gly Thr Leu Val Thr Val Ser Ser
 245

<210> 647
 <211> 249
 <212> PRT
 <213> -

30 <400> 647

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

40 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

50 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

60 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	Ala	Gly	Gly	Ala	Leu	Arg	Leu			
	130						135					140							
10	Ser	Cys	Ala	Ala	Ser	Gly	Arg	Thr	Phe	Glu	Thr	Tyr	Arg	Met	Gly	Trp			
	145					150					155					160			
	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Glu	Arg	Glu	Phe	Val	Ala	Leu	Ile	Asn			
					165					170					175				
	Trp	Ser	Ser	Gly	Thr	Thr	Val	Tyr	Ala	Asp	Ser	Val	Lys	Gly	Arg	Phe			
				180				185						190					
20	Thr	Ile	Ser	Gly	Asp	Asn	Ala	Lys	Asp	Thr	Val	Tyr	Leu	Glu	Met	Asn			
			195					200					205						
	Ser	Leu	Lys	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Val	Gly	Arg			
		210					215					220							
30	Arg	Trp	Ser	Gly	Ser	Tyr	Tyr	Ser	Ala	Leu	Ala	Tyr	Gln	Tyr	Trp	Gly			
	225					230					235					240			
	Gln	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser										
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	1				5					10					15				
	Ala	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Arg	Thr	Phe	Glu	Thr	Tyr			
				20					25					30					
50	Arg	Met	Gly	Trp	Phe	Arg	Gln	Ala	Pro	Gly	Lys	Glu	Arg	Glu	Phe	Val			
		35						40					45						
	Ala	Leu	Ile	Asn	Trp	Ser	Ser	Gly	Thr	Thr	Ile	Tyr	Ala	Asp	Ser	Val			
		50					55					60							
60	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Gly	Asp	Asn	Ala	Lys	Asp	Thr	Val	Tyr			
	65					70					75					80			

Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110

10 Gln 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

20 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

30 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

40 Gln Gly Thr Leu Val Thr Val Ser Ser
 245

<210> 649
 <211> 249
 <212> PRT
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50 <400> 649

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

60 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

10 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

20 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 Ala Gly Gly Ala Leu Arg Leu
130 135 140

Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr Arg Met Gly Trp
145 150 155 160

30 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Leu Ile Asn
165 170 175

Trp Ser Ser Gly Thr Thr Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe
180 185 190

40 Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn
195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg
210 215 220

Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly
225 230 235 240

50 Gln Gly Thr Gln Val Thr Val Ser Ser
245

<210> 650
<211> 249
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60 <400> 650

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15
 Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr
 20 25 30
 10 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45
 Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr Ile Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80
 20 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110
 30 Gln Tyr Trp Gly Lys Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 130 135 140
 Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 145 150 155 160
 40 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
 50 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
 60

Gln Gly Thr Leu Val Thr Val Ser Ser
245

<210> 651
<211> 249
<212> PRT
<213> -

10 <400> 651

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

20 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

30 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

40 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 Ala Gly Gly Ala Leu Arg Leu
130 135 140

50 Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr Arg Met Gly Trp
145 150 155 160

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Leu Ile Asn
165 170 175

Trp Ser Ser Gly Thr Thr Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe
180 185 190

60 Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn
195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg
 210 215 220

Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly
 225 230 235 240

10

Lys Gly Thr Gln Val Thr Val Ser Ser
 245

<210> 652

<211> 249

<212> PRT

<213> -

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<400> 652

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val His Ala Gly Gly
 1 5 10 15

Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Ala Phe Glu Thr Tyr
 20 25 30

30

Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val
 50 55 60

40

Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80

Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110

50

Gln 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

60

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

10 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

20 Gln Gly Thr Leu Val Thr Val Ser Ser
 245

<210> 653
 <211> 249
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 <213> -

30 <400> 653

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

40 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

50 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

60 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 His Ala Gly Gly Ala Leu Arg Leu
130 135 140

Ser Cys Ala Ala Ser Gly Arg Ala Phe Glu Thr Tyr Arg Met Gly Trp
145 150 155 160

10

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Leu Ile Asn
165 170 175

Trp Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val Lys Gly Arg Phe
180 185 190

20

Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn
195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg
210 215 220

Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly
225 230 235 240

30

Gln Gly Thr Gln Val Thr Val Ser Ser
245

<210> 654

<211> 249

<212> PRT

<213> -

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<400> 654

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
1 5 10 15

Ala Leu Arg Pro Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr
20 25 30

50

Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
35 40 45

Ala Leu Ile Asn Trp Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
65 70 75 80

60

Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Val Gly Arg Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110

10 Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 130 135 140

Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 145 150 155 160

20 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

30 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

40 Gln Gly Thr Leu Val Thr Val Ser Ser
 245

<210> 655
 <211> 249
 <212> PRT
 <213> -

50 <400> 655

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

60 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

10

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

20

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 Ala Gly Gly Ala Leu Arg Pro
 130 135 140

Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr Arg Met Gly Trp
 145 150 155 160

30

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Leu Ile Asn
 165 170 175

Trp Ser Ser Gly Thr Thr Val Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

40

Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn
 195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg
 210 215 220

Arg Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly
 225 230 235 240

50

Gln Gly Thr Gln Val Thr Val Ser Ser
 245

<210> 656
 <211> 249
 <212> PRT
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60

<400> 656

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15
 Ala Leu Arg Leu Ser Cys Ala Val Ser Gly Arg Thr Phe Glu Ser Tyr
 20 25 30
 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 10 35 40 45
 Ser Leu Ile Asn Trp Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80
 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 20 85 90 95
 Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110
 Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 30 115 120 125
 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
 40 165 170 175
 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
 50 195 200 205
 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
 60

245

<210> 657
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<400> 657

10

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

20

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

30

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

40

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 Ala Gly Gly Ala Leu Arg Leu
 130 135 140

Ser Cys Ala Val Ser Gly Arg Thr Phe Glu Ser Tyr Arg Met Gly Trp
 145 150 155 160

50

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ser Leu Ile Asn
 165 170 175

Trp Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

60

Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn
 195 200 205

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg
 210 215 220

Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly
 225 230 235 240

10 Gln Gly Thr Gln Val Thr Val Ser Ser
 245

<210> 658
 <211> 249
 <212> PRT
 <213> -

<400> 658

20 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

Ala Leu Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr
 20 25 30

30 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ala Leu Ile Asn Trp Ser Ser Gly Ile Thr Val Tyr Leu Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80

40 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110

50 Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly
 130 135 140

Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly
 145 150 155 160

60 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
 10 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
 20 Gln Gly Thr Leu Val Thr Val Ser Ser
 245
 <210> 659
 <211> 249
 <212> PRT
 <213> -
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 30 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
 40 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
 50 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
 60 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 Ala Gly Gly Ala Leu Arg Leu
 130 135 140

Ser Cys Ala Ala Ser Gly Arg Thr Phe Glu Thr Tyr Arg Met Gly Trp
 145 150 155 160

10 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ala Leu Ile Asn
 165 170 175

Trp Ser Ser Gly Ile Thr Val Tyr Leu Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn
 195 200 205

20 Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg
 210 215 220

Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly
 225 230 235 240

30 Gln Gly Thr Gln Val Thr Val Ser Ser
 245

<210> 660
 <211> 249
 <212> PRT
 <213> -

<400> 660

40 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 Val Ser Gly Arg Thr Phe Glu Ser Tyr
 20 25 30

50 Arg Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

Ser Leu Ile Asn Trp Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr
 65 70 75 80

60 Leu Glu Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys

85

90

95

Ala Val Gly Arg Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr
 100 105 110

Gln Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

10

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

20

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

30

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

40

Gln Gly Thr Leu Val Thr Val Ser Ser
 245

<210> 661

<211> 249

<212> PRT

<213> -

<400> 661

50

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

60

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

10 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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

20 Met Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Val Ser Gly Arg Thr Phe Glu Ser Tyr Arg Met Gly Trp
 145 150 155 160

30 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ser Leu Ile Asn
 165 170 175

Trp Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn
 195 200 205

40 Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg
 210 215 220

Ala Trp Ser Gly Ser Tyr Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly
 225 230 235 240

50 Gln Gly Thr Gln Val Thr Val Ser Ser
 245

<210> 662
 <211> 249
 <212> PRT
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<400> 662

60 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Ser Val Gln Ala Gly Gly

245

<210> 663
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 <212> PRT
 <213> -

<400> 663

10 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

20 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

30 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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

40 Val Glu Ser Gly Gly Gly Ser Val Gln Ala Gly Gly Ala Leu Arg Leu
 130 135 140

Ser Cys Ala Val Ser Gly Arg Thr Phe Glu Ser Tyr Arg Met Gly Trp
 145 150 155 160

50 Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val Ser Leu Ile Asn
 165 170 175

Trp Ser Ser Gly Lys Thr Ile Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Gly Asp Asn Ala Lys Asp Thr Val Tyr Leu Glu Met Asn
 195 200 205

60

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Val Gly Arg
 210 215 220

Ala Trp Ser Gly Ser His Tyr Ser Ala Leu Ala Tyr Gln Tyr Trp Gly
 225 230 235 240

10 Gln Gly Thr Gln Val Thr Val Ser Ser
 245

<210> 664
 <211> 250
 <212> PRT
 <213> -

<400> 664

20 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 Gly Thr Tyr
 20 25 30

30 Ala Met Ala Trp Phe Arg Gln Ser Pro Lys Asn Glu Arg Glu Phe Val
 35 40 45

Ala Thr Leu Arg Trp Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ala Gly Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

40 Leu Gln Met Asn Asn Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Asp Arg Trp Phe Ser Tyr Thr Thr Tyr Asp Ala Thr Asp Thr
 100 105 110

50 Trp His Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly
 115 120 125

Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
 130 135 140

Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser
 145 150 155 160

60 Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro
 165 170 175

Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp
 180 185 190

Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp
 195 200 205

10

Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
 210 215 220

Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser
 225 230 235 240

20

Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 245 250

<210> 665
 <211> 250
 <212> PRT
 <213> -
 <400> 665

30

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

40

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

50

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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

60

Val Glu Ser Gly Gly Gly Leu Val Gln Thr Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Ala Ser Gly Arg Thr Phe Gly Thr Tyr Ala Met Ala Trp
 145 150 155 160

10 Phe Arg Gln Ser Pro Lys Asn Glu Arg Glu Phe Val Ala Thr Leu Arg
 165 170 175

Trp Ser Asp Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ala Gly Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn
 195 200 205

20 Asn Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Arg
 210 215 220

Trp Phe Ser Tyr Thr Thr Tyr Asp Ala Thr Asp Thr Trp His Tyr Trp
 225 230 235 240

30 Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 245 250

<210> 666
 <211> 371
 <212> PRT
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<400> 666

40 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

50 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

60 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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

10

Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Pro Ser Gly Arg Asp Ile Ser Ser Tyr Ile Met Gly Trp
 145 150 155 160

20

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Thr Ala Asp Ile Asn
 165 170 175

Trp Asn Gly Ser Trp Arg Phe Tyr Ala Glu Ser Val Asn Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn
 195 200 205

30

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Lys Glu
 210 215 220

Arg Gly Ser Gly Ala Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr
 225 230 235 240

40

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 245 250 255

Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu
 260 265 270

Ser Cys Ala Pro Ser Gly Arg Asp Ile Ser Ser Tyr Ile Met Gly Trp
 275 280 285

50

Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Thr Ala Asp Ile Asn
 290 295 300

Trp Asn Gly Ser Trp Arg Phe Tyr Ala Glu Ser Val Asn Gly Arg Phe
 305 310 315 320

60

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn
 325 330 335

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Lys Glu
 340 345 350

Arg Gly Ser Gly Ala Tyr Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr
 355 360 365

10 Val Ser Ser
 370

<210> 667
 <211> 392
 <212> PRT
 <213> -

20 <400> 667
 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 Pro Ser Gly Arg Asp Ile Ser Ser Tyr
 20 25 30

30 Ile Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Thr
 35 40 45

Ala Asp Ile Asn Trp Asn Gly Ser Trp Arg Phe Tyr Ala Glu Ser Val
 50 55 60

Asn Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 65 70 75 80

40 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ala Lys Glu Arg Gly Ser Gly Ala Tyr Asp Tyr Trp Gly Gln Gly
 100 105 110

50 Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly 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 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 145 150 155 160

60 Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe

165

170

175

Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys
180 185 190

Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu
195 200 205

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
210 215 220

Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr
225 230 235 240

Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln
245 250 255

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
260 265 270

Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly
275 280 285

Gly Ser Leu Arg Leu Ser Cys Ala Pro Ser Gly Arg Asp Ile Ser Ser
290 295 300

Tyr Ile Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe
305 310 315 320

Thr Ala Asp Ile Asn Trp Asn Gly Ser Trp Arg Phe Tyr Ala Glu Ser
325 330 335

Val Asn Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val
340 345 350

Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr
355 360 365

Cys Ala Ala Lys Glu Arg Gly Ser Gly Ala Tyr Asp Tyr Trp Gly Gln
370 375 380

Gly Thr Gln Val Thr Val Ser Ser
385 390

<210>	668
<211>	392

<212> PRT

<213> -

<400> 668

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

10 Ser Leu Arg Leu Ser Cys Ala Pro Ser Gly Arg Asp Ile Ser Ser Tyr
 20 25 30

Ile Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Thr
 35 40 45

20 Ala Asp Ile Asn Trp Asn Gly Ser Trp Arg Phe Tyr Ala Glu Ser Val
 50 55 60

Asn 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

30 Ala Ala Lys Glu Arg Gly Ser Gly Ala Tyr Asp Tyr Trp Gly Gln Gly
 100 105 110

Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
 115 120 125

40 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 130 135 140

Ser Leu Arg Leu Ser Cys Ala Pro Ser Gly Arg Asp Ile Ser Ser Tyr
 145 150 155 160

Ile Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Thr
 165 170 175

50 Ala Asp Ile Asn Trp Asn Gly Ser Trp Arg Phe Tyr Ala Glu Ser Val
 180 185 190

Asn Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 195 200 205

60 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 210 215 220

Ala Ala Lys Glu Arg Gly Ser Gly Ala Tyr Asp Tyr Trp Gly Gln Gly
 225 230 235 240
 Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 245 250 255
 10 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 260 265 270
 Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 275 280 285
 Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 290 295 300
 20 Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala Pro Gly Lys
 305 310 315 320
 Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser Asp Thr Leu
 325 330 335
 30 Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 340 345 350
 Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr
 355 360 365
 Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln
 370 375 380
 40 Gly Thr Leu Val Thr Val Ser Ser
 385 390
 <210> 669
 <211> 405
 <212> PRT
 <213> -
 50 <400> 669
 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
 60 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

10

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

20

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 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
 145 150 155 160

30

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser
 165 170 175

Tyr Thr Met Tyr Trp Ala Arg Gln Ala Pro Gly Lys Glu Leu Glu Trp
 180 185 190

40

Val Ser Ile Ile Phe Thr Asn Gly Glu Gly Thr Tyr Tyr Ser Asp Ser
 195 200 205

Val Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Thr Leu
 210 215 220

Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Tyr
 225 230 235 240

50

Cys Ala Arg Asp Pro Phe Gly Lys Leu Lys Gly Gln Gly Thr Gln Val
 245 250 255

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 260 265 270

60

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
 275 280 285

Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro
 290 295 300

Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser
 305 310 315 320

10 Ser Tyr Thr Met Tyr Trp Ala Arg Gln Ala Pro Gly Lys Glu Leu Glu
 325 330 335

Trp Val Ser Ile Ile Phe Thr Asn Gly Glu Gly Thr Tyr Tyr Ser Asp
 340 345 350

Ser Val Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Thr
 355 360 365

20 Leu Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr
 370 375 380

Tyr Cys Ala Arg Asp Pro Phe Gly Lys Leu Lys Gly Gln Gly Thr Gln
 385 390 395 400

30 Val Thr Val Ser Ser
 405

<210> 670
 <211> 363
 <212> PRT
 <213> -

<400> 670

40 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Tyr
 20 25 30

50 Thr Met Tyr Trp Ala Arg Gln Ala Pro Gly Lys Glu Leu Glu Trp Val
 35 40 45

Ser Ile Ile Phe Thr Asn Gly Glu Gly Thr Tyr Tyr Ser Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80

60 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Tyr Cys

			85				90				95					
	Ala	Arg	Asp	Pro	Phe	Gly	Lys	Leu	Lys	Gly	Gln	Gly	Thr	Gln	Val	Thr
				100					105					110		
10	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	Pro	Gly	Asn	Ser	Leu	Arg	Leu
		130					135					140				
	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Phe	Gly	Met	Ser	Trp
	145					150					155					160
20	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val	Ser	Ser	Ile	Ser
				165						170					175	
	Gly	Ser	Gly	Ser	Asp	Thr	Leu	Tyr	Ala	Asp	Ser	Val	Lys	Gly	Arg	Phe
				180					185					190		
30	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Thr	Thr	Leu	Tyr	Leu	Gln	Met	Asn
		195						200					205			
	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Thr	Ile	Gly	Gly
		210					215					220				
	Ser	Leu	Ser	Arg	Ser	Ser	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly
	225					230					235					240
40	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly
				245					250					255		
	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala
			260						265					270		
50	Ser	Gly	Phe	Thr	Val	Ser	Ser	Tyr	Thr	Met	Tyr	Trp	Ala	Arg	Gln	Ala
		275						280					285			
	Pro	Gly	Lys	Glu	Leu	Glu	Trp	Val	Ser	Ile	Ile	Phe	Thr	Asn	Gly	Glu
		290					295					300				
	Gly	Thr	Tyr	Tyr	Ser	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Val	Ser	Arg
	305					310					315					320
60	Asp	Asn	Ala	Lys	Asn	Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Lys	Pro
				325						330					335	

Glu Asp Thr Ala Leu Tyr Tyr Cys Ala Arg Asp Pro Phe Gly Lys Leu
 340 345 350

Lys Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 355 360

10

<210> 671
 <211> 384
 <212> PRT
 <213> -

<400> 671

20

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser Tyr
 20 25 30

Thr Met Tyr Trp Ala Arg Gln Ala Pro Gly Lys Glu Leu Glu Trp Val
 35 40 45

30

Ser Ile Ile Phe Thr Asn Gly Glu Gly Thr Tyr Tyr Ser Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80

40

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Tyr Cys
 85 90 95

Ala Arg Asp Pro Phe Gly Lys Leu 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

50

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 130 135 140

Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
 145 150 155 160

60

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Val Ser Ser
 165 170 175

Tyr Thr Met Tyr Trp Ala Arg Gln Ala Pro Gly Lys Glu Leu Glu Trp
 180 185 190

Val Ser Ile Ile Phe Thr Asn Gly Glu Gly Thr Tyr Tyr Ser Asp Ser
 195 200 205

10 Val Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Thr Leu
 210 215 220

Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Leu Tyr Tyr
 225 230 235 240

Cys Ala Arg Asp Pro Phe Gly Lys Leu Lys Gly Gln Gly Thr Gln Val
 245 250 255

20 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

30 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

40 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

50 Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 370 375 380

<210> 672
 <211> 384
 <212> PRT
 <213> -

<400> 672

60 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

10

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

20

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 Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu
 115 120 125

30

Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr Trp Met Tyr Trp
 145 150 155 160

40

Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Ser Val Ser Ser Ile Asn
 165 170 175

Thr Gly Gly Ala Arg Thr Phe Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn
 195 200 205

50

Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys Asp Ala
 210 215 220

Ala Gly Arg Thr Arg Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly
 225 230 235 240

60

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 245 250 255

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln
 260 265 270

Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg
 275 280 285

10 Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr Trp Met Tyr
 290 295 300

Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Ser Val Ser Ser Ile
 305 310 315 320

Asn Thr Gly Gly Ala Arg Thr Phe Tyr Ala Asp Ser Val Lys Gly Arg
 325 330 335

20 Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met
 340 345 350

Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys Asp
 355 360 365

30 Ala Ala Gly Arg Thr Arg Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 370 375 380

<210> 673
 <211> 405
 <212> PRT
 <213> -

<400> 673

40 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
 20 25 30

50 Trp Met Tyr Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Ser Val
 35 40 45

Ser Ser Ile Asn Thr Gly Gly Ala Arg Thr Phe Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
 65 70 75 80

60 Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys

			85				90				95					
	Ala	Lys	Asp	Ala	Ala	Gly	Arg	Thr	Arg	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			
10																
	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly
			130				135					140				
	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly
	145				150						155					160
20																
	Asn	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser
					165					170					175	
	Phe	Gly	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp
				180					185					190		
	Val	Ser	Ser	Ile	Ser	Gly	Ser	Gly	Ser	Asp	Thr	Leu	Tyr	Ala	Asp	Ser
			195					200					205			
30																
	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Thr	Thr	Leu
		210					215					220				
	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Pro	Glu	Asp	Thr	Ala	Val	Tyr	Tyr
	225					230					235					240
40																
	Cys	Thr	Ile	Gly	Gly	Ser	Leu	Ser	Arg	Ser	Ser	Gln	Gly	Thr	Leu	Val
					245					250					255	
	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly
				260					265					270		
	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly
			275					280					285			
50																
	Gly	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro
		290					295					300				
	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser
	305					310					315					320
60																
	Asn	Tyr	Trp	Met	Tyr	Trp	Leu	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu
					325					330					335	

Ser Val Ser Ser Ile Asn Thr Gly Gly Ala Arg Thr Phe Tyr Ala Asp
340 345 350

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr
355 360 365

10

Leu Tyr Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr
370 375 380

Tyr Cys Ala Lys Asp Ala Ala Gly Arg Thr Arg Gly Gln Gly Thr Gln
385 390 395 400

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Val Thr Val Ser Ser
405

<210> 674

<211> 363

<212> PRT

<213> -

<400> 674

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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 Ser Asn Tyr
20 25 30

Trp Met Tyr Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Ser Val
35 40 45

40

Ser Ser Ile Asn Thr Gly Gly Ala Arg Thr Phe Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

50

Leu Gln Met Asn Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Asp Ala Ala Gly Arg Thr Arg 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

60

Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu
 130 135 140

Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr Trp Met Tyr Trp
 145 150 155 160

10 Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Ser Val Ser Ser Ile Asn
 165 170 175

Thr Gly Gly Ala Arg Thr Phe Tyr Ala Asp Ser Val Lys Gly Arg Phe
 180 185 190

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Asn
 195 200 205

20 Ser Leu Lys Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys Asp Ala
 210 215 220

Ala Gly Arg Thr Arg Gly Gln Gly Thr Gln Val Thr Val Ser Ser Gly
 225 230 235 240

30 Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly
 245 250 255

Gly Gly Leu Val Gln Pro Gly Asn Ser Leu Arg Leu Ser Cys Ala Ala
 260 265 270

Ser Gly Phe Thr Phe Ser Ser Phe Gly Met Ser Trp Val Arg Gln Ala
 275 280 285

40 Pro Gly Lys Gly Leu Glu Trp Val Ser Ser Ile Ser Gly Ser Gly Ser
 290 295 300

Asp Thr Leu Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg
 305 310 315 320

50 Asp Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro
 325 330 335

Glu Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg
 340 345 350

Ser Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 355 360

60 <210> 675

<211> 415
 <212> PRT
 <213> -

<400> 675

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Asn
 1 5 10 15

10

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

20

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

30

Thr Ile Gly Gly Ser Leu Ser Arg Ser Ser Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

40

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 130 135 140

Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly
 145 150 155 160

Gly Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Arg Ala Leu Asp Thr
 165 170 175

50

Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe
 180 185 190

Val Ala Ser Asn Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val
 195 200 205

60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
 210 215 220

Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 225 230 235 240

Ala Ala Asp Leu Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly
 245 250 255

10 Gln Gly Thr Gln Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
 260 265 270

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
 275 280 285

20 Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly
 290 295 300

Gly Leu Val Gln Ala Gly Gly Ser Leu Arg Leu Ser Cys Thr Ala Ser
 305 310 315 320

Gly Arg Ala Leu Asp Thr Tyr Thr Val Thr Trp Phe Arg Gln Thr Pro
 325 330 335

30 Gly Lys Glu Arg Glu Phe Val Ala Ser Asn Arg Trp Asn Ala Lys Pro
 340 345 350

Tyr Thr Thr Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn
 355 360 365

Ala Lys Asn Thr Val Tyr Leu Gln Met Asn Ser Leu Lys Pro Glu Asp
 370 375 380

40 Thr Ala Val Tyr Tyr Cys Ala Ala Asp Leu Thr Thr Trp Ala Asp Gly
 385 390 395 400

Pro Tyr Arg Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
 405 410 415

50 <210> 676
 <211> 373
 <212> PRT
 <213> -
 <400> 676

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
 1 5 10 15

60 Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Arg Ala Leu Asp Thr Tyr

Leu Ser Cys Thr Ala Ser Gly Arg Ala Leu Asp Thr Tyr Thr Val Thr
 275 280 285

Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val Ala Ser Asn
 290 295 300

10

Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys Gly Arg Phe
 305 310 315 320

Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu Gln Met Asn
 325 330 335

20

Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Ala Asp Leu
 340 345 350

Thr Thr Trp Ala Asp Gly Pro Tyr Arg Tyr Trp Gly Gln Gly Thr Gln
 355 360 365

Val Thr Val Ser Ser
 370

30

<210> 677
 <211> 394
 <212> PRT
 <213> -

<400> 677

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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Ala Gly Gly
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Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Arg Ala Leu Asp Thr Tyr
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Thr Val Thr Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val
 35 40 45

50

Ala Ser Asn Arg Trp Asn Ala Lys Pro Tyr Thr Thr Asp Ser Val Lys
 50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr Leu
 65 70 75 80

Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

60

	Ala	Asp	Leu	Thr	Thr	Trp	Ala	Asp	Gly	Pro	Tyr	Arg	Tyr	Trp	Gly	Gln	
				100					105					110			
	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	
			115					120					125				
10	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	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	
	145					150					155					160	
	Leu	Val	Gln	Ala	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Thr	Ala	Ser	Gly	
					165					170						175	
20	Arg	Ala	Leu	Asp	Thr	Tyr	Thr	Val	Thr	Trp	Phe	Arg	Gln	Thr	Pro	Gly	
				180						185					190		
	Lys	Glu	Arg	Glu	Phe	Val	Ala	Ser	Asn	Arg	Trp	Asn	Ala	Lys	Pro	Tyr	
			195						200				205				
30	Thr	Thr	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	
		210					215						220				
	Lys	Asn	Thr	Val	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Lys	Pro	Glu	Asp	Thr	
	225					230					235					240	
	Ala	Val	Tyr	Tyr	Cys	Ala	Ala	Asp	Leu	Thr	Thr	Trp	Ala	Asp	Gly	Pro	
					245					250					255		
40	Tyr	Arg	Tyr	Trp	Gly	Gln	Gly	Thr	Gln	Val	Thr	Val	Ser	Ser	Gly	Gly	
				260					265					270			
	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	
			275					280					285				
50	Gly	Leu	Val	Gln	Pro	Gly	Asn	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	
		290					295					300					
	Gly	Phe	Thr	Phe	Ser	Ser	Phe	Gly	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	
	305					310					315					320	
	Gly	Lys	Gly	Leu	Glu	Trp	Val	Ser	Ser	Ile	Ser	Gly	Ser	Gly	Ser	Asp	
				325						330						335	
60	Thr	Leu	Tyr	Ala	Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	

340 345 350
 Asn Ala Lys Thr Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu
 355 360 365

 Asp Thr Ala Val Tyr Tyr Cys Thr Ile Gly Gly Ser Leu Ser Arg Ser
 370 375 380
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 Ser Gln Gly Thr Leu Val Thr Val Ser Ser
 385 390

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 <211> 9
 <212> PRT
 <213> -
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 <400> 678

 Gly Gly Gly Gly Ser Gly Gly Gly Ser
 1 5

 <210> 679
 <211> 30
 <212> PRT
 <213> -
30
 <400> 679

 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
 20 25 30
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 <210> 680
 <211> 109
 <212> PRT
 <213> -

 <400> 680

 Ala Pro Met Ala Glu Gly Gly Gly Gln Asn His His Glu Val Val Lys
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 Phe Met Asp Val Tyr Gln Arg Ser Tyr Cys His Pro Ile Glu Thr Leu
 20 25 30

 Val Asp Ile Phe Gln Glu Tyr Pro Asp Glu Ile Glu Tyr Ile Phe Lys
 35 40 45
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 Pro Ser Cys Val Pro Leu Met Arg Cys Gly Gly Cys Cys Asn Asp Glu

50

55

60

Gly Leu Glu Cys Val Pro Thr Glu Glu Ser Asn Ile Thr Met Gln Ile
65 70 75 80

Met Arg Ile Lys Pro His Gln Gly Gln His Ile Gly Glu Met Ser Phe
85 90 95

10

Leu Gln His Asn Lys Cys Glu Cys Arg Pro Lys Lys Asp
100 105