SEQUENCE LISTING

<110> Igenica Biotherapeutics, Inc.

<120> ANTI-C10ORF54 ANTIBODIES AND USES THEREOF

<130> 13390-028-228

<140> TBA
<141> 2015-12-11

<150> US 62/090,880
<151> 2014-12-11

<160> 1923

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 118
<212> PRT
<213> Murine

<220>
<223> Murine antibody 76E1 VH domain

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

<210> 2
<211> 121
<212> PRT
<213> Murine

<220>
<223> Murine antibody 141A VH domain

<400> 2
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe Ser Arg Tyr
            20   25   30
Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu Glu Trp Ile
        35   40   45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn Glu Lys Phe
    50   55   60
Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
65   70   75   80
Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85   90   95
Ala Gly Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly Tyr Trp Gly
            100   105   110
Gln Gly Thr Leu Val Thr Val Ser Ala

115 120

<210> 3
<211> 119
<212> PRT
<213> Murine

<220>
<223> Murine antibody 175A VH domain

<400> 3
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe Ser Thr His
20 25 30
Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu Glu Trp Ile
35 40 45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn Glu Lys Phe
50 55 60
Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
65 70 75 80
Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Ser Val Thr Val Ser Ser
115

<210> 4
<211> 112
<212> PRT
<213> Murine

<220>
<223> Murine antibody 76E1 VL domain

<400> 4
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1 5 10 15
Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
20 25 30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45
Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80
Asn Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95
Ser His Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 5
<211> 106
<212> PRT
<213> Murine

<220>
<223> Murine antibody 141A VL domain

<400> 5
Gln Ile Val Leu Ser Gln Ser Pro Ala Ile Leu Ser Ala Ser Pro Gly
1 5 10 15
Glu Lys Val Thr Met Thr Cys Arg Ala Ser Ser Ser Leu Ser Tyr Met
20 25 30
His Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
    50   55   60
Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Val Glu Ala Glu
65   70   75   80
Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Asn Pro Tyr Thr
                85   90   95
Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 6
<211> 112
<212> PRT
<213> Murine

<220>
<223> Murine antibody 175A VH domain

<400> 6
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
 1   5   10   15
Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
            20   25   30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35   40   45
Pro Lys Leu Leu Ile Tyr Lys Leu Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65   70   75   80
Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
                85   90   95
Ser His Phe Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 7
<211> 98
<212> PRT
<213> Homo sapiens

<220>
<223> Human germline Immunoglobulin (IMGT IGHV1-18) Heavy chain

<400> 7
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20   25   30
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Leu
    50   55   60
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg

<210> 8
<211> 98
<212> PRT
<213> Homo sapiens

<220>
<223> Human germline Immunoglobulin (IMGT IGHV3-48) Heavy chain

<400> 8
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

```
 1               5                  10                  15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
            20                  25                  30
Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45
Ser Tyr Ile Ser Ser Ser Ser Ser Thr Ile Tyr Tyr Ala Asp Ser Val
    50                  55                  60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65                  70                  75                  80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
Ala Arg
```

<210> 9
<211> 100
<212> PRT
<213> Homo sapiens

<220>
<223> Human germline Immunoglobulin (IMGT IGKV2-28) light chain

<400> 9

```
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1               5                  10                  15
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
            20                  25                  30
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
    50                  55                  60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
                85                  90                  95
Leu Gln Thr Pro
            100
```

<210> 10
<211> 95
<212> PRT
<213> Homo sapiens

<220>
<223> Human germline Immunoglobulin (IMGT IGKV1-39) light chain

<400> 10

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1               5                  10                  15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
            20                  25                  30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35                  40                  45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro
                85                  90                  95
```

<210> 11
<211> 96
<212> PRT
<213> Homo sapiens

<220>
<223> Human germline Immunoglobulin (IMGT IGKV3-20) light chain

<400> 11
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
            20   25   30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
        35   40   45
Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
    50   55   60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65   70   75   80
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
                85   90   95

<210> 12
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VH domain

<400> 12
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Tyr
            20   25   30
Asn Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asn Leu Lys Phe
    50   55   60
Lys Asp Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Ser Thr Met Ile Thr Pro Phe Asp Tyr Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 13
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VH domain

<400> 13
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Tyr
            20   25   30
Asn Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Gln Lys Leu
    50   55   60
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Ser Thr Met Ile Thr Pro Phe Asp Tyr Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 14
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VH domain

<400> 14
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Ser Phe Thr Gly Tyr
            20   25   30
Asn Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asn Leu Lys Phe
    50   55   60
Lys Asp Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Ser Thr Met Ile Thr Pro Phe Asp Tyr Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 15
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VH domain

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

<210> 16
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VH domain

<400> 16
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Arg Tyr
            20   25   30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn Glu Lys Phe

```
    50                  55                  60
Lys Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65                  70                  75                  80
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
Ala Arg Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly Tyr Trp Gly
            100                 105                 110
Gln Gly Thr Leu Val Thr Val Ser Ser
        115                 120


<210> 17
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VH domain

<400> 17
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1               5                  10                  15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Arg Tyr
            20                  25                  30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35                  40                  45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ala Gln Lys Leu
    50                  55                  60
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65                  70                  75                  80
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
Ala Arg Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly Tyr Trp Gly
            100                 105                 110
Gln Gly Thr Leu Val Thr Val Ser Ser
        115                 120


<210> 18
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VH domain

<400> 18
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 Tyr Thr Phe Ser Arg Tyr
            20                  25                  30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45
Ser Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn Glu Lys Phe
    50                  55                  60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65                  70                  75                  80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
Ala Arg Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly Tyr Trp Gly
            100                 105                 110
Gln Gly Thr Leu Val Thr Val Ser Ser
        115                 120


<210> 19
<211> 121
<212> PRT
<213> Artificial Sequence
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<220>
<223> humanized antibody VH domain

<400> 19
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Ser Arg Tyr
            20   25   30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly Tyr Trp Gly
            100   105   110
Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 20
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VH domain

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

<210> 21
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VH domain

<400> 21
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Thr His
            20   25   30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Gln Lys Leu
    50   55   60
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

```
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly
            100                 105                 110
Thr Leu Val Thr Val Ser Ser
        115
```

<210> 22
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VH domain

<400> 22

```
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 Tyr Thr Phe Ser Thr His
            20                  25                  30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45
Ser Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn Glu Lys Phe
    50                  55                  60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65                  70                  75                  80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly
            100                 105                 110
Thr Leu Val Thr Val Ser Ser
        115
```

<210> 23
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VH domain

<400> 23

```
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 Tyr Thr Phe Ser Thr His
            20                  25                  30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45
Ser Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Asp Ser Val
    50                  55                  60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65                  70                  75                  80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly
            100                 105                 110
Thr Leu Val Thr Val Ser Ser
        115
```

<210> 24
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VL domain

<400> 24

```
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
```

```
 1               5                  10                  15
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
            20                  25                  30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45
Pro Gln Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50                  55                  60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
                85                  90                  95
Ser His Val Pro Trp Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110


<210> 25
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VL domain

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


<210> 26
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VL domain

<400> 26
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1               5                  10                  15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Ser Ser Leu Ser Tyr Met
            20                  25                  30
His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
        35                  40                  45
Ala Thr Ser Asn Leu Ala Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
    50                  55                  60
Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
65                  70                  75                  80
Asp Phe Ala Val Tyr Tyr Cys Gln Gln Trp Ser Ser Asn Pro Tyr Thr
                85                  90                  95
Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100                 105


<210> 27
<211> 106
<212> PRT
<213> Artificial Sequence
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<220>
<223> humanized antibody VL domain

<400> 27
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Leu Ser Tyr Met
            20   25   30
His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
        35   40   45
Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
    50   55   60
Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65   70   75   80
Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Asn Pro Tyr Thr
                85   90   95
Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 28
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VL domain

<400> 28
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1   5   10   15
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
            20   25   30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35   40   45
Pro Gln Leu Leu Ile Tyr Lys Leu Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65   70   75   80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
                85   90   95
Ser His Phe Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 29
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody VL domain

<400> 29
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ser Ser Gln Ser Ile Val His Ser
            20   25   30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Lys Pro Gly Lys Ala
        35   40   45
Pro Lys Leu Leu Ile Tyr Lys Leu Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60
Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
65   70   75   80
Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Phe Gln Gly
                85   90   95
Ser His Phe Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 30
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR1

<400> 30
Gly Tyr Ser Phe Thr Gly Tyr Asn Met Asn
 1   5   10

<210> 31
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 31
Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asn Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 32
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR3

<400> 32
Ser Thr Met Ile Thr Pro Phe Asp Tyr
 1   5

<210> 33
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1a VH CDR1

<400> 33
Gly Tyr Thr Phe Ser Arg Tyr Trp Ile Glu
 1   5   10

<210> 34
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1a VH CDR2

<400> 34
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 35

<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1a VH CDR3

<400> 35
Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly Tyr
 1   5   10

<210> 36
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR1

<400> 36
Gly Tyr Thr Phe Ser Thr His Trp Ile Glu
 1   5   10

<210> 37
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR2

<400> 37
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 38
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR3

<400> 38
Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr
 1   5   10

<210> 39
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1a VH FR1

<400> 39
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Met Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser
            20   25

<210> 40
<211> 7

<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVK1 VL CDR2

<400> 40
Lys Val Ser Asn Arg Phe Ser
 1   5

<210> 41
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVK2 VL CDR3

<400> 41
Phe Gln Gly Ser His Val Pro Trp Thr
 1   5

<210> 42
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL CDR1

<400> 42
Arg Ala Ser Ser Ser Leu Ser Tyr Met His
 1   5   10

<210> 43
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVK2 VL CDR3

<400> 43
Ala Thr Ser Asn Leu Ala Ser
 1   5

<210> 44
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL CDR3

<400> 44
Gln Gln Trp Ser Ser Asn Pro Tyr Thr
 1   5

<210> 45
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> VL CDR1 of a humanized anti-C10orf54 antibody

<400> 45
Arg Ser Ser Gln Ser Ile Val His Ser Asn Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 46
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VL CDR2

<400> 46
Lys Leu Ser Asn Arg Phe Ser
 1   5

<210> 47
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VL CDR3

<400> 47
Phe Gln Gly Ser His Phe Pro Tyr Thr
 1   5

<210> 48
<400> 48
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<210> 49
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH CDR2

<400> 49
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ala Gln Lys Leu Gln
 1   5   10   15
Gly

<210> 50
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1b VH CDR2

<400> 50
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Gln Lys Leu Gln
 1   5   10   15
Gly

<210> 51
<211> 25
<212> PRT

<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH FR1

<400> 51
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser
            20   25

<210> 52
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH FR2

<400> 52
Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
 1   5   10

<210> 53
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1b VH FR3

<400> 53
Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 54
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH FR4

<400> 54
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
 1   5   10

<210> 55
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3b VH FR1

<400> 55
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
            20   25

<210> 56
<211> 14

<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3a VH FR2

<400> 56
Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
 1   5   10

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

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 57
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 58
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1a VH FR1

<400> 58
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Met Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Ala Ser
            20   25

<210> 59
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR1

<400> 59
Gly Tyr Ser Phe Thr Gly Tyr Gln Met Asn
 1   5   10

<210> 60
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR1

<400> 60
Gly Tyr Ser Phe Thr Gly Tyr Ser Met Asn
 1   5   10

<210> 61
<211> 10
<212> PRT

<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR1

<400> 61
Gly Tyr Ser Phe Thr Gly Tyr Asp Met Asn
 1   5   10

<210> 62
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR1

<400> 62
Gly Tyr Ser Phe Thr Gly Tyr Ala Met Asn
 1   5   10

<210> 63
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH FR2

<400> 63
Trp Val Arg Gln Ala Pro Gly Gln Ser Leu Glu Trp Met Gly
 1   5   10

<210> 64
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH FR2

<400> 64
Trp Val Arg Gln Ala Pro Gly Gln Ser Leu Glu Trp Ile Gly
 1   5   10

<210> 65
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 65
Asn Ile Glu Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asn Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 66
<211> 17
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 66
Asn Ile Ser Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asn Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 67
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 67
Asn Ile Ala Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asn Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 68
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 68
Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Gln Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 69
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 69
Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ser Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 70
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 70
Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asp Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 71

<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 71
Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 72
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 72
Asn Ile Glu Pro Tyr Tyr Asp Tyr Thr Ser Tyr Gln Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 73
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 73
Asn Ile Glu Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ser Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 74
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 74
Asn Ile Glu Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asp Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 75
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL FR1

<400> 75
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1   5   10   15

Glu Pro Ala Ser Ile Ser Cys
            20

<210> 76
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL FR2

<400> 76
Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr
 1   5   10   15

<210> 77
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL FR3

<400> 77
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys
            20   25   30

<210> 78
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL FR4

<400> 78
Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 1   5   10

<210> 79
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR1

<400> 79
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys
            20

<210> 80
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR2

<400> 80
Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr

1 5 10 15

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

<220>
<223> humanized antibody 175A-huVK1 VL FR3

<400> 81
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
1 5 10 15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
20 25 30

<210> 82
<211> 15
<212> PRT
<213> Homo sapiens

<220>
<223> Joining region IMGT IGHJ4-01

<400> 82
Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
1 5 10 15

<210> 83
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 83
Asn Ile Glu Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Leu Lys Phe Lys
1 5 10 15
Asp

<210> 84
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 84
Asn Ile Ser Pro Tyr Tyr Asp Tyr Thr Ser Tyr Gln Leu Lys Phe Lys
1 5 10 15
Asp

<210> 85
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 85

Asn Ile Ser Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ser Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 86
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 86
Asn Ile Ser Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asp Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 87
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 87
Asn Ile Ser Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 88
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 88
Asn Ile Ala Pro Tyr Tyr Asp Tyr Thr Ser Tyr Gln Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 89
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 89
Asn Ile Ala Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ser Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 90
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 90
Asn Ile Ala Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asp Leu Lys Phe Lys
 1   5   10   15
Asp

<210> 91
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR1

<400> 91
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys
            20

<210> 92
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR2

<400> 92
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
 1   5   10   15

<210> 93
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR3

<400> 93
Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20   25   30

<210> 94
<211> 12
<212> PRT
<213> Homo sapiens

<220>
<223> Joining region IMGT IGKJ2-01

<400> 94
Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 1   5   10

<210> 95
<211> 17
<212> PRT

<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH CDR2

<400> 95
Asn Ile Ala Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Leu Lys Phe Lys
 1   5   10   15
Asp

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

<220>
<223> humanized antibody 76E1-huVH1a VH FR3

<400> 96
Arg Val Thr Leu Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 97
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH FR3

<400> 97
Arg Val Thr Met Thr Val Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 98
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1a VH FR3

<400> 98
Arg Val Thr Met Thr Thr Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 99
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3b VH CDR2

<400> 99
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 100
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3b VH CDR2

<400> 100
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Asp Ser Phe Lys
 1   5   10   15
Gly

<210> 101
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1a VH CDR2

<400> 101
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Gln Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 102
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1a VH CDR2

<400> 102
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ser Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 103
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1a VH CDR2

<400> 103
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asp Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 104
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1a VH CDR2

<400> 104
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 105
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1a VH FR1

<400> 105
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Ala Ser
            20   25

<210> 106
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1a VH FR2

<400> 106
Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile Gly
 1   5   10

<210> 107
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1 VH FR3

<400> 107
Arg Ala Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 108
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1 VH FR3

<400> 108
Arg Val Thr Phe Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 109
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1 VH FR3

<400> 109
Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

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

<220>
<223> humanized antibody 175A-huVH1 VH FR3

<400> 110
Arg Ala Thr Phe Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 111
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1 VH FR3

<400> 111
Arg Val Thr Phe Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 112
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1 VH FR3

<400> 112
Arg Ala Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 113
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1 VH FR3

<400> 113
Arg Ala Thr Phe Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 114
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH1b VH CDR2

<400> 114
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Gln Lys Phe Gln
 1   5   10   15
Gly

<210> 115
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3a VH FR1

<400> 115
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser
            20   25

<210> 116
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3a VH FR1

<400> 116
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1   5   10   15
Ser Val Arg Leu Ser Cys Ala Ala Ser
            20   25

<210> 117
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3a VH FR1

<400> 117
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1   5   10   15
Ser Leu Arg Ile Ser Cys Ala Ala Ser
            20   25

<210> 118
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3a VH FR1

<400> 118
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

 1   5   10   15
Ser Val Arg Leu Ser Cys Ala Ala Ser
            20   25

<210> 119
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3a VH FR1

<400> 119
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1   5   10   15
Ser Val Arg Ile Ser Cys Ala Ala Ser
            20   25

<210> 120
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3a VH FR1

<400> 120
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1   5   10   15
Ser Leu Arg Ile Ser Cys Ala Ala Ser
            20   25

<210> 121
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3a VH FR1

<400> 121
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1   5   10   15
Ser Val Arg Ile Ser Cys Ala Ala Ser
            20   25

<210> 122
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3a VH FR2

<400> 122
Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Ser
 1   5   10

<210> 123
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3a VH FR2

<400> 123
Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Gly
 1   5   10

<210> 124
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3a VH FR2

<400> 124
Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile Gly
 1   5   10

<210> 125
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 125
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 126
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 126
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 127
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 127
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

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

<220>

<223> humanized antibody 175A-huVH3 VH FR3

<400> 128
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 129
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 129
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 130
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 130
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 131
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 131
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 132
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 132
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 133

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 133
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 134
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 134
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 135
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 135
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 136
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 136
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 137
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 137
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15

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

<210> 138
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 138
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 139
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 139
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 140
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 140
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 141
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 141
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 142
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 175A-huVH3 VH FR3

<400> 142
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 143
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 143
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 144
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 144
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 145
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 145
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 146
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 146
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 147

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 147
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 148
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 148
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 149
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 149
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 150
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 150
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 151
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 151
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15

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

<210> 152
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 152
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 153
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 153
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 154
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 154
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 155
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 155
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 156
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 175A-huVH3 VH FR3

<400> 156
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 157
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 157
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 158
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 158
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 159
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 159
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 160
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 160
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 161

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 161
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 162
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 162
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 163
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 163
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 164
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 164
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 165
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 165
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15

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

<210> 166
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 166
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 167
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 167
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 168
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 168
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 169
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 169
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 170
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<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 175A-huVH3 VH FR3

<400> 170
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 171
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 171
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 172
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 172
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 173
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 173
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 174
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 174
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 175

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 175
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 176
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 176
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 177
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 177
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 178
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 178
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 179
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 179
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 180
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 180
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 181
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 181
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 182
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 182
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 183
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 183
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 184
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 175A-huVH3 VH FR3

<400> 184
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 185
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 185
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 186
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 186
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 187
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 187
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 188
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 188
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 189

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 189
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 190
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 190
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 191
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 191
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 192
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 192
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 193
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 193
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 194
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 194
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 195
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 195
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 196
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 196
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 197
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 197
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 198
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 175A-huVH3 VH FR3

<400> 198
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ala Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 199
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 199
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 200
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 200
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 201
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 201
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 202
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 202
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 203

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 203
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 204
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 204
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 205
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 205
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 206
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 206
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 207
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 207
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15

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

<210> 208
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 208
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 209
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 209
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 210
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 211
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

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

<220>

<223> humanized antibody 175A-huVH3 VH FR3

<400> 212
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 213
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 214
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 214
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 215
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 215
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 216
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 216
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 217

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 217
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 218
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 218
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 219
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 219
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 220
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 220
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 221
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 221
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15

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

<210> 222
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 222
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 223
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 223
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 224
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 224
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 225
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 225
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 226
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 175A-huVH3 VH FR3

<400> 226
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 227
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 227
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 228
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 228
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 229
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 229
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 230
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 230
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 231

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 231
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 232
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 232
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 233
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 233
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ala Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 234
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 234
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ala Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 235
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 235
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 236
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 236
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 237
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 237
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 238
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 238
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 239
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 239
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 240
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 175A-huVH3 VH FR3

<400> 240
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 241
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 241
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 242
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 242
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 243
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 243
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 244
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 244
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 245

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

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 245
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 246
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 246
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 247
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 247
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 248
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 248
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 249
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 249
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ala Leu Tyr Met Gln
 1   5   10   15

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

<210> 250
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 250
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 251
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVH3 VH FR3

<400> 251
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 252
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL FR1

<400> 252
Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1   5   10   15
Glu Pro Ala Ser Ile Ser Cys
            20

<210> 253
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 253
Arg Ser Ser Gln Ser Ile Val His Ser Gln Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 254
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 254
Arg Ser Ser Gln Ser Ile Val His Ser Ser Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 255
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 255
Arg Ser Ser Gln Ser Ile Val His Ser Ala Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 256
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 256
Arg Ser Ser Gln Ser Ile Val His Ser Asn Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 257
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 257
Arg Ser Ser Gln Ser Ile Val His Ser Asn Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 258
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 258
Arg Ser Ser Gln Ser Ile Val His Ser Asn Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 259
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 259
Arg Ser Ser Gln Ser Ile Val His Ser Asn Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 260
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 260
Arg Ser Ser Gln Ser Ile Val His Ser Gln Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 261
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 261
Arg Ser Ser Gln Ser Ile Val His Ser Gln Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 262
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 262
Arg Ser Ser Gln Ser Ile Val His Ser Gln Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 263
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 263
Arg Ser Ser Gln Ser Ile Val His Ser Gln Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 264
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 264
Arg Ser Ser Gln Ser Ile Val His Ser Ser Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 265
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 265
Arg Ser Ser Gln Ser Ile Val His Ser Ser Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 266
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 266
Arg Ser Ser Gln Ser Ile Val His Ser Ser Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 267
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 267
Arg Ser Ser Gln Ser Ile Val His Ser Ser Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 268
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 268
Arg Ser Ser Gln Ser Ile Val His Ser Ala Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 269
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
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<400> 269
Arg Ser Ser Gln Ser Ile Val His Ser Ala Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 270
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 270
Arg Ser Ser Gln Ser Ile Val His Ser Ala Gly Ala Thr Tyr Leu Glu

1 5 10 15

<210> 271
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR1

<400> 271
Arg Ser Ser Gln Ser Ile Val His Ser Ala Gly Asp Thr Tyr Leu Glu
1 5 10 15

<210> 272
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR2

<400> 272
Lys Leu Ser Gln Arg Phe Ser
1 5

<210> 273
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR2

<400> 273
Lys Leu Ser Ser Arg Phe Ser
1 5

<210> 274
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR2

<400> 274
Lys Leu Ser Ala Arg Phe Ser
1 5

<210> 275
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL CDR2

<400> 275
Lys Leu Ser Asp Arg Phe Ser
1 5

<210> 276
<211> 32

<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK2 VL FR3

<400> 276
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
            20   25   30

<210> 277
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR1

<400> 277
Asp Val Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys
            20

<210> 278
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR1

<400> 278
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys
            20

<210> 279
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR1

<400> 279
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Ala Thr Ile Thr Cys
            20

<210> 280
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR1

<400> 280
Asp Val Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys

20

<210> 281
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR1

<400> 281
Asp Val Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Ala Thr Ile Thr Cys
20

<210> 282
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR1

<400> 282
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Val Gly
1 5 10 15
Asp Arg Ala Thr Ile Thr Cys
20

<210> 283
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR1

<400> 283
Asp Val Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Val Gly
1 5 10 15
Asp Arg Ala Thr Ile Thr Cys
20

<210> 284
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR2

<400> 284
Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Lys Leu Leu Ile Tyr
1 5 10 15

<210> 285
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR3

<400> 285

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Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1               5                  10                  15
Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
            20                  25                  30


<210> 286
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR3

<400> 286
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1               5                  10                  15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Leu Ala Thr Tyr Tyr Cys
            20                  25                  30


<210> 287
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR3

<400> 287
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1               5                  10                  15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Gly Thr Tyr Tyr Cys
            20                  25                  30


<210> 288
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR3

<400> 288
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1               5                  10                  15
Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Leu Ala Thr Tyr Tyr Cys
            20                  25                  30


<210> 289
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR3

<400> 289
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1               5                  10                  15
Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Phe Gly Thr Tyr Tyr Cys
            20                  25                  30


<210> 290
<211> 32
<212> PRT
<213> Artificial Sequence
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<220>
<223> humanized antibody 175A-huVK1 VL FR3

<400> 290
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Leu Gly Thr Tyr Tyr Cys
            20   25   30

<210> 291
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A-huVK1 VL FR3

<400> 291
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Leu Gly Thr Tyr Tyr Cys
            20   25   30

<210> 292
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 292
Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 293
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 293
Arg Ala Thr Leu Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 294
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 294
Arg Ala Thr Met Thr Val Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 295
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 295
Arg Ala Thr Met Thr Thr Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 296
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 296
Arg Ala Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 297
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 297
Arg Val Thr Leu Thr Val Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 298
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 298
Arg Val Thr Leu Thr Thr Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 299
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 299

Arg Val Thr Leu Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 300
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 300
Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 301
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 301
Arg Val Thr Met Thr Val Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 302
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 302
Arg Val Thr Met Thr Thr Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 303
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 303
Arg Ala Thr Leu Thr Val Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 304
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 304
Arg Ala Thr Leu Thr Thr Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 305
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 305
Arg Ala Thr Leu Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 306
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 306
Arg Ala Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 307
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 307
Arg Ala Thr Met Thr Val Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 308
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 308
Arg Ala Thr Met Thr Thr Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 309
<211> 32
<212> PRT
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<220>
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<400> 309
Arg Val Thr Leu Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 310
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 310
Arg Val Thr Leu Thr Val Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 311
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 311
Arg Val Thr Leu Thr Thr Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 312
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 312
Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 313
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 313

Arg Ala Thr Leu Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 314
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 314
Arg Ala Thr Leu Thr Val Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 315
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 315
Arg Ala Thr Leu Thr Thr Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 316
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 316
Arg Ala Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 317
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 317
Arg Val Thr Leu Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 318
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1 VH FR3

<400> 318
Arg Ala Thr Leu Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 319
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1b VH CDR3

<400> 319
Ser Thr Leu Ile Thr Pro Phe Asp Tyr
 1   5

<210> 320
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1b VH FR4

<400> 320
Trp Gly Gln Gly Thr Leu Leu Thr Val Ser Ser
 1   5   10

<210> 321
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1b VH CDR2

<400> 321
Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Gln Lys Leu Gln
 1   5   10   15
Gly

<210> 322
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH1b VH CDR2

<400> 322
Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Gln Lys Phe Gln
 1   5   10   15
Gly

<210> 323
<211> 14
<212> PRT

<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR2

<400> 323
Trp Val Arg Gln Ala Pro Gly Lys Ser Leu Glu Trp Val Ser
 1   5   10

<210> 324
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR2

<400> 324
Trp Val Arg Gln Ala Pro Gly Lys Ser Leu Glu Trp Ile Ser
 1   5   10

<210> 325
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR2

<400> 325
Trp Val Arg Gln Ala Pro Gly Lys Ser Leu Glu Trp Val Gly
 1   5   10

<210> 326
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR2

<400> 326
Trp Val Arg Gln Ala Pro Gly Lys Ser Leu Glu Trp Ile Gly
 1   5   10

<210> 327
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 327
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 328
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 328
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 329
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 329
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 330
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 330
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 331
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 331
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 332
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 332
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 333

<211> 32
<212> PRT
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<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 333
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 334
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 334
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 335
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 335
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 336
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 336
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 337
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 337
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15

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

<210> 338
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 338
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 339
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 339
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 340
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 340
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 341
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 341
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 342
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 342
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 343
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 343
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 344
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 344
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 345
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 345
Arg Phe Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 346
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 346
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 347

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 347
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 348
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 348
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 349
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 349
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 350
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 350
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 351
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 351
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15

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


<210> 352
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 352
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20                  25                  30


<210> 353
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 353
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20                  25                  30


<210> 354
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 354
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20                  25                  30


<210> 355
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 355
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20                  25                  30


<210> 356
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<223> humanized antibody 76E1-huVH3 VH FR3

<400> 356
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 357
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 357
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 358
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 358
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 359
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 359
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 360
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 360
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 361

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 361
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 362
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 362
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 363
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 363
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 364
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 364
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 365
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 365
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15

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

<210> 366
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 366
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 367
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 367
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 368
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 368
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 369
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 369
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 370
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 370
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 371
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 371
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 372
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 372
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 373
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 373
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 374
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 374
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 375

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 375
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 376
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 376
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 377
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 377
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 378
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 378
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 379
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 379
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15

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

<210> 380
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 380
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 381
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 381
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 382
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 382
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 383
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 383
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 384
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 384
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 385
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 385
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 386
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 386
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 387
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 387
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 388
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 388
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 389

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 389
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 390
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 390
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 391
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 391
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 392
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 392
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 393
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 393
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15

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

<210> 394
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 394
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 395
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 395
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 396
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 396
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 397
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 397
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 398
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 398
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 399
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 399
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 400
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

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

<210> 401
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 401
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 402
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 402
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 403

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 403
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 404
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 404
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 405
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 405
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 406
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 406
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 407
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 407
Arg Phe Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15

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

<210> 408
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 408
Arg Phe Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 409
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 409
Arg Phe Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 410
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 410
Arg Phe Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 411
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 411
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 412
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 412
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 413
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 413
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 414
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 414
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 415
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 415
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 416
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 416
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 417

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 417
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 418
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 418
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 419
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 419
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 420
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 420
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 421
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 421
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15

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

<210> 422
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 422
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 423
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 423
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 424
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 424
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 425
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 425
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 426
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 426
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 427
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 427
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 428
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 428
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 429
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 429
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 430
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 430
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 431

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 431
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 432
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 432
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 433
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 433
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 434
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 434
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 435
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 435
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15

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

<210> 436
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 436
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 437
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 437
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 438
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 438
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 439
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 439
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 440
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 440
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 441
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 441
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 442
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 442
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 443
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 443
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 444
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 444
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 445

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 445
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 446
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 446
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 447
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 447
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 448
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 448
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 449
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 449
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 450
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 450
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 451
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 451
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 452
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 452
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 453
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 453
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 454
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 454
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 455
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 455
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 456
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 456
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 457
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 457
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 458
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 458
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 459

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 459
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 460
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 460
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 461
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 461
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 462
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 462
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 463
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 463
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15

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

<210> 464
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 464
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 465
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 465
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 466
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 466
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 467
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 467
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 468
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 468
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 469
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 469
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 470
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 470
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 471
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 471
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 472
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 472
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 473

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 473
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 474
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 474
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 475
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 475
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 476
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 476
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 477
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 477
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15

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

<210> 478
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 478
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 479
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 479
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 480
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 480
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 481
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 481
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 482
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<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 482
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 483
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<212> PRT
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<220>
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<400> 483
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
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Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 484
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<212> PRT
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<220>
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<400> 484
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 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 485
<211> 32
<212> PRT
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<220>
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<400> 485
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 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 486
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<220>
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<400> 486
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Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
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<220>
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<400> 487
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 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
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<220>
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<400> 488
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
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            20   25   30

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<220>
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<400> 489
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 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
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<210> 490
<211> 32
<212> PRT
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<220>
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<400> 490
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Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 491
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 491
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
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Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

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<220>
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<400> 492
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            20   25   30

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<220>
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            20   25   30

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<220>
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<400> 494
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 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
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<400> 495
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 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

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<400> 496
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<400> 497
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<400> 498
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 1   5   10   15
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            20   25   30

<210> 499
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<220>
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<400> 499
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<210> 500
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<220>
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<400> 500
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 1   5   10   15
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            20   25   30

<210> 501

<211> 32
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<220>
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<400> 501
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 1   5   10   15
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            20   25   30

<210> 502
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<220>
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<400> 502
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 1   5   10   15
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<210> 503
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<220>
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<400> 503
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 1   5   10   15
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<210> 504
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<220>
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<400> 504
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 1   5   10   15
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 1   5   10   15

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

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<400> 506
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            20   25   30

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<400> 507
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            20   25   30

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<400> 508
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 1   5   10   15
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            20   25   30

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            20   25   30

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<400> 512
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            20   25   30

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            20   25   30

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            20   25   30

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

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<400> 520
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            20   25   30

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            20   25   30

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            20   25   30

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<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 547
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15

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

<210> 548
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 548
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 549
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 549
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 550
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 550
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 551
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 551
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 552
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 552
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 553
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 553
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 554
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 554
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 555
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 555
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 556
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 556
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 557

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 557
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 558
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 558
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 559
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 559
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 560
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 560
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 561
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 561
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15

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

<210> 562
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 562
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 563
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 563
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 564
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 564
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 565
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 565
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 566
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 566
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 567
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 567
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 568
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 568
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 569
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 569
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 570
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 570
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 571

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 571
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 572
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 572
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 573
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 573
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 574
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 574
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 575
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 575
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 576
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 576
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 577
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 577
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 578
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 578
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 579
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 579
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 580
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 580
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 581
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 581
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 582
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 582
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 583
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 583
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 584
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 584
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 585

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 585
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 586
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 586
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 587
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
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<400> 587
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 588
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 588
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 589
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 589
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15

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

<210> 590
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 590
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 591
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 591
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 592
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 592
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 593
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 593
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 594
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 594
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 595
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 595
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 596
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 596
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 597
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 597
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 598
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 598
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 599

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 599
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 600
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 600
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 601
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 601
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 602
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 602
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 603
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 603
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 604
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 604
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 605
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 605
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 606
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 606
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 607
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 607
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 608
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 608
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 609
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 609
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 610
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 610
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 611
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 611
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 612
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 612
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 613

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 613
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 614
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 614
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 615
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 615
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 616
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 616
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 617
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 617
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 618
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 618
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 619
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 619
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 620
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 620
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 621
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 621
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 622
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 622
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 623
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 623
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 624
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 624
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 625
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 625
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 626
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 626
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 627

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 627
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 628
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 628
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 629
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 629
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 630
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 630
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 631
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 631
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15

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

<210> 632
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 632
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 633
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 633
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 634
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 634
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 635
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 635
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 636
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 636
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 637
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 637
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 638
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 638
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 639
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 639
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 640
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 640
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 641

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 641
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 642
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 642
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 643
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 643
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 644
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 644
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 645
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 645
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 646
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 646
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 647
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 647
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 648
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 648
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 649
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 649
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 650
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 650
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 651
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 651
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 652
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 652
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 653
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 653
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 654
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 654
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 655

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 655
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 656
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 656
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 657
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 657
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 658
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 658
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 659
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 659
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 660
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 660
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 661
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 661
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 662
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 662
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 663
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 663
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 664
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 664
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 665
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 665
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 666
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 666
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 667
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 667
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 668
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 668
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 669

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 669
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 670
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 670
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 671
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 671
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 672
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 672
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 673
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 673
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Ala Tyr Leu Gln
 1   5   10   15

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

<210> 674
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 674
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 675
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 675
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 676
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 676
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 677
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 677
Arg Phe Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 678
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 678
Arg Phe Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 679
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 679
Arg Phe Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 680
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 680
Arg Phe Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 681
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 681
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 682
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 682
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 683

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 683
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 684
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 684
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 685
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 685
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 686
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 686
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 687
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 687
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15

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

<210> 688
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 688
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 689
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 689
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 690
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 690
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 691
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 691
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 692
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 692
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 693
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 693
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 694
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 694
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 695
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 695
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 696
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 696
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 697

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 697
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 698
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 698
Arg Phe Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 699
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 699
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 700
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 700
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 701
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 701
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15

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

<210> 702
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 702
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 703
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 703
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 704
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 704
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 705
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 705
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 706
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 706
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 707
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 707
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 708
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 708
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 709
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 709
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 710
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 710
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 711

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 711
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 712
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 712
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 713
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 713
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 714
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 714
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 715
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 715
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15

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

<210> 716
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 716
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 717
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 717
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 718
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 718
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 719
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 719
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 720
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 720
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 721
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 721
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 722
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 722
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 723
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 723
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 724
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 724
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 725

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 725
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 726
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 726
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 727
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 727
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 728
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 728
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 729
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 729
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 730
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 730
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 731
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 731
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 732
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 732
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 733
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 733
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 734
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 734
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 735
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 735
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 736
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 736
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 737
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 737
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 738
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 738
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 739

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 739
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 740
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 740
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 741
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 741
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 742
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 742
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 743
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 743
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 744
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 744
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 745
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 745
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 746
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 746
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 747
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 747
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 748
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 748
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 749
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 749
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 750
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 750
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 751
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 751
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 752
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 752
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 753

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 753
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 754
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 754
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 755
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 755
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 756
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 756
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 757
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 757
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15

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

<210> 758
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 758
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 759
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 759
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 760
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 760
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 761
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 761
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 762
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 762
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 763
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 763
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 764
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 764
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 765
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 765
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 766
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 766
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 767

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 767
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 768
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 768
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 769
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 769
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 770
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 770
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 771
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 771
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15

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

<210> 772
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 772
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 773
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 773
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 774
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 774
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 775
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 775
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 776
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 776
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 777
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 777
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 778
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 778
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 779
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 779
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 780
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 780
Arg Phe Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 781

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 781
Arg Phe Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 782
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 782
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 783
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 783
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 784
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 784
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 785
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 785
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 786
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 786
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 787
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 787
Arg Phe Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 788
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 788
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 789
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 789
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 790
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 790
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 791
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 791
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 792
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 792
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 793
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 793
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 794
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 794
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 795

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 795
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 796
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 796
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 797
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 797
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 798
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 798
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 799
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 799
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15

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

<210> 800
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 800
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 801
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 801
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 802
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 802
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 803
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 803
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 804
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 804
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 805
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 805
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 806
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 806
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 807
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 807
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 808
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 808
Arg Ala Thr Leu Ser Arg Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 809

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 809
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 810
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 810
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 811
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 811
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 812
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 812
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 813
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 813
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15

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

<210> 814
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 814
Arg Ala Thr Ile Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 815
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 815
Arg Ala Thr Ile Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 816
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 816
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 817
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 817
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 818
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 818
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 819
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 819
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 820
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 820
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 821
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 821
Arg Phe Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 822
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 822
Arg Phe Thr Leu Ser Arg Asp Lys Ala Ser Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 823

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

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 823
Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 824
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 824
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 825
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 825
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 826
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 826
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 827
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 827
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Leu Tyr Met Gln
 1   5   10   15

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

<210> 828
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 828
Arg Ala Thr Leu Ser Val Asp Lys Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 829
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 829
Arg Ala Thr Leu Ser Val Asp Asn Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 830
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 830
Arg Ala Thr Leu Ser Arg Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 831
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 831
Arg Ala Thr Ile Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 832
<211> 32
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH FR3

<400> 832
Arg Phe Thr Leu Ser Val Asp Lys Ala Lys Ser Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 833
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH FR3

<400> 833
Arg Ala Thr Leu Ser Val Asp Lys Ala Ser Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr
            20   25   30

<210> 834
<400> 834
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<210> 835
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH CDR2

<400> 835
Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 836
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH CDR2

<400> 836
Asn Ile Glu Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 837
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH CDR2

<400> 837
Asn Ile Ser Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Asp Ser Val Lys
 1   5   10   15

Gly

<210> 838
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH CDR2

<400> 838
Asn Ile Ala Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 839
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH CDR2

<400> 839
Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 840
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH CDR2

<400> 840
Asn Ile Glu Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 841
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVH3 VH CDR2

<400> 841
Asn Ile Ser Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 842
<211> 17
<212> PRT
<213> Artificial Sequence

<220>

<223> humanized antibody 76E1-huVH3 VH CDR2

<400> 842
Asn Ile Ala Pro Tyr Tyr Asp Tyr Thr Ser Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 843
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVK2 VL CDR2

<400> 843
Lys Val Ser Gln Arg Phe Ser
 1   5

<210> 844
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVK2 VL CDR2

<400> 844
Lys Val Ser Ser Arg Phe Ser
 1   5

<210> 845
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVK2 VL CDR2

<400> 845
Lys Val Ser Asp Arg Phe Ser
 1   5

<210> 846
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1-huVK2 VL CDR2

<400> 846
Lys Val Ser Ala Arg Phe Ser
 1   5

<210> 847
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 847

Glu Ile Leu Pro Gly Ser Gly Ser Thr Gln Tyr Asn Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 848
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 848
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 849
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 849
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asp Tyr Asn Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 850
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 850
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ala Tyr Asn Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 851
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 851
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Gln Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 852
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 852
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ser Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 853
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 853
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asp Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 854
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 854
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ala Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 855
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 855
Glu Ile Leu Pro Gly Ser Gly Ser Thr Gln Tyr Gln Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 856
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 856
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ser Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 857
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 857
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asp Tyr Asp Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 858
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3a VH CDR2

<400> 858
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ala Tyr Ala Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 859
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 859
Arg Val Thr Met Thr Thr Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 860
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 860
Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 861
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 861

Arg Ala Thr Met Thr Thr Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 862
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 862
Arg Ala Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 863
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 863
Arg Val Thr Phe Thr Thr Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 864
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 864
Arg Val Thr Phe Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 865
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 865
Arg Val Thr Met Thr Ala Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 866
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 866
Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 867
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 867
Arg Val Thr Met Thr Thr Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 868
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 868
Arg Ala Thr Phe Thr Thr Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 869
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 869
Arg Ala Thr Phe Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 870
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 870
Arg Ala Thr Met Thr Ala Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 871
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 871
Arg Ala Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 872
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 872
Arg Ala Thr Met Thr Thr Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 873
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 873
Arg Val Thr Phe Thr Ala Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20   25   30

<210> 874
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 874
Arg Val Thr Phe Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 875
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 875

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Arg Val Thr Phe Thr Thr Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1               5                  10                  15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 876
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 876
Arg Val Thr Met Thr Ala Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1               5                  10                  15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 877
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 877
Arg Ala Thr Phe Thr Ala Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1               5                  10                  15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg
            20                  25                  30


<210> 878
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 878
Arg Ala Thr Phe Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr Met Glu
 1               5                  10                  15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 879
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 879
Arg Ala Thr Phe Thr Thr Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1               5                  10                  15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 880
<211> 32
<212> PRT
<213> Artificial Sequence
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<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 880
Arg Ala Thr Met Thr Ala Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 881
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 881
Arg Val Thr Phe Thr Ala Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 882
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1 VH FR3

<400> 882
Arg Ala Thr Phe Thr Ala Asp Thr Asn Thr Ser Thr Ala Tyr Met Glu
 1   5   10   15
Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 883
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH CDR3

<400> 883
Glu Glu Val Tyr Glu Gly Tyr Pro Trp Phe Gly Tyr
 1   5   10

<210> 884
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH CDR3

<400> 884
Glu Glu Val Tyr Ser Gly Tyr Pro Trp Phe Gly Tyr
 1   5   10

<210> 885
<211> 12
<212> PRT

<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH CDR3

<400> 885
Glu Glu Val Tyr Ala Gly Tyr Pro Trp Phe Gly Tyr
 1   5   10

<210> 886
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH CDR2

<400> 886
Glu Ile Leu Pro Gly Ser Gly Ser Thr Gln Tyr Ala Gln Lys Leu Gln
 1   5   10   15
Gly

<210> 887
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH CDR2

<400> 887
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Gln Lys Leu Gln
 1   5   10   15
Gly

<210> 888
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH CDR2

<400> 888
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asp Tyr Ala Gln Lys Leu Gln
 1   5   10   15
Gly

<210> 889
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH CDR2

<400> 889
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ala Tyr Ala Gln Lys Leu Gln
 1   5   10   15
Gly

<210> 890
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH CDR2

<400> 890
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ala Gln Lys Phe Gln
 1   5   10   15
Gly

<210> 891
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH CDR2

<400> 891
Glu Ile Leu Pro Gly Ser Gly Ser Thr Gln Tyr Ala Gln Lys Phe Gln
 1   5   10   15
Gly

<210> 892
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH CDR2

<400> 892
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Gln Lys Phe Gln
 1   5   10   15
Gly

<210> 893
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH CDR2

<400> 893
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asp Tyr Ala Gln Lys Phe Gln
 1   5   10   15
Gly

<210> 894
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH1b VH CDR2

<400> 894
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ala Tyr Ala Gln Lys Phe Gln

 1   5   10   15
Gly

<210> 895
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR1

<400> 895
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Met Gln Pro Gly Gly
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser
            20   25

<210> 896
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR1

<400> 896
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Met Gln Pro Gly Gly
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser
            20   25

<210> 897
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR1

<400> 897
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Met Gln Pro Gly Gly
 1   5   10   15
Ser Val Arg Leu Ser Cys Ala Ala Ser
            20   25

<210> 898
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR1

<400> 898
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Met Gln Pro Gly Gly
 1   5   10   15
Ser Leu Arg Ile Ser Cys Ala Ala Ser
            20   25

<210> 899
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR1

<400> 899
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Met Gln Pro Gly Gly
 1   5   10   15
Ser Val Arg Leu Ser Cys Ala Ala Ser
            20   25

<210> 900
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR1

<400> 900
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Met Gln Pro Gly Gly
 1   5   10   15
Ser Leu Arg Ile Ser Cys Ala Ala Ser
            20   25

<210> 901
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR1

<400> 901
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Met Gln Pro Gly Gly
 1   5   10   15
Ser Val Arg Ile Ser Cys Ala Ala Ser
            20   25

<210> 902
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR1

<400> 902
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Met Gln Pro Gly Gly
 1   5   10   15
Ser Val Arg Ile Ser Cys Ala Ala Ser
            20   25

<210> 903
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 903
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 904
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 904
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 905
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 905
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 906
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 906
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 907
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 907
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 908
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 908
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln

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 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
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<210> 909
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 909
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Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
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<210> 910
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 910
```
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
```

<210> 911
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 911
```
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
```

<210> 912
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 912
```
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
```

<210> 913
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 913
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 914
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 914
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 915
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 915
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 916
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 916
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 917
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 917
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 918
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 918
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 919
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 919
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 920
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 920
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 921
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 921
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 922
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 922
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln

```
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
```

<210> 923
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 923
```
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
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<210> 924
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 924
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Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
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<210> 925
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 925
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Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
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<210> 926
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 926
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Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
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<210> 927
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 927
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 928
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 928
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 929
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 929
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 930
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 930
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 931
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 931
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 932
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 932
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 933
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 933
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 934
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 934
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 935
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 935
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 936
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 936
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln

```
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 937
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 937
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 938
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 938
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 939
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 939
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 940
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 940
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 941
<211> 32
<212> PRT
<213> Artificial Sequence
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<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 941
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 942
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 942
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 943
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 943
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 944
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 944
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 945
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 945
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 946
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 946
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 947
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 947
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 948
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 948
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 949
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 949
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 950
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 950
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln

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 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 951
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 951
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 952
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 952
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 953
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 953
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 954
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 954
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 955
<211> 32
<212> PRT
<213> Artificial Sequence
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<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 955
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 956
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 956
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 957
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 957
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 958
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 958
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 959
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 959
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 960
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 960
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 961
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 961
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 962
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 962
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 963
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 963
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 964
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 964
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln

```
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 965
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 965
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 966
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 966
Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 967
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 967
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 968
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 968
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 969
<211> 32
<212> PRT
<213> Artificial Sequence
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<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 969
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 970
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 970
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 971
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 971
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 972
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 972
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 973
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 973
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 974
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 974
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 975
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 975
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 976
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 976
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 977
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 977
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ala Leu Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 978
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 978
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln

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 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 979
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 979
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 980
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 980
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 981
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 981
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 982
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 982
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 983
<211> 32
<212> PRT
<213> Artificial Sequence
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<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 983
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 984
<211> 32
<212> PRT
<213> Artificial Sequence 141A-huVH3 VH FR3

<220>
<223> humanized antibody

<400> 984
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 985
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 985
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 986
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 986
Arg Ala Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 987
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 987
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 988
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 988
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 989
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 989
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 990
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 990
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 991
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 991
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 992
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 992
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln

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 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
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<210> 993
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 993
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Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
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<210> 994
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 994
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Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
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<210> 995
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 995
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Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
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<210> 996
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 996
```
Arg Phe Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30
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<210> 997
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 997
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 998
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 998
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 999
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 999
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1000
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1000
Arg Phe Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1001
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1001
Arg Phe Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1002
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1002
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1003
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1003
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1004
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1004
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1005
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1005
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1006
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1006
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Leu Gln

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 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 1007
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1007
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Leu Tyr Met Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 1008
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1008
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 1009
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1009
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 1010
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1010
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 1011
<211> 32
<212> PRT
<213> Artificial Sequence
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<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1011
Arg Ala Thr Phe Ser Arg Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1012
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1012
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ala Leu Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1013
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1013
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ala Leu Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1014
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1014
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1015
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1015
Arg Ala Thr Ile Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1016
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1016
Arg Ala Thr Ile Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1017
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1017
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1018
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1018
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1019
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1019
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1020
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1020
Arg Phe Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln

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 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 1021
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1021
Arg Phe Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 1022
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1022
Arg Phe Thr Ile Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 1023
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1023
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1               5                  10                  15
Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 1024
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1024
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Leu Gln
 1               5                  10                  15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20                  25                  30


<210> 1025
<211> 32
<212> PRT
<213> Artificial Sequence
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<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1025
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1026
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1026
Arg Ala Thr Phe Ser Ala Asp Asn Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1027
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1027
Arg Ala Thr Phe Ser Arg Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1028
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1028
Arg Ala Thr Ile Ser Ala Asp Thr Ala Lys Asn Ala Leu Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1029
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1029
Arg Phe Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1030
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3 VH FR3

<400> 1030
Arg Ala Thr Phe Ser Ala Asp Thr Ala Lys Asn Ser Ala Tyr Met Gln
 1   5   10   15
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly
            20   25   30

<210> 1031
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR1

<400> 1031
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Ala Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys
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<210> 1032
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR1

<400> 1032
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Val Thr Leu Ser Cys
            20

<210> 1033
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR1

<400> 1033
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Met Ser Cys
            20

<210> 1034
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR1

<400> 1034
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Ala Ser Pro Gly

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 1               5                  10                  15
Glu Arg Val Thr Leu Ser Cys
            20


<210> 1035
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR1

<400> 1035
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Ala Ser Pro Gly
 1               5                  10                  15
Glu Arg Ala Thr Met Ser Cys
            20


<210> 1036
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR1

<400> 1036
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1               5                  10                  15
Glu Arg Val Thr Met Ser Cys
            20


<210> 1037
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR1

<400> 1037
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Ala Ser Pro Gly
 1               5                  10                  15
Glu Arg Val Thr Met Ser Cys
            20


<210> 1038
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR2

<400> 1038
Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Arg Leu Leu Ile Tyr
 1               5                  10                  15


<210> 1039
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR2
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<400> 1039
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Leu Ile Tyr
 1   5   10   15

<210> 1040
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR2

<400> 1040
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Trp Ile Tyr
 1   5   10   15

<210> 1041
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR2

<400> 1041
Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Arg Pro Leu Ile Tyr
 1   5   10   15

<210> 1042
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR2

<400> 1042
Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Arg Leu Trp Ile Tyr
 1   5   10   15

<210> 1043
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR2

<400> 1043
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Trp Ile Tyr
 1   5   10   15

<210> 1044
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR2

<400> 1044
Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Arg Pro Trp Ile Tyr
 1   5   10   15

<210> 1045
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL CDR2

<400> 1045
Ala Thr Ser Gln Leu Ala Ser
 1   5

<210> 1046
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL CDR2

<400> 1046
Ala Thr Ser Ser Leu Ala Ser
 1   5

<210> 1047
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL CDR2

<400> 1047
Ala Thr Ser Asp Leu Ala Ser
 1   5

<210> 1048
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL CDR2

<400> 1048
Ala Thr Ser Ala Leu Ala Ser
 1   5

<210> 1049
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR3

<400> 1049
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20   25   30

<210> 1050
<211> 32

<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR3

<400> 1050
Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1   5   10   15
Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20   25   30

<210> 1051
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR3

<400> 1051
Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Arg Val Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20   25   30

<210> 1052
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR3

<400> 1052
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1   5   10   15
Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20   25   30

<210> 1053
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR3

<400> 1053
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Arg Val Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20   25   30

<210> 1054
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR3

<400> 1054
Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1   5   10   15
Leu Thr Ile Ser Arg Val Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys

20 25 30

<210> 1055
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL FR3

<400> 1055
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
1 5 10 15
Leu Thr Ile Ser Arg Val Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
20 25 30

<210> 1056
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL CDR3

<400> 1056
Gln Gln Trp Ser Ser Gln Pro Tyr Thr
1 5

<210> 1057
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK3 VL CDR3

<400> 1057
Gln Gln Trp Ser Ser Ser Pro Tyr Thr
1 5

<210> 1058
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody

<400> 1058
Gln Gln Trp Ser Ser Ala Pro Tyr Thr
1 5

<210> 1059
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK1 VL FR1

<400> 1059
Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys
20

<210> 1060
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK1 VL FR1

<400> 1060
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Met Thr Cys
            20

<210> 1061
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK1 VL FR1

<400> 1061
Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Met Thr Cys
            20

<210> 1062
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK1 VL FR2

<400> 1062
Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Leu Ile Tyr
 1   5   10   15

<210> 1063
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK1 VL FR2

<400> 1063
Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Trp Ile Tyr
 1   5   10   15

<210> 1064
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK1 VL FR2

<400> 1064
Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Lys Pro Leu Ile Tyr
 1   5   10   15

<210> 1065
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK1 VL FR2

<400> 1065
Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Lys Leu Trp Ile Tyr
 1   5   10   15

<210> 1066
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK1 VL FR2

<400> 1066
Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Pro Trp Ile Tyr
 1   5   10   15

<210> 1067
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK1 VL FR2

<400> 1067
Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Lys Pro Trp Ile Tyr
 1   5   10   15

<210> 1068
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK1 VL FR3

<400> 1068
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1069
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVK1 VL FR3

<400> 1069
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1   5   10   15
Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1070
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3b VH CDR2

<400> 1070
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 1071
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3b VH CDR2

<400> 1071
Glu Ile Leu Pro Gly Ser Gly Ser Thr Gln Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 1072
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3b VH CDR2

<400> 1072
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asp Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 1073
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3b VH CDR2

<400> 1073
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ala Tyr Ala Asp Ser Val Lys
 1   5   10   15
Gly

<210> 1074
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3b VH CDR2

<400> 1074
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Ala Asp Ser Phe Lys

 1   5   10   15
Gly

<210> 1075
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3b VH CDR2

<400> 1075
Glu Ile Leu Pro Gly Ser Gly Ser Thr Gln Tyr Ala Asp Ser Phe Lys
 1   5   10   15
Gly

<210> 1076
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3b VH CDR2

<400> 1076
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Asp Ser Phe Lys
 1   5   10   15
Gly

<210> 1077
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3b VH CDR2

<400> 1077
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asp Tyr Ala Asp Ser Phe Lys
 1   5   10   15
Gly

<210> 1078
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A-huVH3b VH CDR2

<400> 1078
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ala Tyr Ala Asp Ser Phe Lys
 1   5   10   15
Gly

<210> 1079
<211> 311
<212> PRT
<213> Homo sapiens

<220>
<223> C10orf54 polypeptide

<400> 1079
Met Gly Val Pro Thr Ala Leu Glu Ala Gly Ser Trp Arg Trp Gly Ser
 1   5   10   15
Leu Leu Phe Ala Leu Phe Leu Ala Ala Ser Leu Gly Pro Val Ala Ala
            20   25   30
Phe Lys Val Ala Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
        35   40   45
Asn Val Thr Leu Thr Cys Arg Leu Leu Gly Pro Val Asp Lys Gly His
    50   55   60
Asp Val Thr Phe Tyr Lys Thr Trp Tyr Arg Ser Ser Arg Gly Glu Val
65   70   75   80
Gln Thr Cys Ser Glu Arg Arg Pro Ile Arg Asn Leu Thr Phe Gln Asp
                85   90   95
Leu His Leu His His Gly Gly His Gln Ala Ala Asn Thr Ser His Asp
            100   105   110
Leu Ala Gln Arg His Gly Leu Glu Ser Ala Ser Asp His His Gly Asn
        115   120   125
Phe Ser Ile Thr Met Arg Asn Leu Thr Leu Leu Asp Ser Gly Leu Tyr
    130   135   140
Cys Cys Leu Val Val Glu Ile Arg His His His Ser Glu His Arg Val
145   150   155   160
His Gly Ala Met Glu Leu Gln Val Gln Thr Gly Lys Asp Ala Pro Ser
                165   170   175
Asn Cys Val Val Tyr Pro Ser Ser Ser Gln Asp Ser Glu Asn Ile Thr
            180   185   190
Ala Ala Ala Leu Ala Thr Gly Ala Cys Ile Val Gly Ile Leu Cys Leu
        195   200   205
Pro Leu Ile Leu Leu Leu Val Tyr Lys Gln Arg Gln Ala Ala Ser Asn
    210   215   220
Arg Arg Ala Gln Glu Leu Val Arg Met Asp Ser Asn Ile Gln Gly Ile
225   230   235   240
Glu Asn Pro Gly Phe Glu Ala Ser Pro Pro Ala Gln Gly Ile Pro Glu
                245   250   255
Ala Lys Val Arg His Pro Leu Ser Tyr Val Ala Gln Arg Gln Pro Ser
            260   265   270
Glu Ser Gly Arg His Leu Leu Ser Glu Pro Ser Thr Pro Leu Ser Pro
        275   280   285
Pro Gly Pro Gly Asp Val Phe Phe Pro Ser Leu Asp Pro Val Pro Asp
    290   295   300
Ser Pro Asn Phe Glu Val Ile
305   310

<210> 1080
<211> 936
<212> DNA
<213> Homo sapiens

<220>
<223> cDNA nucleic acid sequence encoding the C10orf54 polypeptide

<400> 1080
atgggcgtcc ccacggccct ggaggccggc agctggcgct ggggatccct gctcttcgct 60
ctcttcctgg ctgcgtccct aggtccggtg gcagccttca aggtcgccac gccgtattcc 120
ctgtatgtct gtcccgaggg gcagaacgtc accctcacct gcaggctctt gggccctgtg 180
gacaaagggc acgatgtgac cttctacaag acgtggtacc gcagctcgag gggcgaggtg 240
cagacctgct cagagcgccg gcccatccgc aacctcacgt tccaggacct tcacctgcac 300
catggaggcc accaggctgc caacaccagc cacgacctgg ctcagcgcca cgggctggag 360
tcggcctccg accaccatgg caacttctcc atcaccatgc gcaacctgac cctgctggat 420
agcggcctct actgctgcct ggtggtggag atcaggcacc accactcgga gcacagggtc 480
catggtgcca tggagctgca ggtgcagaca ggcaaagatg caccatccaa ctgtgtggtg 540
tacccatcct cctcccagga tagtgaaaac atcacggctg cagccctggc tacgggtgcc 600
tgcatcgtag gaatcctctg cctccccctc atcctgctcc tggtctacaa gcaaaggcag 660
gcagcctcca accgccgtgc ccaggagctg gtgcggatgg acagcaacat tcaagggatt 720
gaaaaccccg gctttgaagc ctcaccacct gcccagggga tacccgaggc caaagtcagg 780
cacccccctgt cctatgtggc ccagcggcag ccttctgagt ctgggcggca tctgctttcg 840
gagcccagca ccccccctgtc tcctccaggc cccggagacg tcttcttccc atccctggac 900

cctgtccctg actctccaaa ctttgaggtc atctag 936

<210> 1081
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR1 determined by IMGT

<400> 1081
Gly Tyr Thr Phe Ser Thr His Trp
 1   5

<210> 1082
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR2 determined by IMGT

<400> 1082
Ile Leu Pro Gly Ser Gly Ser Thr
 1   5

<210> 1083
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR3 determined by IMGT

<400> 1083
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr
 1   5   10

<210> 1084
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VL CDR1 determined by IMGT

<400> 1084
Gln Ser Ile Val His Ser Asn Gly Asn Thr Tyr
 1   5   10

<210> 1085
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VL CDR2 determined by IMGT

<400> 1085
Lys Leu Ser
 1

<210> 1086
<211> 5
<212> PRT

<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR1 determined by Kabat

<400> 1086
Thr His Trp Ile Glu
 1   5

<210> 1087
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR1 determined by chothia

<400> 1087
Gly Tyr Thr Phe Ser Thr His
 1   5

<210> 1088
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR2 determined by chothia

<400> 1088
Pro Gly Ser Gly
 1

<210> 1089
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR3 determined by chothia

<400> 1089
Leu Leu Tyr Tyr Tyr Ala Met Asp
 1   5

<210> 1090
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VL CDR1 determined by chothia

<400> 1090
Ser Gln Ser Ile Val His Ser Asn Gly Asn Thr Tyr
 1   5   10

<210> 1091
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VL CDR3 determined by chothia

<400> 1091
Gly Ser His Phe Pro Tyr
 1   5

<210> 1092
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR1 determined by Contact

<400> 1092
Ser Thr His Trp Ile Glu
 1   5

<210> 1093
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR2 determined by Contact

<400> 1093
Trp Ile Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser
 1   5   10

<210> 1094
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR3 determined by Contact

<400> 1094
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp
 1   5   10

<210> 1095
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VL CDR1 determined by Contact

<400> 1095
Val His Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr
 1   5   10

<210> 1096
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VL CDR2 determined by Contact

<400> 1096
Leu Leu Ile Tyr Lys Leu Ser Asn Arg Phe
 1   5   10

<210> 1097
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VL CDR3 determined by Contact

<400> 1097
Phe Gln Gly Ser His Phe Pro Tyr
 1   5

<210> 1098
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 175A VH CDR2 determined by AbM

<400> 1098
Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser
 1   5   10

<210> 1099
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VH CDR1 determined by IMGT

<400> 1099
Gly Tyr Ser Phe Thr Gly Tyr Asn
 1   5

<210> 1100
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VH CDR2 determined by IMGT

<400> 1100
Ile Asp Pro Tyr Tyr Asp Tyr Thr
 1   5

<210> 1101
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VH CDR3 determined by IMGT

<400> 1101
Ala Thr Ser Thr Met Ile Thr Pro Phe Asp Tyr
 1   5   10

<210> 1102
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VL CDR1 determined by IMGT

<400> 1102
Gln Ser Ile Val His Ser Asn Gly Asn Thr Tyr
 1   5   10

<210> 1103
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VL CDR2 determined by IMGT

<400> 1103
Lys Val Ser
 1

<210> 1104
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VH CDR1 determined by Kabat

<400> 1104
Gly Tyr Asn Met Asn
 1   5

<210> 1105
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VH CDR1 determined by Chothia

<400> 1105
Gly Tyr Ser Phe Thr Gly Tyr
 1   5

<210> 1106
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VH CDR2 determined by Chothia

<400> 1106
Pro Tyr Tyr Asp
 1

<210> 1107
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VH CDR3 determined by Chothia

<400> 1107
Thr Met Ile Thr Pro Phe Asp

1 5

<210> 1108
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VL CDR1 determined by Chothia

<400> 1108
Ser Gln Ser Ile Val His Ser Asn Gly Asn Thr Tyr
1 5 10

<210> 1109
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VL CDR3 determined by Chothia

<400> 1109
Gly Ser His Val Pro Trp
1 5

<210> 1110
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VH CDR1 determined by Contact

<400> 1110
Thr Gly Tyr Asn Met Asn
1 5

<210> 1111
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VH CDR2 determined by Contact

<400> 1111
Trp Ile Gly Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser
1 5 10

<210> 1112
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VH CDR3 determined by Contact

<400> 1112
Ala Thr Ser Thr Met Ile Thr Pro Phe Asp
1 5 10

<210> 1113
<211> 12

<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VL CDR1 determined by Contact

<400> 1113
Val His Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr
 1   5   10

<210> 1114
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VL CDR2 determined by Contact

<400> 1114
Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe
 1   5   10

<210> 1115
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VL CDR3 determined by Contact

<400> 1115
Phe Gln Gly Ser His Val Pro Trp
 1   5

<210> 1116
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 76E1 VH CDR2 determined by AbM

<400> 1116
Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser
 1   5   10

<210> 1117
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VH CDR1 determined by IMGT

<400> 1117
Gly Tyr Thr Phe Ser Arg Tyr Trp
 1   5

<210> 1118
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VH CDR2 determined by IMGT

<400> 1118
Ile Leu Pro Gly Ser Gly Ser Thr
 1   5

<210> 1119
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VH CDR3 determined by IMGT

<400> 1119
Ala Gly Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly Tyr
 1   5   10

<210> 1120
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VL CDR1 determined by IMGT

<400> 1120
Ser Ser Leu Ser Tyr
 1   5

<210> 1121
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VL CDR2 determined by IMGT

<400> 1121
Ala Thr Ser
 1

<210> 1122
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VH CDR1 determined by Kabat

<400> 1122
Arg Tyr Trp Ile Glu
 1   5

<210> 1123
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VH CDR1 determined by Chothia

<400> 1123
Gly Tyr Thr Phe Ser Arg Tyr
 1   5

<210> 1124
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VH CDR2 determined by Chothia

<400> 1124
Pro Gly Ser Gly
 1

<210> 1125
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VH CDR3 determined by Chothia

<400> 1125
Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly
 1   5   10

<210> 1126
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VL CDR1 determined by Chothia

<400> 1126
Ser Ser Ser Leu Ser Tyr
 1   5

<210> 1127
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VL CDR3 determined by Chothia

<400> 1127
Trp Ser Ser Asn Pro Tyr
 1   5

<210> 1128
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VH CDR1 determined by Contact

<400> 1128
Ser Arg Tyr Trp Ile Glu
 1   5

<210> 1129
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VH CDR2 determined by Contact

<400> 1129
Trp Ile Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn
 1   5   10

<210> 1130
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VH CDR3 determined by Contact

<400> 1130
Ala Gly Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly
 1   5   10

<210> 1131
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VL CDR1 determined by Contact

<400> 1131
Ser Tyr Met His Trp Tyr
 1   5

<210> 1132
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VL CDR2 determined by Contact

<400> 1132
Pro Trp Ile Tyr Ala Thr Ser Asn Leu Ala
 1   5   10

<210> 1133
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VL CDR3 determined by Contact

<400> 1133
Gln Gln Trp Ser Ser Asn Pro Tyr
 1   5

<210> 1134
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized antibody 141A VH CDR2 determined by Contact

<400> 1134

Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn
 1   5   10

<210> 1135
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> VH of humanized antibody hu76E1

<400> 1135
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Tyr
            20   25   30
Asn Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35   40   45
Gly Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asn Leu Lys Phe
    50   55   60
Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Thr Ser Thr Met Ile Thr Pro Phe Asp Tyr Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 1136
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> VH of humanized antibody hu141A

<400> 1136
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Arg Tyr
            20   25   30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35   40   45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn Glu Lys Phe
    50   55   60
Lys Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Gly Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly Tyr Trp Gly
            100   105   110
Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 1137
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> VH of humanized antibody hu175A

<400> 1137
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Thr His

```
            20                  25                  30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35                  40                  45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn Glu Lys Phe
    50                  55                  60
Lys Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65                  70                  75                  80
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly
            100                 105                 110
Thr Leu Val Thr Val Ser Ser
        115


<210> 1138
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus sequences of VH of humanized antibodies
      between hu76E1 and hu175A

<220>
<221> VARIANT
<222> 31
<223> Xaa = Arg or Thr

<220>
<221> VARIANT
<222> 32
<223> Xaa = Tyr or His

<220>
<221> VARIANT
<222> 59
<223> Xaa = Asn or Ser

<220>
<221> VARIANT
<222> 99, 100, 101, 102, 103, 104, 105, 106, 107
<223> Xaa = Any Amino Acid

<220>
<221> VARIANT
<222> 108
<223> Xaa = Met or Phe

<220>
<221> VARIANT
<222> 109
<223> Xaa = Gly or Asp

<400> 1138
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1               5                  10                  15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Xaa Xaa
            20                  25                  30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35                  40                  45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Xaa Tyr Asn Glu Lys Phe
    50                  55                  60
Lys Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65                  70                  75                  80
Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
Ala Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Tyr Trp Gly
            100                 105                 110
Gln Gly Thr Leu Val Thr Val Ser Ser
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115 120

<210> 1139
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> VL of humanized antibody hu76E1

<400> 1139
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Ser Ser Leu Ser Tyr Met
20 25 30
His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Pro Trp Ile Tyr
35 40 45
Ala Thr Ser Asn Leu Ala Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
50 55 60
Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
65 70 75 80
Asp Phe Ala Val Tyr Tyr Cys Gln Gln Trp Ser Ser Asn Pro Tyr Thr
85 90 95
Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 1140
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> VL of humanized antibody hu141A

<400> 1140
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
20 25 30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45
Pro Gln Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95
Ser His Val Pro Trp Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 1141
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> VL of humanized antibody hu175A

<400> 1141
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
20 25 30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45
Pro Gln Leu Leu Ile Tyr Lys Leu Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95
Ser His Phe Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 1142
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus sequences of VL of humanized antibodies between hu76E1 and hu175A

<220>
<221> VARIANT
<222> 56
<223> Xaa = Val or Leu

<220>
<221> VARIANT
<222> 99
<223> Xaa = Val or Phe

<220>
<221> VARIANT
<222> 101
<223> Xaa = Trp or Tyr

<400> 1142
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
20 25 30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45
Pro Gln Leu Leu Ile Tyr Lys Xaa Ser Asn Arg Phe Ser Gly Val Pro
50 55 60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95
Ser His Xaa Pro Xaa Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 1143
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> pseudo-sequences of VH domains of murine antibodies 76E1

<400> 1143
Glu Val Gln Leu Leu Gln Ser Gly Pro Glu Leu Glu Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe Ala Ala Ala
20 25 30
Ala Ala Ala Trp Val Lys Gln Ser Asn Gly Lys Ser Leu Glu Trp Ile
35 40 45
Gly Ala Ile Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala
50 55 60
Ala Ala Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65 70 75 80
Met Gln Leu Lys Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95

Ala Thr Ala Ala Ala Ala Ala Ala Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110
Thr Leu Thr Val Ser Ser
115

<210> 1144
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> pseudo-sequences of VH domains of murine antibodies 141A

<400> 1144
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe Ala Ala Ala
20 25 30
Ala Ala Ala Trp Val Lys Gln Arg Pro Gly His Gly Leu Glu Trp Ile
35 40 45
Gly Ala Ile Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala
50 55 60
Ala Ala Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
65 70 75 80
Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95
Ala Gly Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Trp Gly
100 105 110
Gln Gly Thr Leu Val Thr Val Ser Ala
115 120

<210> 1145
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> pseudo-sequences of VH domains of murine antibodies 175A

<400> 1145
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe Ala Ala Ala
20 25 30
Ala Ala Ala Trp Val Lys Gln Arg Pro Gly His Gly Leu Glu Trp Ile
35 40 45
Gly Ala Ile Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala
50 55 60
Ala Ala Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
65 70 75 80
Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95
Ala Arg Ala Ala Ala Ala Ala Tyr Ala Met Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Ser Val Thr Val Ser Ser
115

<210> 1146
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> pseudo-sequences of VL domains of murine antibodies 76E1

<400> 1146
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly

```
 1               5                  10                  15
Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ala Ala Ala Ala
            20                  25                  30
Ala Ala Ala Ala Ala Ala Ala Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45
Pro Lys Leu Leu Ile Tyr Ala Ala Ala Ala Ala Ala Ala Gly Val Pro
    50                  55                  60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80
Asn Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Ala Gln Ala
                85                  90                  95
Ala Ala Ala Pro Ala Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110


<210> 1147
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> pseudo-sequences of VL domains of murine antibodies 141A

<400> 1147
Gln Ile Val Leu Ser Gln Ser Pro Ala Ile Leu Ser Ala Ser Pro Gly
 1               5                  10                  15
Glu Lys Val Thr Met Thr Cys Arg Ala Ser Ala Ala Ala Ala Ala Ala
            20                  25                  30
Ala Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
        35                  40                  45
Ala Ala Ala Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
    50                  55                  60
Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Val Glu Ala Glu
65                  70                  75                  80
Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Ala Ala Ala Ala Pro Ala Thr
                85                  90                  95
Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105


<210> 1148
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> pseudo-sequences of VL domains of murine antibodies 175A

<400> 1148
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
 1               5                  10                  15
Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ala Ala Ala Ala
            20                  25                  30
Ala Ala Ala Ala Ala Ala Ala Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45
Pro Lys Leu Leu Ile Tyr Ala Ala Ala Ala Ala Ala Ala Gly Val Pro
    50                  55                  60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80
Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Ala Gln Ala
                85                  90                  95
Ala Ala Ala Pro Ala Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110


<210> 1149
<211> 10
<212> PRT
<213> Artificial Sequence
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<220>
<223> VH CDR1 of a humanized anti-C10orf54 antibody

<220>
<221> VARIANT
<222> 6
<223> Xaa = Arg or Thr

<220>
<221> VARIANT
<222> 7
<223> Xaa = Tyr or His

<400> 1149
Gly Tyr Thr Phe Ser Xaa Xaa Trp Ile Glu
 1   5   10

<210> 1150
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> VH CDR2 of a humanized anti-C10orf54 antibody

<220>
<221> VARIANT
<222> 10
<223> Xaa = Asn or Ser

<400> 1150
Glu Ile Leu Pro Gly Ser Gly Ser Thr Xaa Tyr Asn Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 1151
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> VH CDR3 of a humanized anti-C10orf54 antibody

<220>
<221> VARIANT
<222> 1, 2, 3, 4, 5, 6, 7, 8, 9
<223> Xaa = Any Amino Acid

<220>
<221> VARIANT
<222> 10
<223> Xaa = Met or Phe

<220>
<221> VARIANT
<222> 11
<223> Xaa = Gly or Asp

<400> 1151
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Tyr
 1   5   10

<210> 1152
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> VL CDR2 of a humanized anti-C10orf54 antibody

<220>
<221> VARIANT
<222> 2
<223> Xaa = Val or Leu

<400> 1152
Lys Xaa Ser Asn Arg Phe Ser
 1   5

<210> 1153
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> VL CDR3 of a humanized anti-C10orf54 antibody

<220>
<221> VARIANT
<222> 6
<223> Xaa = Val or Phe

<220>
<221> VARIANT
<222> 8
<223> Xaa = Trp or Tyr

<400> 1153
Phe Gln Gly Ser His Xaa Pro Xaa Thr
 1   5

<210> 1154
<211> 408
<212> DNA
<213> Artificial Sequence

<220>
<223> 5B heavy chain variable region with signal sequence

<400> 1154
atgggttgga gctgtatcat cttctttctg gtagcaacag ctacaggtgt gcactcccag 60
gtccagctgc agcagtctgg ggctgagctg gtgaggcctg gggtctcagt gaagatttcc 120
tgcaagggtt ctggctacac attcactgat tatggtatgc actgggtgaa gcagagtcat 180
gcaaagagtc tagagtggat tggaattatt gatacttact atggtgatgc tacctacaac 240
cagaagttca agggcaaggc cacgatgact gtagacaaat cctccagcac agcctatatg 300
gaacttgcca gactgacatc tgaggattct gccatctatt actgtgcaag aagggctggg 360
aatgctatgg actactgggg tcaaggaacc tcagtcaccg tctcctca   408

<210> 1155
<211> 136
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B heavy chain variable region with signal sequence

<400> 1155
Met Gly Trp Ser Cys Ile Ile Phe Phe Leu Val Ala Thr Ala Thr Gly
 1   5   10   15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg
            20   25   30
Pro Gly Val Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe
        35   40   45
Thr Asp Tyr Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu

```
    50                  55                  60
Glu Trp Ile Gly Ile Ile Asp Thr Tyr Tyr Gly Asp Ala Thr Tyr Asn
65                  70                  75                  80
Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser
                85                  90                  95
Thr Ala Tyr Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile
            100                 105                 110
Tyr Tyr Cys Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln
        115                 120                 125
Gly Thr Ser Val Thr Val Ser Ser
    130                 135


<210> 1156
<211> 381
<212> DNA
<213> Artificial Sequence

<220>
<223> 5B light chain variable region with signal sequence

<400> 1156
atgaagtcac agacccaggt cttcgtattt ctactgctct gtgtgtctgg tgctcatggg 60
aatattgtga tgacccagac tcccaaattc ctgcttgtat cagcaggaga cagggttacc 120
ataacctgca aggccagtca gagtgtgagt aatgatgtag cttggtacca acagaagcca 180
gggcagtctc ctaaactgct gatatactat gcatccaatc gctacactgg agtccctgat 240
cgcttcactg gcagtggata tgggacggat ttcactttca ccatcagcac tgtgcaggct 300
gaagacctgg cagtttattt ctgtcagcag gattatagct ctcctcggac gttcggtgga 360
ggcaccaagc tggaaatcaa a                                           381

<210> 1157
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B light chain variable region with signal sequence

<400> 1157
Met Lys Ser Gln Thr Gln Val Phe Val Phe Leu Leu Leu Cys Val Ser
 1               5                  10                  15
Gly Ala His Gly Asn Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu
            20                  25                  30
Val Ser Ala Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser
        35                  40                  45
Val Ser Asn Asp Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro
    50                  55                  60
Lys Leu Leu Ile Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp
65                  70                  75                  80
Arg Phe Thr Gly Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser
                85                  90                  95
Thr Val Gln Ala Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr
            100                 105                 110
Ser Ser Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
        115                 120                 125


<210> 1158
<211> 408
<212> DNA
<213> Artificial Sequence

<220>
<223> 46A heavy chain variable region with signal sequence

<400> 1158
atgggttgga gctgtatcgt cttctttctg gtagcaacag ctacaggtgt gcactcccag 60
gtccagctgc agcaggccgg gggtgagctg gtgaggcctg gggtctcagt gaagatttcc 120
tgcaagggtt ctggctacac attcactgat tatggtatgc actgggtgaa gcagagtcat 180
gcaaagagtc tagagtggat tggaattatt aatacttact atggggatgc tacctacaac 240
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cagaagttca agggcaaggc cacaatgact gtagacaaat cctccagcac agcctatatg 300
gaacttgcca gactgacatc tgaggattct gccatctatt actgtgcaag aagggctggg 360
actgctatgg actactgggg tcaaggaacc tcagtcaccg tctcctca 408

<210> 1159
<211> 136
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A heavy chain variable region with signal sequence

<400> 1159
Met Gly Trp Ser Cys Ile Val Phe Phe Leu Val Ala Thr Ala Thr Gly
 1   5   10   15
Val His Ser Gln Val Gln Leu Gln Gln Ala Gly Gly Glu Leu Val Arg
            20   25   30
Pro Gly Val Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe
        35   40   45
Thr Asp Tyr Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu
    50   55   60
Glu Trp Ile Gly Ile Ile Asn Thr Tyr Tyr Gly Asp Ala Thr Tyr Asn
65   70   75   80
Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser
                85   90   95
Thr Ala Tyr Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile
            100   105   110
Tyr Tyr Cys Ala Arg Arg Ala Gly Thr Ala Met Asp Tyr Trp Gly Gln
        115   120   125
Gly Thr Ser Val Thr Val Ser Ser
    130   135

<210> 1160
<211> 381
<212> DNA
<213> Artificial Sequence

<220>
<223> 46A light chain variable region with signal sequence

<400> 1160
atgaagtcac agacccaggt cttcgtattt ctactgctct gtgtgtctgg tggtcatggg 60
agtattgtga tgacccagac tcccaaattc ctgcttgtat cagcaggaga cagggttacc 120
ataacctgca aggccagtca gagtgtgagt aatgatgtag cttggtacca acagaagcca 180
gggcagtctc ctaaactgct gatatactat gcatccaatc gctacactgg agtccctgat 240
cgcttcactg gcagtggata tgggacggat ttcactttca ccatcagcac tgtgcaggct 300
gaagacctgg cagtttattt ctgtcagcag gattatggct ctcctcggac gttcggtgga 360
ggcaccaagc tggaaatcaa a 381

<210> 1161
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A light chain variable region with signal sequence

<400> 1161
Met Lys Ser Gln Thr Gln Val Phe Val Phe Leu Leu Leu Cys Val Ser
 1   5   10   15
Gly Gly His Gly Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu
            20   25   30
Val Ser Ala Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser
        35   40   45
Val Ser Asn Asp Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro
    50   55   60
Lys Leu Leu Ile Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp
65   70   75   80
Arg Phe Thr Gly Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser

```
                85                  90                  95
Thr Val Gln Ala Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr
            100                 105                 110
Gly Ser Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
        115                 120                 125
```

<210> 1162
<211> 408
<212> DNA
<213> Artificial Sequence

<220>
<223> 97A heavy chain variable region with signal sequence

<400> 1162
```
atgggttgga gctgtatcat cttctttctg gtagcaacag ctacaggtgt gcactcccag 60
gtccagctgc agcagtctgg ggctgagctg gtgaggcctg gggtctcagt gaagatttcc 120
tgcaagggtt ctggctacac attcactgat tatggtatgc actgggtgaa gcagagtcat 180
gcaaagagtc tagagtggat tggagttatt gatacttact atggtgatgc tagtaacaac 240
cagaagttca agggcaaggc cacaatgact gtagacaaat cctccagcac agcctatatg 300
gaacttgcca gactgacatc tgaggattct gccatctatt actgtgcaag aagggctggg 360
aatgctatgg actactgggg tcaaggaacc tcagtcaccg tctcctca              408
```

<210> 1163
<211> 136
<212> PRT
<213> Artificial Sequence

<220>
<223> 97A heavy chain variable region with signal sequence

<400> 1163
```
Met Gly Trp Ser Cys Ile Ile Phe Phe Leu Val Ala Thr Ala Thr Gly
 1               5                  10                  15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg
            20                  25                  30
Pro Gly Val Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe
        35                  40                  45
Thr Asp Tyr Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu
    50                  55                  60
Glu Trp Ile Gly Val Ile Asp Thr Tyr Tyr Gly Asp Ala Ser Asn Asn
65                  70                  75                  80
Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser
                85                  90                  95
Thr Ala Tyr Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile
            100                 105                 110
Tyr Tyr Cys Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln
        115                 120                 125
Gly Thr Ser Val Thr Val Ser Ser
    130                 135
```

<210> 1164
<211> 381
<212> DNA
<213> Artificial Sequence

<220>
<223> 97A light chain variable region with signal sequence

<400> 1164
```
atgaagtcac agacccaggt cttcgtattt ctactgctct gtgtgtctgg tgctcatggg 60
agtattgtga tgacccagac tcccaaattc ctgcttgtat cagcaggaga cagggttgcc 120
ataacctgca aggccagtca gagtgtgagt aatgatgtag cttggtacca acagaagcca 180
gggcagtctc ctaaactgct gatatactat gcatccaatc gctacactgg agtccctgat 240
cgcttcactg gcagtggata tgggacggat ttcactttca ccatcagcac tgtgcaggct 300
gaagacctgg cagtttattt ctgtcagcag gattatggct ctcctcggac gttcggtgga 360
ggcaccaagc tggaaatcaa a                                          381
```

<210> 1165
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> 97A light chain variable region with signal sequence

<400> 1165
Met Lys Ser Gln Thr Gln Val Phe Val Phe Leu Leu Leu Cys Val Ser
 1   5   10   15
Gly Ala His Gly Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu
            20   25   30
Val Ser Ala Gly Asp Arg Val Ala Ile Thr Cys Lys Ala Ser Gln Ser
        35   40   45
Val Ser Asn Asp Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro
    50   55   60
Lys Leu Leu Ile Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp
65   70   75   80
Arg Phe Thr Gly Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser
                85   90   95
Thr Val Gln Ala Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr
            100   105   110
Gly Ser Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
        115   120   125

<210> 1166
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<223> 128A heavy chain variable region with signal sequence

<400> 1166
atgggttgga gctgtatcat cttctttctg gtagcaacag ctacaggtgt gcactcccag 60
gtccagctgc agcagtctgg ggctgagctg gtgaggcctg gggtctcagt gaagatttcc 120
tgcaagggtt ctggctacac attcactgat tatggtatgc actgggtgaa gcagagtcat 180
gcaaagagtc tagagtggat tggacttatt gatacttact atggtgatgc tacctacaac 240
cacaaattca agggcaaggc cacgatgact gtagacaaat cctccagaac agcctatatg 300
gaacttgcca gactgacatc tgaggattct gccatctatt actgtgcaag aagggctggg 360
aatgct   366

<210> 1167
<211> 136
<212> PRT
<213> Artificial Sequence

<220>
<223> 128A heavy chain variable region with signal sequence

<400> 1167
Met Gly Trp Ser Cys Ile Ile Phe Phe Leu Val Ala Thr Ala Thr Gly
 1   5   10   15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg
            20   25   30
Pro Gly Val Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe
        35   40   45
Thr Asp Tyr Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu
    50   55   60
Glu Trp Ile Gly Leu Ile Asp Thr Tyr Tyr Gly Asp Ala Thr Tyr Asn
65   70   75   80
His Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Arg
                85   90   95
Thr Ala Tyr Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile
            100   105   110
Tyr Tyr Cys Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln
        115   120   125
Gly Thr Ser Val Thr Ala Ser Ser

130 135

<210> 1168
<211> 381
<212> DNA
<213> Artificial Sequence

<220>
<223> 128A light chain variable region with signal sequence

<400> 1168
atgaagtcac agacccaggt cttcgtattt ctactgctct gtgtgtctgg tactcatggg 60
aatattgcga tgacccagac tcccaaattc ctgcttgtat cagcaggaga cagggttacc 120
ataacctgca aggccagtca gagtgtgagt aatgatatag cttggtacca acagaagcca 180
ggacagtctc ctagattgct gatatactat gcatccaatc gctacactgg agtccctgat 240
cgcttcactg gcagtggata tgggacggat ttcactttca ccatcagcac tgtgcaggct 300
gaagacctgg cagtttattt ctgtcagcag gattatagct ctcctcggac gttcggtgga 360
ggcaccaagc tggaaatcaa a 381

<210> 1169
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> 128A light chain variable region with signal sequence

<400> 1169
Met Lys Ser Gln Thr Gln Val Phe Val Phe Leu Leu Leu Cys Val Ser
 1 5 10 15
Gly Thr His Gly Asn Ile Ala Met Thr Gln Thr Pro Lys Phe Leu Leu
 20 25 30
Val Ser Ala Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser
 35 40 45
Val Ser Asn Asp Ile Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro
 50 55 60
Arg Leu Leu Ile Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp
65 70 75 80
Arg Phe Thr Gly Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser
 85 90 95
Thr Val Gln Ala Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr
 100 105 110
Ser Ser Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 115 120 125

<210> 1170
<211> 408
<212> DNA
<213> Artificial Sequence

<220>
<223> 146C heavy chain variable region with signal sequence

<400> 1170
atgggttgga gctgtatcat cttctttctg gtagcaacag ctacaggtgt gcactcccag 60
gtccagctgc agcagtctgg ggctgagctg gtgaggcctg gggtctcagt gaagatttcc 120
tgcaagggtt ctggctacac attcactgat tatggtatgc actgggtgaa gcagagtcat 180
gcaaagagtc tagagtggat tggacttatt gatacttact atggtgatgc tacctacaac 240
cacaaattca agggcaaggc cacgatgact gtagacaaat cctccagaac agcctatatg 300
gaacttgcca gactgacatc tgaggattct gccatctatt actgtgcaag aagggctggg 360
aatgctatgg actactgggg tcaaggaacc tcagtcaccg cctcctca 408

<210> 1171
<211> 136
<212> PRT
<213> Artificial Sequence

<220>

<223> 146C heavy chain variable region with signal sequence

<400> 1171
Met Gly Trp Ser Cys Ile Ile Phe Phe Leu Val Ala Thr Ala Thr Gly
 1   5   10   15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg
            20   25   30
Pro Gly Val Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe
        35   40   45
Thr Asp Tyr Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu
    50   55   60
Glu Trp Ile Gly Leu Ile Asp Thr Tyr Tyr Gly Asp Ala Thr Tyr Asn
65   70   75   80
His Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Arg
                85   90   95
Thr Ala Tyr Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile
            100   105   110
Tyr Tyr Cys Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln
        115   120   125
Gly Thr Ser Val Thr Ala Ser Ser
    130   135

<210> 1172
<211> 381
<212> DNA
<213> Artificial Sequence

<220>
<223> 146C light chain variable region with signal sequence

<400> 1172
atgaagtcac agacccaggt cttcgtattt ctactgctct gtgtgtctgg tactcatggg 60
aatattgcga tgacccagac tcccaaattc ctgcttgtat cagcaggaga cagggttacc 120
ataacctgca aggccagtca gagtgtgagt aatgatatag cttggtacca acagaagcca 180
ggacagtctc ctagattgct gatatactat gcatccaatc gctacactgg agtccctgat 240
cgcttcactg gcagtggata tgggacggat ttcactttca ccatcagcac tgtgcaggct 300
gaagacctgg cagtttattt ctgtcagcag gattatagct ctcctcggac gttcggtgga 360
ggcaccaagc tggaaatcaa a   381

<210> 1173
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> 146C light chain variable region with signal sequence

<400> 1173
Met Lys Ser Gln Thr Gln Val Phe Val Phe Leu Leu Leu Cys Val Ser
 1   5   10   15
Gly Thr His Gly Asn Ile Ala Met Thr Gln Thr Pro Lys Phe Leu Leu
            20   25   30
Val Ser Ala Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser
        35   40   45
Val Ser Asn Asp Ile Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro
    50   55   60
Arg Leu Leu Ile Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp
65   70   75   80
Arg Phe Thr Gly Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser
                85   90   95
Thr Val Gln Ala Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr
            100   105   110
Ser Ser Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
        115   120   125

<210> 1174
<211> 408
<212> DNA

<213> Artificial Sequence

<220>
<223> 208A heavy chain variable region with signal sequence

<400> 1174
atgggttgga gctgtatcat cttctttctg gtagcaacag ctacaggtgt gcactcccag 60
gtccagctgc agcagtctgg ggctgagctg gtgaggcctg gggtctcagt gaagatttcc 120
tgcaagggtt ctggctacac attcactgat tatggtatgc actgggtgaa gcagagtcat 180
gcaaagagtc tagagtggat tggagttatt gatacttact atggtgatgc tggctacaac 240
cagaagttca agggcaaggc cacaatgact gtagacaaat cctccagcac agcctatatg 300
gaacttgcca gactgacatc tgaggattct gccatctatt actgtgcaag aagggctgga 360
aatgctatgg actactgggg tcaaggaacc tcagtcaccg tctcctca 408

<210> 1175
<211> 136
<212> PRT
<213> Artificial Sequence

<220>
<223> 208A heavy chain variable region with signal sequence

<400> 1175
Met Gly Trp Ser Cys Ile Ile Phe Phe Leu Val Ala Thr Ala Thr Gly
 1   5   10   15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg
            20   25   30
Pro Gly Val Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe
        35   40   45
Thr Asp Tyr Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu
    50   55   60
Glu Trp Ile Gly Val Ile Asp Thr Tyr Tyr Gly Asp Ala Gly Tyr Asn
65   70   75   80
Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser
                85   90   95
Thr Ala Tyr Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile
            100   105   110
Tyr Tyr Cys Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln
        115   120   125
Gly Thr Ser Val Thr Val Ser Ser
    130   135

<210> 1176
<211> 381
<212> DNA
<213> Artificial Sequence

<220>
<223> 208A light chain variable region with signal sequence

<400> 1176
atgaagtcac agacccaggt cttcgtattt ctactgctct gtgtgtctgg tgctcttggg 60
agtattgtga tgacccagac tcccaaattc ctgcttgtat cagcaggaga cagggtcacc 120
ataacctgca aggccagtca gagtgtgagt aatgatgttg cttggtacca acagaagcca 180
gggcagtctc ctaaactgct gatatactat gcatccaatc gctacactgg agtccctgat 240
cgcttcactg gcagtggata tgggacggat ttcactttca ccatcagcac tgtgcaggct 300
gaggacctgg cagtttattt ctgtcagcag gattatagct ctcctcggac gttcggtgga 360
ggcaccaagc tggaaatcaa a 381

<210> 1177
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> 208A light chain variable region with signal sequence

<400> 1177
Met Lys Ser Gln Thr Gln Val Phe Val Phe Leu Leu Leu Cys Val Ser

```
 1               5                  10                  15
Gly Ala Leu Gly Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu
            20                  25                  30
Val Ser Ala Gly Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser
        35                  40                  45
Val Ser Asn Asp Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro
    50                  55                  60
Lys Leu Leu Ile Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp
65                  70                  75                  80
Arg Phe Thr Gly Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser
                85                  90                  95
Thr Val Gln Ala Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr
            100                 105                 110
Ser Ser Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
        115                 120                 125
```

<210> 1178
<211> 411
<212> DNA
<213> Artificial Sequence

<220>
<223> 215A heavy chain variable region with signal sequence

<400> 1178
```
atgggatgga gctggatctt tctcttcctc ctgtcaggaa ctgcaggtgt ccactctgag 60
gtccagctgc agcagtctgg acctgagttg gtgaagcctg gtgcttcaat gaagatatcc 120
tgcaaggctt ctggtttctc tttcactggc tacaccatga actgggtgaa gcagagccat 180
ggaaagaacc ttgagtggat tggacttatt agtccttaca atggtggtac tagctacaac 240
cagaagttca agggcaaggc cacattaact gtagataagt catccagcac agcctacatg 300
gagctcctca gtctgacatc tgaggactct gcagtctatt actgtgcaag aagggcctac 360
ggctatgcta tggactactg gggtcaagga acctcagtca ccgtctcctc a          411
```

<210> 1179
<211> 137
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A heavy chain variable region with signal sequence

<400> 1179
```
Met Gly Trp Ser Trp Ile Phe Leu Phe Leu Leu Ser Gly Thr Ala Gly
 1               5                  10                  15
Val His Ser Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys
            20                  25                  30
Pro Gly Ala Ser Met Lys Ile Ser Cys Lys Ala Ser Gly Phe Ser Phe
        35                  40                  45
Thr Gly Tyr Thr Met Asn Trp Val Lys Gln Ser His Gly Lys Asn Leu
    50                  55                  60
Glu Trp Ile Gly Leu Ile Ser Pro Tyr Asn Gly Gly Thr Ser Tyr Asn
65                  70                  75                  80
Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser
                85                  90                  95
Thr Ala Tyr Met Glu Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val
            100                 105                 110
Tyr Tyr Cys Ala Arg Arg Ala Tyr Gly Tyr Ala Met Asp Tyr Trp Gly
        115                 120                 125
Gln Gly Thr Ser Val Thr Val Ser Ser
    130                 135
```

<210> 1180
<211> 384
<212> DNA
<213> Artificial Sequence

<220>
<223> 215A light chain variable region with signal sequence

<400> 1180
atggattttc aagtgcagat tttcagcttc ctgctaatca gtgcctcagt catactgtcc 60
agaggacaaa ttgttctcac ccagtctcca gcaatcatgt ctgcatctcc aggggagaag 120
gtcaccatga cctgcagtgc cagctcaagt gtaagttaca tgttctggta ccagcagaag 180
ccaggatcct cccccagact cctgatttat gacacatcca acctggcttc tggagtccct 240
cttcgcttca gtggcagtgg gtctgggacc tcttactctc tcacaatcag ccgaatggag 300
gctgaggatg ctgccactta ttactgccag cagtggagta gttacccatt cacgttcggc 360
tcggggacaa agttggaaat aaaa 384

<210> 1181
<211> 128
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A light chain variable region with signal sequence

<400> 1181
Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu Ile Ser Ala Ser
 1   5   10   15
Val Ile Leu Ser Arg Gly Gln Ile Val Leu Thr Gln Ser Pro Ala Ile
            20   25   30
Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser
        35   40   45
Ser Ser Val Ser Tyr Met Phe Trp Tyr Gln Gln Lys Pro Gly Ser Ser
    50   55   60
Pro Arg Leu Leu Ile Tyr Asp Thr Ser Asn Leu Ala Ser Gly Val Pro
65   70   75   80
Leu Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile
                85   90   95
Ser Arg Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp
            100   105   110
Ser Ser Tyr Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
        115   120   125

<210> 1182
<211> 411
<212> DNA
<213> Artificial Sequence

<220>
<223> 26A heavy chain variable region with signal sequence

<400> 1182
atgggatgga gctggatctt tctcttcctc ctgtcaggaa ctgcaggtgt ccactctgag 60
gtccagctgc agcagtctgg acctgagctg gtgaagcctg gtgcttcaat gaagatatcc 120
tgcaaggctt ctggtttctc attcactggc tacaccatga actgggtgaa gcagagccat 180
gtaaagaacc ttgagtggat tggacttatt agtccttaca atggtggtac tagctacaac 240
cagaagttca agggcaaggc cacattaact gtagacaagt catccagcac agcctacatg 300
gagctcctca gtctgacatc tgaggactct gcagtctatt actgtgcaag aagggcctac 360
ggctatgcta tggactactg gggtcaagga acctcagtca ccgtctcctc a 411

<210> 1183
<211> 137
<212> PRT
<213> Artificial Sequence

<220>
<223> 26A heavy chain variable region with signal sequence

<400> 1183
Met Gly Trp Ser Trp Ile Phe Leu Phe Leu Leu Ser Gly Thr Ala Gly
 1   5   10   15
Val His Ser Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys
            20   25   30
Pro Gly Ala Ser Met Lys Ile Ser Cys Lys Ala Ser Gly Phe Ser Phe
        35   40   45
Thr Gly Tyr Thr Met Asn Trp Val Lys Gln Ser His Val Lys Asn Leu

```
    50                  55                  60
Glu Trp Ile Gly Leu Ile Ser Pro Tyr Asn Gly Gly Thr Ser Tyr Asn
65                  70                  75                  80
Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser
                85                  90                  95
Thr Ala Tyr Met Glu Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val
            100                 105                 110
Tyr Tyr Cys Ala Arg Arg Ala Tyr Gly Tyr Ala Met Asp Tyr Trp Gly
        115                 120                 125
Gln Gly Thr Ser Val Thr Val Ser Ser
    130                 135


<210> 1184
<211> 384
<212> DNA
<213> Artificial Sequence

<220>
<223> 26A light chain variable region with signal sequence

<400> 1184
atggattttc aagtgcagat tttcagcttc ctgctaatca gtgcctcagt catactgtcc 60
agaggacaaa ttgttctcac ccagtctcca gcaatcatgt ctgcatctcc aggggagaag 120
gtcaccatga cctgcagtgc cagctcaagt gtaagttaca tgtactggta ccagcagaag 180
ccaggatcct cccccagact cctgatttat gacacatcca acctggcttc tggagtccct 240
cttcgcttca gtggcagtgg gtctgggacc tcttactctc tcacaatcag ccgaatggag 300
gctgaggatg ctgccactta ttactgccag cagtggagta gttacccatt cacgttcggc 360
tcggggacaa agttggaaat aaaa                                       384

<210> 1185
<211> 128
<212> PRT
<213> Artificial Sequence

<220>
<223> 26A light chain variable region with signal sequence

<400> 1185
Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu Ile Ser Ala Ser
 1               5                  10                  15
Val Ile Leu Ser Arg Gly Gln Ile Val Leu Thr Gln Ser Pro Ala Ile
            20                  25                  30
Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser
        35                  40                  45
Ser Ser Val Ser Tyr Met Tyr Trp Tyr Gln Gln Lys Pro Gly Ser Ser
    50                  55                  60
Pro Arg Leu Leu Ile Tyr Asp Thr Ser Asn Leu Ala Ser Gly Val Pro
65                  70                  75                  80
Leu Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile
                85                  90                  95
Ser Arg Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp
            100                 105                 110
Ser Ser Tyr Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
        115                 120                 125


<210> 1186
<211> 417
<212> DNA
<213> Artificial Sequence

<220>
<223> 164A heavy chain variable region with signal sequence

<400> 1186
atgggatgga cctggatctt tattttaatc ctgtcagtaa ctacaggtgt ccactctgag 60
gtccagctgc agcagtctgg acctgagttg gagaagcctg gcgcttcagt gaagatatcc 120
tgcaaggctt ctggttactc attcactggc tacaacatga actgggtgaa gcagagcaat 180
ggaaagagcc ttgagtggat tggaaatatt gatccttact atggtagtgc tagctacaac 240
```

cagaaattca agggcaaggc cacattgact gtagacaaat cctccaccac agcctacatg 300
cagctcaaga gcctgacatc tgaagactct gcagtctatt actgtacaag aagtaattat 360
ggttactacg ggtacttcga tgtctggggc gcagggacca cggtcaccgt ctcctca 417

<210> 1187
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A heavy chain variable region with signal sequence

<400> 1187
Met Gly Trp Thr Trp Ile Phe Ile Leu Ile Leu Ser Val Thr Thr Gly
 1   5   10   15
Val His Ser Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Glu Lys
            20   25   30
Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe
        35   40   45
Thr Gly Tyr Asn Met Asn Trp Val Lys Gln Ser Asn Gly Lys Ser Leu
    50   55   60
Glu Trp Ile Gly Asn Ile Asp Pro Tyr Tyr Gly Ser Ala Ser Tyr Asn
65   70   75   80
Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Thr
                85   90   95
Thr Ala Tyr Met Gln Leu Lys Ser Leu Thr Ser Glu Asp Ser Ala Val
            100   105   110
Tyr Tyr Cys Thr Arg Ser Asn Tyr Gly Tyr Tyr Gly Tyr Phe Asp Val
        115   120   125
Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser
    130   135

<210> 1188
<211> 396
<212> DNA
<213> Artificial Sequence

<220>
<223> 164A light chain variable region with signal sequence

<400> 1188
atggaatcac agactcaggt cttcctctcc ctgctgctct gggtatctgg tacctgtggg 60
aacattatga tgacacagtc gccatcatct ctggctgtgt ctgcaggaga aaaggtcact 120
atgagctgta agtccagtca aagtgtttta tacagttcaa atcagaagaa ctacttggcc 180
tggtaccagc agaaaccagg gcagtctcct aaactgctga tctattgggc atccactagg 240
gaatctggtg tccctgatcg cttcacaggc agtggatctg ggacagattt tactcttact 300
atcagcagtg tacaagctga agacctggca gtttattact gtcatcaatt cctctcctcg 360
tacacgttcg gaggggggac caagctggaa atgaaa 396

<210> 1189
<211> 132
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A light chain variable region with signal sequence

<400> 1189
Met Glu Ser Gln Thr Gln Val Phe Leu Ser Leu Leu Leu Trp Val Ser
 1   5   10   15
Gly Thr Cys Gly Asn Ile Met Met Thr Gln Ser Pro Ser Ser Leu Ala
            20   25   30
Val Ser Ala Gly Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser
        35   40   45
Val Leu Tyr Ser Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln
    50   55   60
Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg
65   70   75   80
Glu Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp

```
                85                  90                  95
Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr
            100                 105                 110
Tyr Cys His Gln Phe Leu Ser Ser Tyr Thr Phe Gly Gly Gly Thr Lys
        115                 120                 125
Leu Glu Met Lys
    130


<210> 1190
<211> 390
<212> DNA
<213> Artificial Sequence

<220>
<223> 164A light chain variable region number 2 with signal sequence

<400> 1190
atggattttc aggtgcagat tttcagcttc ctgttaatca gtgtctcagt cataatgtcc 60
agaggagaaa atgtgctgac ccagtctcca gcaatcatgg ctgcatctcc aggggagaag 120
gtcaccatga cctgcagtgc cagctcaagt gtaagttcta gtaacttgca ctggtaccag 180
cagaagtcag gcacttctac caaattctgg atttatagga catccaacct ggcttcagaa 240
gtcccagctc ccttcagtgg cagtgggtct gggacctctt actctcttac aatcagcagc 300
gtggaggccg aagatgctgc cacttattac tgccagcagt ggagtggtta cccacggacg 360
ttcggtggag gcaccaagct ggaaatcaaa                                  390

<210> 1191
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A light chain variable region number 2 with signal sequence

<400> 1191
Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu Ile Ser Val Ser
 1               5                  10                  15
Val Ile Met Ser Arg Gly Glu Asn Val Leu Thr Gln Ser Pro Ala Ile
            20                  25                  30
Met Ala Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser
        35                  40                  45
Ser Ser Val Ser Ser Ser Asn Leu His Trp Tyr Gln Gln Lys Ser Gly
    50                  55                  60
Thr Ser Thr Lys Phe Trp Ile Tyr Arg Thr Ser Asn Leu Ala Ser Glu
65                  70                  75                  80
Val Pro Ala Pro Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu
                85                  90                  95
Thr Ile Ser Ser Val Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln
            100                 105                 110
Gln Trp Ser Gly Tyr Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu
        115                 120                 125
Ile Lys
    130


<210> 1192
<211> 139
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A heavy chain variable region with signal sequence

<400> 1192
Met Gly Trp Thr Trp Ile Phe Ile Leu Ile Leu Ser Val Thr Thr Gly
 1               5                  10                  15
Val His Ser Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Glu Lys
            20                  25                  30
Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe
        35                  40                  45
```

```
Thr Gly Ser Asn Met Asn Trp Val Lys Gln Asn Asn Gly Lys Ser Leu
    50                  55                  60
Glu Trp Ile Gly Asn Ile Asp Pro Tyr Tyr Gly Tyr Thr Thr Tyr Asn
65                  70                  75                  80
Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser
                85                  90                  95
Thr Ala Tyr Met Gln Leu Lys Ser Leu Thr Ser Glu Asp Ser Ala Val
            100                 105                 110
Tyr Tyr Cys Ala Arg Asp Tyr Asp Tyr Ala Leu Gly Tyr Phe Asp Val
        115                 120                 125
Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser
    130                 135


<210> 1193
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<223> 230A light chain variable region with signal sequence

<400> 1193
atgaagttgc ctgttaggct gttggtgctg atgttctgga ttcctgcttc cagcagtgat 60
gttgtgatga cccaaactcc actctccctg cctgtcagtc ttggagatca agcctccatc 120
tcttgcagat ctagtcagag ccttgtacac agtaatggaa acacctattt acattggtac 180
ctgcagaagc caggccagtc tccaaagctc ctgatctaca aagtttccaa ccgattttct 240
ggggtcccag acaggttcag tggcagtgga tcagggacag atttcacact caagatcagc 300
agagtggagg ctgaggatct gggagtttat ttctgctctc aaagtacaca tgttccgtac 360
acgttcggag gggggaccaa gctggaaata aaa                               393

<210> 1194
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A light chain variable region with signal sequence

<400> 1194
Met Lys Leu Pro Val Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala
 1               5                  10                  15
Ser Ser Ser Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val
            20                  25                  30
Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu
        35                  40                  45
Val His Ser Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro
    50                  55                  60
Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser
65                  70                  75                  80
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
                85                  90                  95
Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys
            100                 105                 110
Ser Gln Ser Thr His Val Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu
        115                 120                 125
Glu Ile Lys
    130


<210> 1195
<211> 411
<212> DNA
<213> Artificial Sequence

<220>
<223> 76E1 heavy chain variable region with signal sequence

<400> 1195
atgggatgga cctggatctt tattttaatc ctgtcagtaa ctacaggtgt ccactctgag 60
```

gtccagctgc tgcagtctgg acctgagctg gagaagcctg gcgcttcagt gaagatatcc 120
tgcaaggctt ctggttactc attcactggc tacaacatga actgggtgaa gcagagcaat 180
ggaaagagcc ttgagtggat tggaaatatt gatccttact atgattatac tagttacaac 240
ctgaagttca aggacaaggc cacattgact gtagacaaat cctccagcac agcctacatg 300
cagctcaaga gcctgacatc tgaggactct gcagtctatt actgtgcaac ctctactatg 360
attactccct ttgactactg gggccaaggc accactctca cagtctcctc a 411

<210> 1196
<211> 137
<212> PRT
<213> Artificial Sequence

<220>
<223> 76E1 heavy chain variable region with signal sequence

<400> 1196
Met Gly Trp Thr Trp Ile Phe Ile Leu Ile Leu Ser Val Thr Thr Gly
 1   5   10   15
Val His Ser Glu Val Gln Leu Leu Gln Ser Gly Pro Glu Leu Glu Lys
            20   25   30
Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe
        35   40   45
Thr Gly Tyr Asn Met Asn Trp Val Lys Gln Ser Asn Gly Lys Ser Leu
    50   55   60
Glu Trp Ile Gly Asn Ile Asp Pro Tyr Tyr Asp Tyr Thr Ser Tyr Asn
65   70   75   80
Leu Lys Phe Lys Asp Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser
                85   90   95
Thr Ala Tyr Met Gln Leu Lys Ser Leu Thr Ser Glu Asp Ser Ala Val
            100   105   110
Tyr Tyr Cys Ala Thr Ser Thr Met Ile Thr Pro Phe Asp Tyr Trp Gly
        115   120   125
Gln Gly Thr Thr Leu Thr Val Ser Ser
    130   135

<210> 1197
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<223> 76E1 light chain variable region with signal sequence

<400> 1197
atgaagttgc ctgttaggct gttggtgctg atgttctgga ttcctgcttc cagcagtgat 60
gttttgatga cccaaactcc actctccctg cctgtcagtc ttggagatca agcctccatc 120
tcttgcagat ctagtcagag cattgtacat agtaatggaa acacctattt agaatggtac 180
ctgcagaaac caggccagtc tccaaagctc ctgatctaca aagtttccaa ccgattttct 240
ggggtcccag acaggttcag tggcagtgga tcagggacag atttcacact caagatcaac 300
agagtggagg ctgaagatct gggagtttat tactgctttc aaggttcaca tgttccgtgg 360
acgttcggtg gaggcaccaa gctggaaatc aaa 393

<210> 1198
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<223> 76E1 light chain variable region with signal sequence

<400> 1198
Met Lys Leu Pro Val Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala
 1   5   10   15
Ser Ser Ser Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val
            20   25   30
Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile
        35   40   45
Val His Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro
    50   55   60

Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser
65 70 75 80
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
85 90 95
Leu Lys Ile Asn Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
100 105 110
Phe Gln Gly Ser His Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu
115 120 125
Glu Ile Lys
130

<210> 1199
<211> 408
<212> DNA
<213> Artificial Sequence

<220>
<223> 53A heavy chain variable region with signal sequence

<400> 1199
atggaatgga gttggatatt tctctttctc ctgtcaggaa ctgcaggtgt ccactctgag 60
gtccagctgc agcagtctgg acctgagctg gtaaagcctg gggcttcagt gaagatgtcc 120
tgcaaggctt ctggatacac attcactagc tattttatgc actgggtgaa gcagaagcct 180
gggcagggcc ttgagtggat tggatatatt tatccttaca atgatggtac taagtacaat 240
gagaagttca aaggcaaggc cacactgact tcagacaaat cctccagcac agcctacatg 300
gagctcagca gcctgacctc tgaggactct gcggtctatt actgtgcaag atttgattac 360
gacaccctgc gatactgggg ccaaggcacc actctcacag tctcctca 408

<210> 1200
<211> 136
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A heavy chain variable region with signal sequence

<400> 1200
Met Glu Trp Ser Trp Ile Phe Leu Phe Leu Leu Ser Gly Thr Ala Gly
1 5 10 15
Val His Ser Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys
20 25 30
Pro Gly Ala Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe
35 40 45
Thr Ser Tyr Phe Met His Trp Val Lys Gln Lys Pro Gly Gln Gly Leu
50 55 60
Glu Trp Ile Gly Tyr Ile Tyr Pro Tyr Asn Asp Gly Thr Lys Tyr Asn
65 70 75 80
Glu Lys Phe Lys Gly Lys Ala Thr Leu Thr Ser Asp Lys Ser Ser Ser
85 90 95
Thr Ala Tyr Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val
100 105 110
Tyr Tyr Cys Ala Arg Phe Asp Tyr Asp Thr Leu Arg Tyr Trp Gly Gln
115 120 125
Gly Thr Thr Leu Thr Val Ser Ser
130 135

<210> 1201
<211> 396
<212> DNA
<213> Artificial Sequence

<220>
<223> 53A light chain variable region with signal sequence

<400> 1201
atgaagctgc ctgttctgct agtggtgctg ctattgttca cgagtccagc ctcaagtagt 60
gatgttgttc tgacccaaac tccactctct ctgcctgtca atattggaga tcaagcctct 120
atctcttgca agtctactaa gagtcttctg aatagtgatg gattcactta tttggactgg 180

tacctgcaga agccaggcca gtctccacag ctcctaatat atttggtttc taatcgattt 240
tctggagttc cagacaggtt cagtggcagt gggtcaggaa cagatttcac actcaagatc 300
agcagagtgg aggctgagga tttgggagtt tattattgct tccagagtaa ctattttccg 360
tggacgttcg gtggaggcac caagctggaa atcaaa 396

<210> 1202
<211> 132
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A light chain variable region with signal sequence

<400> 1202
Met Lys Leu Pro Val Leu Leu Val Val Leu Leu Leu Phe Thr Ser Pro
 1   5   10   15
Ala Ser Ser Ser Asp Val Val Leu Thr Gln Thr Pro Leu Ser Leu Pro
            20   25   30
Val Asn Ile Gly Asp Gln Ala Ser Ile Ser Cys Lys Ser Thr Lys Ser
        35   40   45
Leu Leu Asn Ser Asp Gly Phe Thr Tyr Leu Asp Trp Tyr Leu Gln Lys
    50   55   60
Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Val Ser Asn Arg Phe
65   70   75   80
Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
                85   90   95
Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr
            100   105   110
Cys Phe Gln Ser Asn Tyr Phe Pro Trp Thr Phe Gly Gly Gly Thr Lys
        115   120   125
Leu Glu Ile Lys
    130

<210> 1203
<211> 408
<212> DNA
<213> Artificial Sequence

<220>
<223> 259A heavy chain variable region with signal sequence

<400> 1203
atggaatgga gttggatatt tctctttctc ctgtcaggaa ctgcaggtgt ccactctgag 60
gtccagctgc agcagtctgg acctgagctg gtaaagcctg gggcttcagt gaagatgtcc 120
tgcaaggctt ctggatacac attcactagc tattttatgc actgggtgaa gcagaagcct 180
gggcagggcc ttgagtggat tggatatatt tatccttaca atgatggtac taagtacaat 240
gagaagttca aaggcaaggc cacactgact tcagacaaat cctccagcac agcctacatg 300
gacctcagca gcctgacctc tgaagactct gcggtctatt actgtgcaag atttgattac 360
gacaccctgc gatactgggg ccaaggcacc actctcacag tctcctca 408

<210> 1204
<211> 136
<212> PRT
<213> Artificial Sequence

<220>
<223> 259A heavy chain variable region with signal sequence

<400> 1204
Met Glu Trp Ser Trp Ile Phe Leu Phe Leu Leu Ser Gly Thr Ala Gly
 1   5   10   15
Val His Ser Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys
            20   25   30
Pro Gly Ala Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe
        35   40   45
Thr Ser Tyr Phe Met His Trp Val Lys Gln Lys Pro Gly Gln Gly Leu
    50   55   60
Glu Trp Ile Gly Tyr Ile Tyr Pro Tyr Asn Asp Gly Thr Lys Tyr Asn
65   70   75   80

```
Glu Lys Phe Lys Gly Lys Ala Thr Leu Thr Ser Asp Lys Ser Ser Ser
                85                  90                  95
Thr Ala Tyr Met Asp Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val
            100                 105                 110
Tyr Tyr Cys Ala Arg Phe Asp Tyr Asp Thr Leu Arg Tyr Trp Gly Gln
        115                 120                 125
Gly Thr Thr Leu Thr Val Ser Ser
    130                 135


<210> 1205
<211> 396
<212> DNA
<213> Artificial Sequence

<220>
<223> 259A light chain variable region with signal sequence

<400> 1205
atgaagctgc ctgttctgct agtggtgctg ctattgttca cgagtccagc ctcaagtagt 60
gatgttgttc tgacccaaac tccactctct ctgcctgtca atattggaga tcaagcctct 120
atctcttgca agtctactaa gagtcttctg aatagtgatg gattcactta tttggactgg 180
tacctgcaga agccaggcca gtctccacag ctcctaatat atttgatttc taatcgattt 240
tctggagttc cagacaggtt cagtggcagt gggtcaggaa cagatttcac actcaagatc 300
agcagagtgg aggctgagga tttgggagtt tattattgct tccagagtaa ctattttccg 360
tggacgttcg gtggaggcac caagctggaa atcaaa                          396

<210> 1206
<211> 132
<212> PRT
<213> Artificial Sequence

<220>
<223> 259A light chain variable region with signal sequence

<400> 1206
Met Lys Leu Pro Val Leu Leu Val Val Leu Leu Leu Phe Thr Ser Pro
 1               5                  10                  15
Ala Ser Ser Ser Asp Val Val Leu Thr Gln Thr Pro Leu Ser Leu Pro
            20                  25                  30
Val Asn Ile Gly Asp Gln Ala Ser Ile Ser Cys Lys Ser Thr Lys Ser
        35                  40                  45
Leu Leu Asn Ser Asp Gly Phe Thr Tyr Leu Asp Trp Tyr Leu Gln Lys
    50                  55                  60
Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Ile Ser Asn Arg Phe
65                  70                  75                  80
Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
                85                  90                  95
Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr
            100                 105                 110
Cys Phe Gln Ser Asn Tyr Phe Pro Trp Thr Phe Gly Gly Gly Thr Lys
        115                 120                 125
Leu Glu Ile Lys
    130


<210> 1207
<211> 414
<212> DNA
<213> Artificial Sequence

<220>
<223> 33A heavy chain variable region with signal sequence

<400> 1207
atggaatgga cctgggtctt tctcttcctc ctgtcagtaa ctgcaggtgt ccactcccag 60
gttcagctgc agcagtctgg agctgagctg atgaagcctg gggcctcagt gaagatatcc 120
tgcaaggcta ctggctacac attcagtagc tactggatag agtgggtaaa gcagaggcct 180
ggacatggcc ttgagtggat tggagagatt ttacctggaa gtggtagtac tagctacaat 240
gagaagttca agggcaaggc cacattcact gcagatacat cctccaacac agcctacatg 300
```

caactcagcg gcctgacatc tgaggactct gccgtctatt actgtgcaag atggttacta 360
tattactatg ctatggtcta ctggggtcaa ggaacctcag tcaccgtctc ctca 414

<210> 1208
<211> 138
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A heavy chain variable region with signal sequence

<400> 1208
Met Glu Trp Thr Trp Val Phe Leu Phe Leu Leu Ser Val Thr Ala Gly
 1   5   10   15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys
            20   25   30
Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe
        35   40   45
Ser Ser Tyr Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu
    50   55   60
Glu Trp Ile Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn
65   70   75   80
Glu Lys Phe Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn
                85   90   95
Thr Ala Tyr Met Gln Leu Ser Gly Leu Thr Ser Glu Asp Ser Ala Val
            100   105   110
Tyr Tyr Cys Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Val Tyr Trp
        115   120   125
Gly Gln Gly Thr Ser Val Thr Val Ser Ser
    130   135

<210> 1209
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<223> 33A light chain variable region with signal sequence

<400> 1209
atgaagttgc ctgttaggct gttggtgctg atgttctgga ttcctgcttc cagcagtgat 60
gttttgatga cccaaactcc actctccctg cctgtcagtc ttggagatca agcctccatc 120
tcttgcagat ctagtcagag cattgtacat agtaatggaa acacctattt agaatggtac 180
ctgcagaaac caggccagtc tccaaagctc ctgatctaca aagtttccaa ccgattttct 240
ggggtcccag acaggttcag tggcagtgga tcagggacag atttcacact caagatcagc 300
agagtggagg ctgaggatct gggagtttat tactgctttc aaggttcaca tgttccgtac 360
acgttcggag gggggaccaa gctggaaata aaa 393

<210> 1210
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A light chain variable region with signal sequence

<400> 1210
Met Lys Leu Pro Val Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala
 1   5   10   15
Ser Ser Ser Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val
            20   25   30
Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile
        35   40   45
Val His Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro
    50   55   60
Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser
65   70   75   80
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
                85   90   95

```
Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
            100                 105                 110
Phe Gln Gly Ser His Val Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu
        115                 120                 125
Glu Ile Lys
    130
```

<210> 1211
<211> 414
<212> DNA
<213> Artificial Sequence

<220>
<223> 39A heavy chain variable region with signal sequence

<400> 1211
atggaatgga cctgggtctg tctcttcctc ctgtcagtaa ctgcaggtgt ccactcccag 60
gttcagctgc agcagtctgg agctgagctg atgaagcctg gggcctcagt gaagatatcc 120
tgcaaggcta ctggctacac attcagtagt aactggatag agtgggtaaa gcagaggcct 180
ggacatggcc ttgagtggat tggagagatt ttacctggaa gtggcagtac tagctacaat 240
gagaagttca agggcaaggc cacattcact gcagatacat cctccaacac agcctacatg 300
cagctcagca gcctgacatc tgaagactct gccgtctatt actgtgcaag atggttacta 360
tattactatg ctatggacta ctggggtcaa ggaacctcag tcaccgtctc ctca 414

<210> 1212
<211> 138
<212> PRT
<213> Artificial Sequence

<220>
<223> 39A heavy chain variable region with signal sequence

<400> 1212
```
Met Glu Trp Thr Trp Val Cys Leu Phe Leu Leu Ser Val Thr Ala Gly
 1               5                  10                  15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys
            20                  25                  30
Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe
        35                  40                  45
Ser Ser Asn Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu
    50                  55                  60
Glu Trp Ile Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn
65                  70                  75                  80
Glu Lys Phe Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn
                85                  90                  95
Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val
            100                 105                 110
Tyr Tyr Cys Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr Trp
        115                 120                 125
Gly Gln Gly Thr Ser Val Thr Val Ser Ser
    130                 135
```

<210> 1213
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<223> 39A light chain variable region with signal sequence

<400> 1213
atgaagttgc ctgttaggct gttggtgctg atgttctgga ttcctgcttc cagcagtgat 60
gttttgatga cccaaactcc actctccctg cctgtcagtc ttggagatcc agcctccatc 120
tcttgcagat ctagtcagag cattgtacat aataatggaa acacctattt agaatggtac 180
ctgcagaaac caggccagtc tccaaagctc ctgatctaca aagtttccaa ccgattttct 240
ggggtcccag acaggttcag tggcagtgga tcagggacag atttcacact caagatcagc 300
agagtggagg ctgaggatct gggagtttat tactgctttc aaggttcaca tgttccgtac 360
acgttcggag gggggaccaa gctggaaata aaa 393

<210> 1214
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<223> 39A light chain variable region with signal sequence

<400> 1214
Met Lys Leu Pro Val Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala
 1   5   10   15
Ser Ser Ser Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val
            20   25   30
Ser Leu Gly Asp Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile
        35   40   45
Val His Asn Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro
    50   55   60
Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser
65   70   75   80
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
                85   90   95
Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
            100   105   110
Phe Gln Gly Ser His Val Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu
        115   120   125
Glu Ile Lys
    130

<210> 1215
<211> 414
<212> DNA
<213> Artificial Sequence

<220>
<223> 124A heavy chain variable region with signal sequence

<400> 1215
atggaatgga cctgggtctt tctcttcctc ctgtcagtaa ctgcaggtgt ccactcccag 60
gttcagctgc agcagtctgg agctgagctg atgaagcctg gggcctcagt gaagatatcc 120
tgcaaggcta ctggctacac attcagtagc aactggatag agtgggtaaa gcagaggcct 180
ggacatggcc ttgagtggat gggagagatt ttacctggaa gtggcagtac tagctacaat 240
gagaagttca agggcaaggc cacattcact gcagatacat cctccaacac agcctacatg 300
cagctcagca gcctgacatc tgaagactct gccgtctatt actgtgcaag atggttacta 360
tattactatg ctatggactt ctggggtcaa ggaacctcag tcaccgtctc ctca   414

<210> 1216
<211> 138
<212> PRT
<213> Artificial Sequence

<220>
<223> 124A heavy chain variable region with signal sequence

<400> 1216
Met Glu Trp Thr Trp Val Phe Leu Phe Leu Leu Ser Val Thr Ala Gly
 1   5   10   15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys
            20   25   30
Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe
        35   40   45
Ser Ser Asn Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu
    50   55   60
Glu Trp Met Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn
65   70   75   80
Glu Lys Phe Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn
                85   90   95
Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val
            100   105   110

```
Tyr Tyr Cys Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Phe Trp
        115                 120                 125
Gly Gln Gly Thr Ser Val Thr Val Ser Ser
    130                 135


<210> 1217
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<223> 124A light chain variable region with signal sequence

<400> 1217
atgaagttgc ctgttaggct gttggtgctg atgttctgga ttcctgcttc agcagtgat 60
gttttgatga cccaaactcc actctccctg cctgtcagtc ttggagatca agcctccatc 120
tcttgcagat ctagtcagag cattgtacat aataatggaa acacctattt agaatggtac 180
ctgcagaaac caggccagtc tccaaagctc ctgatctaca aagtttccaa ccgattttct 240
ggggtcccag acaggttcag tggcagtgga tcagggacag atttcacact caagatcagc 300
agagtggagg ctgaggatct gggagtttat tactgctttc aaggttcaca tgttccgtac 360
acgttcggag gggggaccaa gctggaaata aaa                               393

<210> 1218
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<223> 124A light chain variable region with signal sequence

<400> 1218
Met Lys Leu Pro Val Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala
 1               5                  10                  15
Ser Ser Ser Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val
            20                  25                  30
Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile
        35                  40                  45
Val His Asn Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro
    50                  55                  60
Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser
65                  70                  75                  80
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
                85                  90                  95
Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
            100                 105                 110
Phe Gln Gly Ser His Val Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu
        115                 120                 125
Glu Ile Lys
    130


<210> 1219
<211> 414
<212> DNA
<213> Artificial Sequence

<220>
<223> 175A heavy chain variable region with signal sequence

<400> 1219
atggaatgga cctgggtctt tctcttcctc ctgtcagtaa ctgcaggtgt ccactcccag 60
gttcagctgc agcagtctgg agctgagctg atgaagcctg gggcctcagt gaagatatcc 120
tgcaaggcta ctggctacac attcagtacc cactggatag agtgggtaaa gcagaggcct 180
ggacatggcc ttgagtggat tggagagatt ttacctggaa gtggtagtac tagctacaat 240
gagaagttca agggcaaggc cacattcact gcagatacat cctccaacac agcctacatg 300
caactcagca gcctgacatc tgaggactct gccgtctatt actgtgcaag atggttacta 360
tattactatg ctatggacta ctggggtcaa ggaacctcag tcaccgtctc ctca       414

<210> 1220
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<211> 138
<212> PRT
<213> Artificial Sequence

<220>
<223> 175A heavy chain variable region with signal sequence

<400> 1220
Met Glu Trp Thr Trp Val Phe Leu Phe Leu Leu Ser Val Thr Ala Gly
 1   5   10   15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys
            20   25   30
Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe
        35   40   45
Ser Thr His Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu
    50   55   60
Glu Trp Ile Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn
65   70   75   80
Glu Lys Phe Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn
                85   90   95
Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val
            100   105   110
Tyr Tyr Cys Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr Trp
        115   120   125
Gly Gln Gly Thr Ser Val Thr Val Ser Ser
    130   135

<210> 1221
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<223> 175A light chain variable region with signal sequence

<400> 1221
atgaagttgc ctgttaggct gttggtgctg atgttctgga ttcctgcttc cagcagtgat 60
gttttgatga cccaaactcc actctccctg cctgtcagtc ttggagatca agcctccatc 120
tcttgcagat ctagtcagag cattgtacat agtaatggaa acacctattt agaatggtac 180
ctgcagaaac caggccagtc tccaaagctc ctgatctaca aactttccaa ccgattttct 240
ggggtcccag acaggttcag tggcagtgga tcagggacag atttcacact caagatcagc 300
agagtggagg ctgaggatct gggagtttat tactgctttc aaggttcaca ttttccgtac 360
acgttcggag gggggaccaa gctggaaata aaa   393

<210> 1222
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<223> 175A light chain variable region with signal sequence

<400> 1222
Met Lys Leu Pro Val Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala
 1   5   10   15
Ser Ser Ser Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val
            20   25   30
Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile
        35   40   45
Val His Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro
    50   55   60
Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Leu Ser Asn Arg Phe Ser
65   70   75   80
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
                85   90   95
Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
            100   105   110
Phe Gln Gly Ser His Phe Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu
        115   120   125

Glu Ile Lys
    130

<210> 1223
<211> 414
<212> DNA
<213> Artificial Sequence

<220>
<223> 321D heavy chain variable region with signal sequence

<400> 1223
atggaatgga cctgggtctt tctcttcctc ctgtcagtaa ctgcaggtgt ccactcccag 60
gttcagctgc agcagtctgg agctgagctg atgaagcctg gggccgcagt gaagatatcc 120
tgcaaggcta ctggctacac attcagtagc cactggatag agtgggtaaa gcagaggcct 180
ggacatggcc ttgagtggat tggagagatt ttacctggaa gtggtagtac tgactacaat 240
gagaagttca agggcaaggc cacattcact gcagatacat cctccaacac agcctacatg 300
caactcagca gcctgacatc tgaggactct gccgtctatt actgtgcaag atggttacta 360
tattactatg ctatggacta ctggggtcaa ggaacctcag tcaccgtctc ctca   414

<210> 1224
<211> 138
<212> PRT
<213> Artificial Sequence

<220>
<223> 321D heavy chain variable region with signal sequence

<400> 1224
Met Glu Trp Thr Trp Val Phe Leu Phe Leu Leu Ser Val Thr Ala Gly
 1   5   10   15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys
            20   25   30
Pro Gly Ala Ala Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe
        35   40   45
Ser Ser His Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu
    50   55   60
Glu Trp Ile Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asp Tyr Asn
65   70   75   80
Glu Lys Phe Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn
                85   90   95
Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val
            100   105   110
Tyr Tyr Cys Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr Trp
        115   120   125
Gly Gln Gly Thr Ser Val Thr Val Ser Ser
    130   135

<210> 1225
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<223> 321D light chain variable region with signal sequence

<400> 1225
atgaagttgc ctgttaggct gttggtgctg atgttctgga ttcctgcttc cagcagtgat 60
gttttgatga cccaaactcc actctccctg cctgtcagtc ttggagatca agcctccatc 120
tcttgcagat ctagtcagag cattgtacat agtaatggaa acacctattt agaatggtac 180
ctgcagaaac caggccagtc tccaaagctc ctgatctaca aagtttccaa ccgattttct 240
ggggtcccag acaggttcag tggcagtgga tcagggacag atttcacact caagatcacc 300
agagtggagg ctgaggatct gggagtttat tactgctttc aaggttcaca tgttccgttc 360
acgttcggag gggggaccaa gctggaaata aaa   393

<210> 1226
<211> 131
<212> PRT

<213> Artificial Sequence

<220>
<223> 321D light chain variable region with signal sequence

<400> 1226
Met Lys Leu Pro Val Arg Leu Leu Val Leu Met Phe Trp Ile Pro Ala
 1   5   10   15
Ser Ser Ser Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val
            20   25   30
Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile
        35   40   45
Val His Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro
    50   55   60
Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser
65   70   75   80
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
                85   90   95
Leu Lys Ile Thr Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys
            100   105   110
Phe Gln Gly Ser His Val Pro Phe Thr Phe Gly Gly Gly Thr Lys Leu
        115   120   125
Glu Ile Lys
    130

<210> 1227
<211> 420
<212> DNA
<213> Artificial Sequence

<220>
<223> 141A heavy chain variable region with signal sequence

<400> 1227
atggaatgga cctgggtctt tctcttcctc ctgtcagtaa ctgcaggtgt ccactcccag 60
gttcagctgc agcagtctgg agctgagctg atgaagcctg gggcctcagt gaagatatcc 120
tgcaaggcta ctggctacac attcagtagg tactggatag agtgggtaaa gcagaggcct 180
ggacatggcc ttgagtggat tggagagatt ttacctggaa gtggtagtac taactacaat 240
gagaagttca agggcaaggc cacattcact gcagatacat cctccaacac agcctacatg 300
caactcagca gcctgacatc tgaggactct gccgtctatt actgtgcagg agaggaagtc 360
tatgatggtt acccctggtt tggttactgg ggccaaggga ctctggtcac tgtctctgca 420

<210> 1228
<211> 140
<212> PRT
<213> Artificial Sequence

<220>
<223> 141A heavy chain variable region with signal sequence

<400> 1228
Met Glu Trp Thr Trp Val Phe Leu Phe Leu Leu Ser Val Thr Ala Gly
 1   5   10   15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys
            20   25   30
Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe
        35   40   45
Ser Arg Tyr Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu
    50   55   60
Glu Trp Ile Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn
65   70   75   80
Glu Lys Phe Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn
                85   90   95
Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val
            100   105   110
Tyr Tyr Cys Ala Gly Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly
        115   120   125
Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ala

130 135 140

<210> 1229
<211> 384
<212> DNA
<213> Artificial Sequence

<220>
<223> 141A light chain variable region with signal sequence

<400> 1229
atggattttc aagtgcagat tttcagcttc ctgctaatca gtgcttcagt cataatgtcc 60
agaggacaaa ttgttctctc ccagtctcca gcaatcctgt ctgcatctcc aggggagaag 120
gtcacaatga cttgcagggc cagctcaagt ttaagttaca tgcactggta ccagcagaag 180
ccaggatcct cccccaaacc ctggatttat gccacatcca acctggcttc tggagtccct 240
gctcgcttca gtggcagtgg gtctgggacc tcttactctc tcacaatcag cagagtggag 300
gctgaagatg ctgccactta ttactgccag cagtggagta gtaacccgta cacgttcgga 360
gggggggacca agctggaaat aaaa 384

<210> 1230
<211> 128
<212> PRT
<213> Artificial Sequence

<220>
<223> 141A light chain variable region with signal sequence

<400> 1230
Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu Ile Ser Ala Ser
1 5 10 15
Val Ile Met Ser Arg Gly Gln Ile Val Leu Ser Gln Ser Pro Ala Ile
20 25 30
Leu Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Arg Ala Ser
35 40 45
Ser Ser Leu Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Ser Ser
50 55 60
Pro Lys Pro Trp Ile Tyr Ala Thr Ser Asn Leu Ala Ser Gly Val Pro
65 70 75 80
Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile
85 90 95
Ser Arg Val Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp
100 105 110
Ser Ser Asn Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
115 120 125

<210> 1231
<211> 420
<212> DNA
<213> Artificial Sequence

<220>
<223> 51A heavy chain variable region with signal sequence

<400> 1231
atggaatgga cctgggtctt tctcttcctc ctgtcagtaa ctgcaggtgt ccactcccag 60
gttcagctgc agcagtctgg agctgagctg atgaagcctg gggcctcagt gaagatatcc 120
tgcaaggcta ctggctacac attcagtagg tactggatag agtgggtaaa gcagaggcct 180
ggacatggcc ttgagtggat tggagagatt ttacctggaa gtggtagtac taactacaat 240
gagaagttca agggcaaggc cacattcact gcagatacat cctccaacac agcctacatg 300
caactcagca gcctgacatc tgaggactct gccgtctatt actgtgcaag cgaggaagtc 360
tatgatggtt acccctggtt tggttactgg ggccaaggga ctctggtcac tgtctctgca 420

<210> 1232
<211> 140
<212> PRT
<213> Artificial Sequence

<220>
<223> 51A heavy chain variable region with signal sequence

<400> 1232
Met Glu Trp Thr Trp Val Phe Leu Phe Leu Leu Ser Val Thr Ala Gly
 1   5   10   15
Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys
            20   25   30
Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe
        35   40   45
Ser Arg Tyr Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu
    50   55   60
Glu Trp Ile Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn
65   70   75   80
Glu Lys Phe Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn
                85   90   95
Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val
            100   105   110
Tyr Tyr Cys Ala Ser Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly
        115   120   125
Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ala
    130   135   140

<210> 1233
<211> 384
<212> DNA
<213> Artificial Sequence

<220>
<223> 51A light chain variable region with signal sequence

<400> 1233
atggattttc aagtgcagat tttcagcttc ctgctaatca gtgcttcagt cataatgtcc 60
agaggacaaa ttgttctctc ccagtctcca gcaatcctgt ctgcatctcc aggggagaag 120
gtcacaatga cttgcagggc cagctcaagt ttaagttaca tgcactggta ccagcagagg 180
ccaggatcct cccccaaacc ctggatttat gccacatcca acctggcttc tggagtccct 240
gctcgcttca gtggcagtgg gtctgggacc tcttactctc tcacaatcag cagagtggag 300
gctgaagatg ctgccactta ttactgccag cagtggagta gtaacccgta cacgttcgga 360
gggggggacca agctggaaat aaaa   384

<210> 1234
<211> 128
<212> PRT
<213> Artificial Sequence

<220>
<223> 51A light chain variable region with signal sequence

<400> 1234
Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu Ile Ser Ala Ser
 1   5   10   15
Val Ile Met Ser Arg Gly Gln Ile Val Leu Ser Gln Ser Pro Ala Ile
            20   25   30
Leu Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Arg Ala Ser
        35   40   45
Ser Ser Leu Ser Tyr Met His Trp Tyr Gln Gln Arg Pro Gly Ser Ser
    50   55   60
Pro Lys Pro Trp Ile Tyr Ala Thr Ser Asn Leu Ala Ser Gly Val Pro
65   70   75   80
Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile
                85   90   95
Ser Arg Val Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp
            100   105   110
Ser Ser Asn Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
        115   120   125

<210> 1235
<211> 423

<212> DNA
<213> Artificial Sequence

<220>
<223> 353A heavy chain variable region with signal sequence

<400> 1235
atggattttg ggctgatttt ttttattgtt gctcttttaa aaggggtcca gtgtgaggtg 60
aagcttctcg agtctggagg tggcctggtg cagcctggag gatccctgaa actctcctgt 120
gcagcctcag gattcgattt tagtagatac tggatgaatt gggtccggca ggctccaggg 180
aaagggctag aatggattgg agaaattaat ccagatagca gtacgataaa ctatacgcca 240
tctctaaagg ataaattcat catctccaga gacaacgcca aaaatacgct gtacctgcaa 300
atgagcaaag tgagatatga ggacacagcc ctttattact gtgcaagacc gggggaaatt 360
tattactacg gtagttactg gtttgcttac tggggccaag ggactctggt cactgtctct 420
gca 423

<210> 1236
<211> 141
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A heavy chain variable region with signal sequence

<400> 1236
Met Asp Phe Gly Leu Ile Phe Phe Ile Val Ala Leu Leu Lys Gly Val
 1   5   10   15
Gln Cys Glu Val Lys Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro
            20   25   30
Gly Gly Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Asp Phe Ser
        35   40   45
Arg Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu
    50   55   60
Trp Ile Gly Glu Ile Asn Pro Asp Ser Ser Thr Ile Asn Tyr Thr Pro
65   70   75   80
Ser Leu Lys Asp Lys Phe Ile Ile Ser Arg Asp Asn Ala Lys Asn Thr
                85   90   95
Leu Tyr Leu Gln Met Ser Lys Val Arg Tyr Glu Asp Thr Ala Leu Tyr
            100   105   110
Tyr Cys Ala Arg Pro Gly Glu Ile Tyr Tyr Tyr Gly Ser Tyr Trp Phe
        115   120   125
Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ala
    130   135   140

<210> 1237
<211> 393
<212> DNA
<213> Artificial Sequence

<220>
<223> 353A light chain variable region with signal sequence

<400> 1237
atggagtcag acacactcct gctatgggtg ctgctgctct gggttccagg ctccactggt 60
gacattgtgc tcacccaatc tccagcttct ttggctgtgt ctctagggca gagagccacc 120
atctcctgca gagccagtga aagtgttgaa tattatggca caagtttaat gcagtggttc 180
caacagaaac caggacagcc acccaaactc ctcatctatg ctgcatccaa cgtagaatct 240
agggtccctg ccaggtttag tggcagtggg tctgggacag acttcagcct caacatccat 300
cctgtggagg aggatgatat tgcaatgtat ttctgtcagc aaagtaggaa ggatccttgg 360
acattcggtg gaggcaccaa gctggaaatc aaa 393

<210> 1238
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A light chain variable region with signal sequence

<400> 1238
Met Glu Ser Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
 1   5   10   15
Gly Ser Thr Gly Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala
            20   25   30
Val Ser Leu Gly Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser
        35   40   45
Val Glu Tyr Tyr Gly Thr Ser Leu Met Gln Trp Phe Gln Gln Lys Pro
    50   55   60
Gly Gln Pro Pro Lys Leu Leu Ile Tyr Ala Ala Ser Asn Val Glu Ser
65   70   75   80
Arg Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Ser
                85   90   95
Leu Asn Ile His Pro Val Glu Glu Asp Asp Ile Ala Met Tyr Phe Cys
            100   105   110
Gln Gln Ser Arg Lys Asp Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu
        115   120   125
Glu Ile Lys
    130

<210> 1239
<211> 408
<212> DNA
<213> Artificial Sequence

<220>
<223> 305A heavy chain variable region with signal sequence

<400> 1239
atgaaagtgt tgagtctgtt gtacctgttg acagccattc ctggtatcct gtctgatgta 60
cagcttcagg agtcaggacc tggcctcgtg aaaccttctc agtctctgtc tctcacctgc 120
tctgtcactg gctactccat caccagtggt tattactgga actggatccg gcagtttcca 180
ggaaacaaac tggaatggat gggctacata agctacgacg gtagcaataa ctacaaccca 240
tctctcaaaa atcgaatctc catcactcgt gacacatcta agaaccagtt tttcctgaag 300
ttgaattctg tgactactga ggacacagct acatattact gtgcaagacg gcatgattac 360
ctctcctttg cttactgggg ccaagggact ctggtcattg tctctgca   408

<210> 1240
<211> 136
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A heavy chain variable region with signal sequence

<400> 1240
Met Lys Val Leu Ser Leu Leu Tyr Leu Leu Thr Ala Ile Pro Gly Ile
 1   5   10   15
Leu Ser Asp Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro
            20   25   30
Ser Gln Ser Leu Ser Leu Thr Cys Ser Val Thr Gly Tyr Ser Ile Thr
        35   40   45
Ser Gly Tyr Tyr Trp Asn Trp Ile Arg Gln Phe Pro Gly Asn Lys Leu
    50   55   60
Glu Trp Met Gly Tyr Ile Ser Tyr Asp Gly Ser Asn Asn Tyr Asn Pro
65   70   75   80
Ser Leu Lys Asn Arg Ile Ser Ile Thr Arg Asp Thr Ser Lys Asn Gln
                85   90   95
Phe Phe Leu Lys Leu Asn Ser Val Thr Thr Glu Asp Thr Ala Thr Tyr
            100   105   110
Tyr Cys Ala Arg Arg His Asp Tyr Leu Ser Phe Ala Tyr Trp Gly Gln
        115   120   125
Gly Thr Leu Val Ile Val Ser Ala
    130   135

<210> 1241
<211> 393
<212> DNA

<213> Artificial Sequence

<220>
<223> 305A light chain variable region with signal sequence

<400> 1241
atggagacag acacaatcct gctatgggtg ctgctgctct gggttccagg ctccactggt 60
gacattgtgc tgacccaatc tccagcttct ttggctgtgt ctctagggca gagggccacc 120
atctcctgca aggccagcca aagtgttgat tatgatggtg atagttatat gaactggtac 180
caacagaaac caggacagcc acccaaactc ctcatctatg ctgcatccaa tctagaatct 240
gggatcccag ccaggtttag tggcagtggg tctgggacag acttcaccct caacatccat 300
cctgtggagg aggaggatgc tgcaacctat tactgtcagc aaagtgatga ggatccgtac 360
acgttcggag gggggaccaa gctggaaata aaa 393

<210> 1242
<211> 131
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A light chain variable region with signal sequence

<400> 1242
Met Glu Thr Asp Thr Ile Leu Leu Trp Val Leu Leu Leu Trp Val Pro
 1   5   10   15
Gly Ser Thr Gly Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala
            20   25   30
Val Ser Leu Gly Gln Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser
        35   40   45
Val Asp Tyr Asp Gly Asp Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro
    50   55   60
Gly Gln Pro Pro Lys Leu Leu Ile Tyr Ala Ala Ser Asn Leu Glu Ser
65   70   75   80
Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
                85   90   95
Leu Asn Ile His Pro Val Glu Glu Glu Asp Ala Ala Thr Tyr Tyr Cys
            100   105   110
Gln Gln Ser Asp Glu Asp Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu
        115   120   125
Glu Ile Lys
    130

<210> 1243
<211> 309
<212> PRT
<213> Artificial Sequence

<220>
<223> mouse C10orf54 protein encoded by the CC2 expression
construct

<400> 1243
Met Gly Val Pro Ala Val Pro Glu Ala Ser Ser Pro Arg Trp Gly Thr
 1   5   10   15
Leu Leu Leu Ala Ile Phe Leu Ala Ala Ser Arg Gly Leu Val Ala Ala
            20   25   30
Phe Lys Val Thr Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
        35   40   45
Asn Ala Thr Leu Thr Cys Arg Ile Leu Gly Pro Val Ser Lys Gly His
    50   55   60
Asp Val Thr Ile Tyr Lys Thr Trp Tyr Leu Ser Ser Arg Gly Glu Val
65   70   75   80
Gln Met Cys Lys Glu His Arg Pro Ile Arg Asn Phe Thr Leu Gln His
                85   90   95
Leu Gln His His Gly Ser His Leu Lys Ala Asn Ala Ser His Asp Gln
            100   105   110
Pro Gln Lys His Gly Leu Glu Leu Ala Ser Asp His His Gly Asn Phe
        115   120   125
Ser Ile Thr Leu Arg Asn Val Thr Pro Arg Asp Ser Gly Leu Tyr Cys

```
    130                 135                 140
Cys Leu Val Ile Glu Leu Lys Asn His His Pro Glu Gln Arg Phe Tyr
145                 150                 155                 160
Gly Ser Met Glu Leu Gln Val Gln Ala Gly Lys Gly Ser Gly Ser Thr
                165                 170                 175
Cys Met Ala Ser Asn Glu Gln Asp Ser Asp Ser Ile Thr Ala Ala Ala
            180                 185                 190
Leu Ala Thr Gly Ala Cys Ile Val Gly Ile Leu Cys Leu Pro Leu Ile
        195                 200                 205
Leu Leu Leu Val Tyr Lys Gln Arg Gln Val Ala Ser His Arg Arg Ala
    210                 215                 220
Gln Glu Leu Val Arg Met Asp Ser Ser Asn Thr Gln Gly Ile Glu Asn
225                 230                 235                 240
Pro Gly Phe Glu Thr Thr Pro Pro Phe Gln Gly Met Pro Glu Ala Lys
                245                 250                 255
Thr Arg Pro Pro Leu Ser Tyr Val Ala Gln Arg Gln Pro Ser Glu Ser
            260                 265                 270
Gly Arg Tyr Leu Leu Ser Asp Pro Ser Thr Pro Leu Ser Pro Pro Gly
        275                 280                 285
Pro Gly Asp Val Phe Phe Pro Ser Leu Asp Pro Val Pro Asp Ser Pro
    290                 295                 300
Asn Ser Glu Ala Ile
305
```

<210> 1244
<211> 309
<212> PRT
<213> Artificial Sequence

<220>
<223> rat C10orf54 protein encoded by the CC3 expression construct

<400> 1244

```
Met Gly Val Pro Thr Val Pro Glu Ala Ser Ser Leu Arg Trp Gly Thr
 1               5                  10                  15
Leu Leu Leu Thr Ile Phe Leu Ala Ala Ser Arg Gly Leu Val Ala Ala
            20                  25                  30
Ile Lys Val Thr Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
        35                  40                  45
Asn Val Thr Leu Thr Cys Arg Ile Leu Asp Ser Val Ser Lys Gly His
    50                  55                  60
Asp Ala Asn Phe Leu Lys Thr Trp Phe Leu Ser Ser Arg Gly Glu Val
65                  70                  75                  80
Gln Val Cys Lys Glu His Arg Pro Ile Arg Asn Phe Ile Ser His His
                85                  90                  95
Gln His His Arg Ser His Pro Ala Val Asn Ala Ser His Asp Gln Pro
            100                 105                 110
Gln Lys His Gly Leu Glu Ile Ala Tyr Asp Asn His Gly Asn Phe Ser
        115                 120                 125
Ile Thr Leu His Asn Val Thr Leu Ser Asp Ser Gly Leu Tyr Cys Cys
    130                 135                 140
Leu Val Ile Glu Val Lys His His His Pro Glu Arg Arg Leu Tyr Gly
145                 150                 155                 160
Tyr Met Glu Leu Gln Val Gln Thr Gly Lys Gly Ser Ala Ser Thr Cys
                165                 170                 175
Thr Ala Tyr Pro Pro Asn Glu Gln Asp Ser Asp Ser Ile Thr Ala Ala
            180                 185                 190
Ala Leu Ala Thr Gly Ala Cys Ile Val Gly Ile Leu Cys Leu Pro Leu
        195                 200                 205
Ile Leu Leu Leu Val Tyr Lys Gln Arg Gln Ala Ala Ser His Arg Arg
    210                 215                 220
Ala Gln Glu Leu Val Arg Met Asp Ser Asn Thr Gln Gly Ile Glu Asn
225                 230                 235                 240
Pro Gly Tyr Glu Thr Thr Pro Pro Phe Gln Gly Met Pro Glu Ala Lys
                245                 250                 255
Thr Arg Pro Pro Leu Ser Tyr Val Ala Gln Arg Gln Pro Ser Glu Ser
            260                 265                 270
Gly Arg His Leu Leu Ser Asp Pro Ser Thr Pro Leu Ser Pro Pro Gly
```

```
        275                 280                 285
Pro Gly Asp Val Phe Phe Pro Ser Leu Asp Pro Val Pro Asp Ser Pro
    290                 295                 300
Asn Ser Glu Ala Ile
305
```

<210> 1245
<211> 311
<212> PRT
<213> Artificial Sequence

<220>
<223> cynomolgus C10orf54 protein encoded by the CC4 expression construct

<400> 1245

```
Met Gly Val Pro Thr Ala Pro Glu Ala Gly Cys Trp Arg Trp Gly Ser
 1               5                  10                  15
Leu Leu Phe Ala Leu Phe Leu Ala Ala Ser Leu Gly Pro Val Ala Ala
            20                  25                  30
Phe Lys Val Ala Thr Leu Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
        35                  40                  45
Asn Val Thr Leu Thr Cys Arg Val Phe Gly Pro Val Asp Lys Gly His
    50                  55                  60
Asp Val Thr Phe Tyr Lys Thr Trp Tyr Arg Ser Ser Arg Gly Glu Val
65                  70                  75                  80
Gln Thr Cys Ser Glu Arg Arg Pro Ile Arg Asn Leu Thr Phe Gln Asp
                85                  90                  95
Leu His Leu His His Gly Gly His Gln Ala Ala Asn Thr Ser His Asp
            100                 105                 110
Leu Ala Gln Arg His Gly Leu Glu Ser Ala Ser Asp His His Gly Asn
        115                 120                 125
Phe Ser Ile Thr Met Arg Asn Leu Thr Leu Leu Asp Ser Gly Leu Tyr
    130                 135                 140
Cys Cys Leu Val Val Glu Ile Arg His His His Ser Glu His Arg Val
145                 150                 155                 160
His Gly Ala Met Glu Leu Gln Val Gln Thr Gly Lys Asp Ala Pro Ser
                165                 170                 175
Ser Cys Val Ala Tyr Pro Ser Ser Ser Gln Glu Ser Glu Asn Ile Thr
            180                 185                 190
Ala Ala Ala Leu Ala Thr Gly Ala Cys Ile Val Gly Ile Leu Cys Leu
        195                 200                 205
Pro Leu Ile Leu Leu Leu Val Tyr Lys Gln Arg Gln Ala Ala Ser Asn
    210                 215                 220
Arg Arg Ala Gln Glu Leu Val Arg Met Asp Ser Asn Thr Gln Gly Ile
225                 230                 235                 240
Glu Asn Pro Gly Phe Glu Ala Ser Ser Pro Ala Gln Gly Ile Leu Glu
                245                 250                 255
Ala Lys Val Arg His Pro Leu Ser Tyr Val Ala Gln Arg Gln Pro Ser
            260                 265                 270
Glu Ser Gly Arg His Leu Leu Ser Glu Pro Gly Thr Pro Leu Ser Pro
        275                 280                 285
Pro Gly Pro Gly Asp Val Phe Phe Pro Ser Leu Asp Pro Val Pro Asp
    290                 295                 300
Ser Pro Asn Phe Glu Val Ile
305                 310
```

<210> 1246
<211> 310
<212> PRT
<213> Artificial Sequence

<220>
<223> chimeric protein encoded by the CC5 expression construct

<400> 1246

```
Met Gly Val Pro Thr Ala Leu Glu Ala Gly Ser Trp Arg Trp Gly Ser
 1               5                  10                  15
```

```
Leu Leu Phe Ala Leu Phe Leu Ala Ala Ser Leu Gly Pro Val Ala Ala
            20                  25                  30
Phe Lys Val Ala Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
        35                  40                  45
Asn Val Thr Leu Thr Cys Arg Leu Leu Gly Pro Val Asp Lys Gly His
    50                  55                  60
Asp Val Thr Phe Tyr Lys Thr Trp Tyr Arg Ser Ser Arg Gly Glu Val
65                  70                  75                  80
Gln Thr Cys Ser Glu Arg Arg Pro Ile Arg Asn Leu Thr Phe Gln Asp
                85                  90                  95
Leu His Leu His His Gly Gly His Gln Ala Ala Asn Thr Ser His Asp
            100                 105                 110
Leu Ala Gln Arg His Gly Leu Glu Ser Ala Ser Asp His His Gly Asn
        115                 120                 125
Phe Ser Ile Thr Met Arg Asn Leu Thr Leu Leu Asp Ser Gly Leu Tyr
    130                 135                 140
Cys Cys Leu Val Val Glu Ile Arg His His His Ser Glu His Arg Val
145                 150                 155                 160
His Gly Ala Met Glu Leu Gln Val Gln Ala Gly Lys Gly Ser Gly Ser
                165                 170                 175
Thr Cys Met Ala Ser Asn Glu Gln Asp Ser Asp Ser Ile Thr Ala Ala
            180                 185                 190
Ala Leu Ala Thr Gly Ala Cys Ile Val Gly Ile Leu Cys Leu Pro Leu
        195                 200                 205
Ile Leu Leu Leu Val Tyr Lys Gln Arg Gln Val Ala Ser His Arg Arg
    210                 215                 220
Ala Gln Glu Leu Val Arg Met Asp Ser Ser Asn Thr Gln Gly Ile Glu
225                 230                 235                 240
Asn Pro Gly Phe Glu Thr Thr Pro Pro Phe Gln Gly Met Pro Glu Ala
                245                 250                 255
Lys Thr Arg Pro Pro Leu Ser Tyr Val Ala Gln Arg Gln Pro Ser Glu
            260                 265                 270
Ser Gly Arg Tyr Leu Leu Ser Asp Pro Ser Thr Pro Leu Ser Pro Pro
        275                 280                 285
Gly Pro Gly Asp Val Phe Phe Pro Ser Leu Asp Pro Val Pro Asp Ser
    290                 295                 300
Pro Asn Ser Glu Ala Ile
305                 310
```

<210> 1247
<211> 310
<212> PRT
<213> Artificial Sequence

<220>
<223> chimeric protein encoded by the CC6 expression construct

<400> 1247

```
Met Gly Val Pro Ala Val Pro Glu Ala Ser Ser Pro Arg Trp Gly Thr
 1               5                  10                  15
Leu Leu Leu Ala Ile Phe Leu Ala Ala Ser Arg Gly Leu Val Ala Ala
            20                  25                  30
Phe Lys Val Thr Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
        35                  40                  45
Asn Ala Thr Leu Thr Cys Arg Ile Leu Gly Pro Val Ser Lys Gly His
    50                  55                  60
Asp Val Thr Ile Tyr Lys Thr Trp Tyr Leu Ser Ser Arg Gly Glu Val
65                  70                  75                  80
Gln Met Cys Lys Glu His Arg Pro Ile Arg Asn Phe Thr Leu Gln His
                85                  90                  95
Leu Gln His His Gly Ser His Leu Lys Ala Asn Ala Ser His Asp Gln
            100                 105                 110
Pro Gln Lys His Gly Leu Glu Leu Ala Ser Asp His His Gly Asn Phe
        115                 120                 125
Ser Ile Thr Leu Arg Asn Val Thr Pro Arg Asp Ser Gly Leu Tyr Cys
    130                 135                 140
Cys Leu Val Ile Glu Leu Lys Asn His His Pro Glu Gln Arg Phe Tyr
145                 150                 155                 160
Gly Ser Met Glu Leu Gln Val Gln Thr Gly Lys Asp Ala Pro Ser Asn
```

```
                165                 170                 175
Cys Val Val Tyr Pro Ser Ser Ser Gln Asp Ser Glu Asn Ile Thr Ala
            180                 185                 190
Ala Ala Leu Ala Thr Gly Ala Cys Ile Val Gly Ile Leu Cys Leu Pro
        195                 200                 205
Leu Ile Leu Leu Leu Val Tyr Lys Gln Arg Gln Ala Ala Ser Asn Arg
    210                 215                 220
Arg Ala Gln Glu Leu Val Arg Met Asp Ser Asn Ile Gln Gly Ile Glu
225                 230                 235                 240
Asn Pro Gly Phe Glu Ala Ser Pro Pro Ala Gln Gly Ile Pro Glu Ala
                245                 250                 255
Lys Val Arg His Pro Leu Ser Tyr Val Ala Gln Arg Gln Pro Ser Glu
            260                 265                 270
Ser Gly Arg His Leu Leu Ser Glu Pro Ser Thr Pro Leu Ser Pro Pro
        275                 280                 285
Gly Pro Gly Asp Val Phe Phe Pro Ser Leu Asp Pro Val Pro Asp Ser
    290                 295                 300
Pro Asn Phe Glu Val Ile
305                 310


<210> 1248
<211> 309
<212> PRT
<213> Artificial Sequence

<220>
<223> chimeric protein encoded by the CC7 expression construct

<400> 1248
Met Gly Val Pro Thr Ala Leu Glu Ala Gly Ser Trp Arg Trp Gly Ser
 1                  5                  10                  15
Leu Leu Phe Ala Leu Phe Leu Ala Ala Ser Leu Gly Pro Val Ala Ala
            20                  25                  30
Phe Lys Val Ala Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
        35                  40                  45
Asn Val Thr Leu Thr Cys Arg Leu Leu Gly Pro Val Asp Lys Gly His
    50                  55                  60
Asp Val Thr Phe Tyr Lys Thr Trp Tyr Arg Ser Ser Arg Gly Glu Val
65                  70                  75                  80
Gln Thr Cys Lys Glu His Arg Pro Ile Arg Asn Phe Thr Leu Gln His
                85                  90                  95
Leu Gln His His Gly Ser His Leu Lys Ala Asn Ala Ser His Asp Gln
            100                 105                 110
Pro Gln Lys His Gly Leu Glu Leu Ala Ser Asp His His Gly Asn Phe
        115                 120                 125
Ser Ile Thr Leu Arg Asn Val Thr Pro Arg Asp Ser Gly Leu Tyr Cys
    130                 135                 140
Cys Leu Val Ile Glu Leu Lys Asn His His Pro Glu Gln Arg Phe Tyr
145                 150                 155                 160
Gly Ser Met Glu Leu Gln Val Gln Ala Gly Lys Gly Ser Gly Ser Thr
                165                 170                 175
Cys Met Ala Ser Asn Glu Gln Asp Ser Asp Ser Ile Thr Ala Ala Ala
            180                 185                 190
Leu Ala Thr Gly Ala Cys Ile Val Gly Ile Leu Cys Leu Pro Leu Ile
        195                 200                 205
Leu Leu Leu Val Tyr Lys Gln Arg Gln Val Ala Ser His Arg Arg Ala
    210                 215                 220
Gln Glu Leu Val Arg Met Asp Ser Ser Asn Thr Gln Gly Ile Glu Asn
225                 230                 235                 240
Pro Gly Phe Glu Thr Thr Pro Pro Phe Gln Gly Met Pro Glu Ala Lys
                245                 250                 255
Thr Arg Pro Pro Leu Ser Tyr Val Ala Gln Arg Gln Pro Ser Glu Ser
            260                 265                 270
Gly Arg Tyr Leu Leu Ser Asp Pro Ser Thr Pro Leu Ser Pro Pro Gly
        275                 280                 285
Pro Gly Asp Val Phe Phe Pro Ser Leu Asp Pro Val Pro Asp Ser Pro
    290                 295                 300
Asn Ser Glu Ala Ile
305
```

<210> 1249
<211> 311
<212> PRT
<213> Artificial Sequence

<220>
<223> chimeric protein encoded by the CC8 expression construct

<400> 1249
Met Gly Val Pro Ala Val Pro Glu Ala Ser Ser Pro Arg Trp Gly Thr
 1   5   10   15
Leu Leu Leu Ala Ile Phe Leu Ala Ala Ser Arg Gly Leu Val Ala Ala
            20   25   30
Phe Lys Val Thr Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
        35   40   45
Asn Ala Thr Leu Thr Cys Arg Ile Leu Gly Pro Val Ser Lys Gly His
    50   55   60
Asp Val Thr Ile Tyr Lys Thr Trp Tyr Leu Ser Ser Arg Gly Glu Val
65   70   75   80
Gln Met Cys Ser Glu Arg Arg Pro Ile Arg Asn Leu Thr Phe Gln Asp
                85   90   95
Leu His Leu His His Gly Gly His Gln Ala Ala Asn Thr Ser His Asp
            100   105   110
Leu Ala Gln Arg His Gly Leu Glu Ser Ala Ser Asp His His Gly Asn
        115   120   125
Phe Ser Ile Thr Met Arg Asn Leu Thr Leu Leu Asp Ser Gly Leu Tyr
    130   135   140
Cys Cys Leu Val Val Glu Ile Arg His His His Ser Glu His Arg Val
145   150   155   160
His Gly Ala Met Glu Leu Gln Val Gln Thr Gly Lys Asp Ala Pro Ser
                165   170   175
Asn Cys Val Val Tyr Pro Ser Ser Ser Gln Asp Ser Glu Asn Ile Thr
            180   185   190
Ala Ala Ala Leu Ala Thr Gly Ala Cys Ile Val Gly Ile Leu Cys Leu
        195   200   205
Pro Leu Ile Leu Leu Leu Val Tyr Lys Gln Arg Gln Ala Ala Ser Asn
    210   215   220
Arg Arg Ala Gln Glu Leu Val Arg Met Asp Ser Asn Ile Gln Gly Ile
225   230   235   240
Glu Asn Pro Gly Phe Glu Ala Ser Pro Pro Ala Gln Gly Ile Pro Glu
                245   250   255
Ala Lys Val Arg His Pro Leu Ser Tyr Val Ala Gln Arg Gln Pro Ser
            260   265   270
Glu Ser Gly Arg His Leu Leu Ser Glu Pro Ser Thr Pro Leu Ser Pro
        275   280   285
Pro Gly Pro Gly Asp Val Phe Phe Pro Ser Leu Asp Pro Val Pro Asp
    290   295   300
Ser Pro Asn Phe Glu Val Ile
305   310

<210> 1250
<211> 310
<212> PRT
<213> Artificial Sequence

<220>
<223> chimeric protein encoded by the CC9 expression construct

<400> 1250
Met Gly Val Pro Thr Ala Leu Glu Ala Gly Ser Trp Arg Trp Gly Ser
 1   5   10   15
Leu Leu Phe Ala Leu Phe Leu Ala Ala Ser Leu Gly Pro Val Ala Ala
            20   25   30
Phe Lys Val Ala Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
        35   40   45
Asn Val Thr Leu Thr Cys Arg Leu Leu Gly Pro Val Asp Lys Gly His
    50   55   60

```
Asp Val Thr Phe Tyr Lys Thr Trp Tyr Arg Ser Ser Arg Gly Glu Val
65                  70                  75                  80
Gln Thr Cys Lys Glu His Arg Pro Ile Arg Asn Phe Thr Leu Gln His
                85                  90                  95
Leu Gln His His Gly Ser His Leu Lys Ala Asn Ala Ser His Asp Gln
            100                 105                 110
Pro Gln Lys His Gly Leu Glu Ser Ala Ser Asp His His Gly Asn Phe
        115                 120                 125
Ser Ile Thr Met Arg Asn Leu Thr Leu Leu Asp Ser Gly Leu Tyr Cys
    130                 135                 140
Cys Leu Val Val Glu Ile Arg His His His Ser Glu His Arg Val His
145                 150                 155                 160
Gly Ala Met Glu Leu Gln Val Gln Thr Gly Lys Asp Ala Pro Ser Asn
                165                 170                 175
Cys Val Val Tyr Pro Ser Ser Ser Gln Asp Ser Glu Asn Ile Thr Ala
            180                 185                 190
Ala Ala Leu Ala Thr Gly Ala Cys Ile Val Gly Ile Leu Cys Leu Pro
        195                 200                 205
Leu Ile Leu Leu Leu Val Tyr Lys Gln Arg Gln Ala Ala Ser Asn Arg
    210                 215                 220
Arg Ala Gln Glu Leu Val Arg Met Asp Ser Asn Ile Gln Gly Ile Glu
225                 230                 235                 240
Asn Pro Gly Phe Glu Ala Ser Pro Pro Ala Gln Gly Ile Pro Glu Ala
                245                 250                 255
Lys Val Arg His Pro Leu Ser Tyr Val Ala Gln Arg Gln Pro Ser Glu
            260                 265                 270
Ser Gly Arg His Leu Leu Ser Glu Pro Ser Thr Pro Leu Ser Pro Pro
        275                 280                 285
Gly Pro Gly Asp Val Phe Phe Pro Ser Leu Asp Pro Val Pro Asp Ser
    290                 295                 300
Pro Asn Phe Glu Val Ile
305                 310


<210> 1251
<211> 310
<212> PRT
<213> Artificial Sequence

<220>
<223> chimeric protein encoded by the CC10 expression construct

<400> 1251
Met Gly Val Pro Ala Val Pro Glu Ala Ser Ser Pro Arg Trp Gly Thr
 1                  5                  10                  15
Leu Leu Leu Ala Ile Phe Leu Ala Ala Ser Arg Gly Leu Val Ala Ala
            20                  25                  30
Phe Lys Val Thr Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
        35                  40                  45
Asn Ala Thr Leu Thr Cys Arg Ile Leu Gly Pro Val Ser Lys Gly His
    50                  55                  60
Asp Val Thr Ile Tyr Lys Thr Trp Tyr Leu Ser Ser Arg Gly Glu Val
65                  70                  75                  80
Gln Met Cys Ser Glu Arg Arg Pro Ile Arg Asn Leu Thr Phe Gln Asp
                85                  90                  95
Leu His Leu His His Gly Gly His Gln Ala Ala Asn Thr Ser His Asp
            100                 105                 110
Leu Ala Gln Arg His Gly Leu Glu Leu Ala Ser Asp His His Gly Asn
        115                 120                 125
Phe Ser Ile Thr Leu Arg Asn Val Thr Pro Arg Asp Ser Gly Leu Tyr
    130                 135                 140
Cys Cys Leu Val Ile Glu Leu Lys Asn His His Pro Glu Gln Arg Phe
145                 150                 155                 160
Tyr Gly Ser Met Glu Leu Gln Val Gln Ala Gly Lys Gly Ser Gly Ser
                165                 170                 175
Thr Cys Met Ala Ser Asn Glu Gln Asp Ser Asp Ser Ile Thr Ala Ala
            180                 185                 190
Ala Leu Ala Thr Gly Ala Cys Ile Val Gly Ile Leu Cys Leu Pro Leu
        195                 200                 205
Ile Leu Leu Leu Val Tyr Lys Gln Arg Gln Val Ala Ser His Arg Arg
```

```
    210                 215                 220
Ala Gln Glu Leu Val Arg Met Asp Ser Ser Asn Thr Gln Gly Ile Glu
225                 230                 235                 240
Asn Pro Gly Phe Glu Thr Thr Pro Pro Phe Gln Gly Met Pro Glu Ala
                245                 250                 255
Lys Thr Arg Pro Pro Leu Ser Tyr Val Ala Gln Arg Gln Pro Ser Glu
            260                 265                 270
Ser Gly Arg Tyr Leu Leu Ser Asp Pro Ser Thr Pro Leu Ser Pro Pro
        275                 280                 285
Gly Pro Gly Asp Val Phe Phe Pro Ser Leu Asp Pro Val Pro Asp Ser
    290                 295                 300
Pro Asn Ser Glu Ala Ile
305                 310


<210> 1252
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 5B

<400> 1252
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Pro Gly Val
 1               5                  10                  15
Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Asp Tyr
            20                  25                  30
Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu Glu Trp Ile
        35                  40                  45
Gly Ile Ile Asp Thr Tyr Tyr Gly Asp Ala Thr Tyr Asn Gln Lys Phe
    50                  55                  60
Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65                  70                  75                  80
Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile Tyr Tyr Cys
                85                  90                  95
Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
            100                 105                 110
Val Thr Val Ser Ser
        115


<210> 1253
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 5B

<400> 1253
Asn Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
 1               5                  10                  15
Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Ser Asn Asp
            20                  25                  30
Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
        35                  40                  45
Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
    50                  55                  60
Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Thr Val Gln Ala
65                  70                  75                  80
Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr Ser Ser Pro Arg
                85                  90                  95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105


<210> 1254
<211> 117
<212> PRT
```

<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 46A

<400> 1254
Gln Val Gln Leu Gln Gln Ala Gly Gly Glu Leu Val Arg Pro Gly Val
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Asp Tyr
            20   25   30
Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu Glu Trp Ile
        35   40   45
Gly Ile Ile Asn Thr Tyr Tyr Gly Asp Ala Thr Tyr Asn Gln Lys Phe
    50   55   60
Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile Tyr Tyr Cys
                85   90   95
Ala Arg Arg Ala Gly Thr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
            100   105   110
Val Thr Val Ser Ser
        115

<210> 1255
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 46A

<400> 1255
Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Ser Asn Asp
            20   25   30
Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
        35   40   45
Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
    50   55   60
Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Thr Val Gln Ala
65   70   75   80
Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr Gly Ser Pro Arg
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 1256
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 97A

<400> 1256
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Pro Gly Val
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Asp Tyr
            20   25   30
Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu Glu Trp Ile
        35   40   45
Gly Val Ile Asp Thr Tyr Tyr Gly Asp Ala Ser Asn Asn Gln Lys Phe
    50   55   60
Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile Tyr Tyr Cys
                85   90   95

```
Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
            100                 105                 110
Val Thr Val Ser Ser
        115
```

<210> 1257
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 97A

<400> 1257
```
Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
 1               5                  10                  15
Asp Arg Val Ala Ile Thr Cys Lys Ala Ser Gln Ser Val Ser Asn Asp
            20                  25                  30
Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
        35                  40                  45
Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
    50                  55                  60
Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Thr Val Gln Ala
65                  70                  75                  80
Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr Gly Ser Pro Arg
                85                  90                  95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105
```

<210> 1258
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 128A

<400> 1258
```
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Pro Gly Val
 1               5                  10                  15
Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Asp Tyr
            20                  25                  30
Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu Glu Trp Ile
        35                  40                  45
Gly Leu Ile Asp Thr Tyr Tyr Gly Asp Ala Thr Tyr Asn His Lys Phe
    50                  55                  60
Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Arg Thr Ala Tyr
65                  70                  75                  80
Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile Tyr Tyr Cys
                85                  90                  95
Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
            100                 105                 110
Val Thr Ala Ser Ser
        115
```

<210> 1259
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 128A

<400> 1259
```
Asn Ile Ala Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
 1               5                  10                  15
Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Ser Asn Asp
```

```
            20                  25                  30
Ile Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Arg Leu Leu Ile
        35                  40                  45
Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
    50                  55                  60
Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Thr Val Gln Ala
65                  70                  75                  80
Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr Ser Ser Pro Arg
                85                  90                  95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105


<210> 1260
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 146C

<400> 1260
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Pro Gly Val
 1               5                  10                  15
Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Asp Tyr
            20                  25                  30
Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu Glu Trp Ile
        35                  40                  45
Gly Leu Ile Asp Thr Tyr Tyr Gly Asp Ala Thr Tyr Asn His Lys Phe
    50                  55                  60
Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Arg Thr Ala Tyr
65                  70                  75                  80
Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile Tyr Tyr Cys
                85                  90                  95
Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
            100                 105                 110
Val Thr Ala Ser Ser
        115


<210> 1261
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 146C

<400> 1261
Asn Ile Ala Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
 1               5                  10                  15
Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Ser Asn Asp
            20                  25                  30
Ile Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Arg Leu Leu Ile
        35                  40                  45
Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
    50                  55                  60
Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Thr Val Gln Ala
65                  70                  75                  80
Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr Ser Ser Pro Arg
                85                  90                  95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105


<210> 1262
<211> 117
<212> PRT
<213> Artificial Sequence
```

<220>
<223> VH domain of murine antibody 208A

<400> 1262
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Pro Gly Val
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Asp Tyr
            20   25   30
Gly Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu Glu Trp Ile
        35   40   45
Gly Val Ile Asp Thr Tyr Tyr Gly Asp Ala Gly Tyr Asn Gln Lys Phe
    50   55   60
Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile Tyr Tyr Cys
                85   90   95
Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
            100   105   110
Val Thr Val Ser Ser
        115

<210> 1263
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 208A

<400> 1263
Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Ser Asn Asp
            20   25   30
Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
        35   40   45
Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
    50   55   60
Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Thr Val Gln Ala
65   70   75   80
Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr Ser Ser Pro Arg
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 1264
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 215A

<400> 1264
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
 1   5   10   15
Ser Met Lys Ile Ser Cys Lys Ala Ser Gly Phe Ser Phe Thr Gly Tyr
            20   25   30
Thr Met Asn Trp Val Lys Gln Ser His Gly Lys Asn Leu Glu Trp Ile
        35   40   45
Gly Leu Ile Ser Pro Tyr Asn Gly Gly Thr Ser Tyr Asn Gln Lys Phe
    50   55   60
Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Arg Ala Tyr Gly Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr
            100   105   110

Ser Val Thr Val Ser Ser
        115

<210> 1265
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 215A

<400> 1265
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
 1   5   10   15
Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
            20   25   30
Phe Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Arg Leu Leu Ile Tyr
        35   40   45
Asp Thr Ser Asn Leu Ala Ser Gly Val Pro Leu Arg Phe Ser Gly Ser
    50   55   60
Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu
65   70   75   80
Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro Phe Thr
                85   90   95
Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 1266
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 26A

<400> 1266
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
 1   5   10   15
Ser Met Lys Ile Ser Cys Lys Ala Ser Gly Phe Ser Phe Thr Gly Tyr
            20   25   30
Thr Met Asn Trp Val Lys Gln Ser His Val Lys Asn Leu Glu Trp Ile
        35   40   45
Gly Leu Ile Ser Pro Tyr Asn Gly Gly Thr Ser Tyr Asn Gln Lys Phe
    50   55   60
Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Arg Ala Tyr Gly Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr
            100   105   110
Ser Val Thr Val Ser Ser
        115

<210> 1267
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 26A

<400> 1267
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
 1   5   10   15
Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
            20   25   30
Tyr Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Arg Leu Leu Ile Tyr

```
        35                  40                  45
Asp Thr Ser Asn Leu Ala Ser Gly Val Pro Leu Arg Phe Ser Gly Ser
    50                  55                  60
Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu
65                  70                  75                  80
Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro Phe Thr
                85                  90                  95
Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
            100                 105


<210> 1268
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 164A

<400> 1268
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Glu Lys Pro Gly Ala
 1               5                  10                  15
Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Tyr
            20                  25                  30
Asn Met Asn Trp Val Lys Gln Ser Asn Gly Lys Ser Leu Glu Trp Ile
        35                  40                  45
Gly Asn Ile Asp Pro Tyr Tyr Gly Ser Ala Ser Tyr Asn Gln Lys Phe
    50                  55                  60
Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Thr Thr Ala Tyr
65                  70                  75                  80
Met Gln Leu Lys Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85                  90                  95
Thr Arg Ser Asn Tyr Gly Tyr Tyr Gly Tyr Phe Asp Val Trp Gly Ala
            100                 105                 110
Gly Thr Thr Val Thr Val Ser Ser
        115                 120


<210> 1269
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 164A

<400> 1269
Asn Ile Met Met Thr Gln Ser Pro Ser Ser Leu Ala Val Ser Ala Gly
 1               5                  10                  15
Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
            20                  25                  30
Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
        35                  40                  45
Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
    50                  55                  60
Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65                  70                  75                  80
Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys His Gln
                85                  90                  95
Phe Leu Ser Ser Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Met Lys
            100                 105                 110


<210> 1270
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 164A sequence no. 2
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<400> 1270
Glu Asn Val Leu Thr Gln Ser Pro Ala Ile Met Ala Ala Ser Pro Gly
 1   5   10   15
Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Ser Ser
            20   25   30
Asn Leu His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Thr Lys Phe Trp
        35   40   45
Ile Tyr Arg Thr Ser Asn Leu Ala Ser Glu Val Pro Ala Pro Phe Ser
    50   55   60
Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Val Glu
65   70   75   80
Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Gly Tyr Pro
                85   90   95
Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 1271
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 230A

<400> 1271
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Glu Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Ser
            20   25   30
Asn Met Asn Trp Val Lys Gln Asn Asn Gly Lys Ser Leu Glu Trp Ile
        35   40   45
Gly Asn Ile Asp Pro Tyr Tyr Gly Tyr Thr Thr Tyr Asn Gln Lys Phe
    50   55   60
Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65   70   75   80
Met Gln Leu Lys Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Asp Tyr Asp Tyr Ala Leu Gly Tyr Phe Asp Val Trp Gly Ala
            100   105   110
Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1272
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 230A

<400> 1272
Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
 1   5   10   15
Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
            20   25   30
Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35   40   45
Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65   70   75   80
Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser Gln Ser
                85   90   95
Thr His Val Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 1273
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 53A

<400> 1273
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20   25   30
Phe Met His Trp Val Lys Gln Lys Pro Gly Gln Gly Leu Glu Trp Ile
        35   40   45
Gly Tyr Ile Tyr Pro Tyr Asn Asp Gly Thr Lys Tyr Asn Glu Lys Phe
    50   55   60
Lys Gly Lys Ala Thr Leu Thr Ser Asp Lys Ser Ser Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Phe Asp Tyr Asp Thr Leu Arg Tyr Trp Gly Gln Gly Thr Thr
            100   105   110
Leu Thr Val Ser Ser
        115

<210> 1274
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 53A

<400> 1274
Asp Val Val Leu Thr Gln Thr Pro Leu Ser Leu Pro Val Asn Ile Gly
 1   5   10   15
Asp Gln Ala Ser Ile Ser Cys Lys Ser Thr Lys Ser Leu Leu Asn Ser
            20   25   30
Asp Gly Phe Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35   40   45
Pro Gln Leu Leu Ile Tyr Leu Val Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65   70   75   80
Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Ser
                85   90   95
Asn Tyr Phe Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 1275
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 259A

<400> 1275
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20   25   30
Phe Met His Trp Val Lys Gln Lys Pro Gly Gln Gly Leu Glu Trp Ile
        35   40   45
Gly Tyr Ile Tyr Pro Tyr Asn Asp Gly Thr Lys Tyr Asn Glu Lys Phe
    50   55   60
Lys Gly Lys Ala Thr Leu Thr Ser Asp Lys Ser Ser Ser Thr Ala Tyr

65 70 75 80
Met Asp Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95
Ala Arg Phe Asp Tyr Asp Thr Leu Arg Tyr Trp Gly Gln Gly Thr Thr
100 105 110
Leu Thr Val Ser Ser
115

<210> 1276
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 259A

<400> 1276
Asp Val Val Leu Thr Gln Thr Pro Leu Ser Leu Pro Val Asn Ile Gly
1 5 10 15
Asp Gln Ala Ser Ile Ser Cys Lys Ser Thr Lys Ser Leu Leu Asn Ser
20 25 30
Asp Gly Phe Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45
Pro Gln Leu Leu Ile Tyr Leu Ile Ser Asn Arg Phe Ser Gly Val Pro
50 55 60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80
Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Ser
85 90 95
Asn Tyr Phe Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 1277
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 33A

<400> 1277
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe Ser Ser Tyr
20 25 30
Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu Glu Trp Ile
35 40 45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn Glu Lys Phe
50 55 60
Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
65 70 75 80
Met Gln Leu Ser Gly Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Val Tyr Trp Gly Gln Gly
100 105 110
Thr Ser Val Thr Val Ser Ser
115

<210> 1278
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 33A

<400> 1278

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


<210> 1279
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 39A

<400> 1279
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys Pro Gly Ala
 1               5                  10                  15
Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe Ser Ser Asn
            20                  25                  30
Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu Glu Trp Ile
        35                  40                  45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn Glu Lys Phe
    50                  55                  60
Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
65                  70                  75                  80
Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85                  90                  95
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly
            100                 105                 110
Thr Ser Val Thr Val Ser Ser
        115


<210> 1280
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 39A

<400> 1280
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
 1               5                  10                  15
Asp Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Asn
            20                  25                  30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45
Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50                  55                  60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80
Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
                85                  90                  95
Ser His Val Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110


<210> 1281
<211> 119
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<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 124A

<400> 1281
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe Ser Ser Asn
            20   25   30
Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu Glu Trp Met
        35   40   45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Asn Glu Lys Phe
    50   55   60
Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
65   70   75   80
Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Phe Trp Gly Gln Gly
            100   105   110
Thr Ser Val Thr Val Ser Ser
        115

<210> 1282
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 124A

<400> 1282
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
 1   5   10   15
Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Asn
            20   25   30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35   40   45
Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65   70   75   80
Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
                85   90   95
Ser His Val Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 1283
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 321D

<400> 1283
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys Pro Gly Ala
 1   5   10   15
Ala Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe Ser Ser His
            20   25   30
Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu Glu Trp Ile
        35   40   45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asp Tyr Asn Glu Lys Phe
    50   55   60
Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
65   70   75   80
Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys

```
                85                  90                  95
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly
            100                 105                 110
Thr Ser Val Thr Val Ser Ser
        115


<210> 1284
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 321D

<400> 1284
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
 1               5                  10                  15
Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
            20                  25                  30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45
Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50                  55                  60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80
Thr Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
                85                  90                  95
Ser His Val Pro Phe Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110


<210> 1285
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 51A

<400> 1285
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Met Lys Pro Gly Ala
 1               5                  10                  15
Ser Val Lys Ile Ser Cys Lys Ala Thr Gly Tyr Thr Phe Ser Arg Tyr
            20                  25                  30
Trp Ile Glu Trp Val Lys Gln Arg Pro Gly His Gly Leu Glu Trp Ile
        35                  40                  45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn Glu Lys Phe
    50                  55                  60
Lys Gly Lys Ala Thr Phe Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr
65                  70                  75                  80
Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
                85                  90                  95
Ala Ser Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly Tyr Trp Gly
            100                 105                 110
Gln Gly Thr Leu Val Thr Val Ser Ala
        115                 120


<210> 1286
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 51A

<400> 1286
Gln Ile Val Leu Ser Gln Ser Pro Ala Ile Leu Ser Ala Ser Pro Gly
 1               5                  10                  15
```

Glu Lys Val Thr Met Thr Cys Arg Ala Ser Ser Ser Leu Ser Tyr Met
            20   25   30
His Trp Tyr Gln Gln Arg Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
        35   40   45
Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
    50   55   60
Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Val Glu Ala Glu
65   70   75   80
Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Asn Pro Tyr Thr
                85   90   95
Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 1287
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 353A

<400> 1287
Glu Val Lys Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1   5   10   15
Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Asp Phe Ser Arg Tyr
            20   25   30
Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile
        35   40   45
Gly Glu Ile Asn Pro Asp Ser Ser Thr Ile Asn Tyr Thr Pro Ser Leu
    50   55   60
Lys Asp Lys Phe Ile Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Ser Lys Val Arg Tyr Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Arg Pro Gly Glu Ile Tyr Tyr Tyr Gly Ser Tyr Trp Phe Ala Tyr
            100   105   110
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ala
        115   120

<210> 1288
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 353A

<400> 1288
Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
 1   5   10   15
Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Glu Tyr Tyr
            20   25   30
Gly Thr Ser Leu Met Gln Trp Phe Gln Gln Lys Pro Gly Gln Pro Pro
        35   40   45
Lys Leu Leu Ile Tyr Ala Ala Ser Asn Val Glu Ser Arg Val Pro Ala
    50   55   60
Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Ser Leu Asn Ile His
65   70   75   80
Pro Val Glu Glu Asp Asp Ile Ala Met Tyr Phe Cys Gln Gln Ser Arg
                85   90   95
Lys Asp Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 1289
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> VH domain of murine antibody 305A

<400> 1289
Asp Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
 1   5   10   15
Ser Leu Ser Leu Thr Cys Ser Val Thr Gly Tyr Ser Ile Thr Ser Gly
            20   25   30
Tyr Tyr Trp Asn Trp Ile Arg Gln Phe Pro Gly Asn Lys Leu Glu Trp
        35   40   45
Met Gly Tyr Ile Ser Tyr Asp Gly Ser Asn Asn Tyr Asn Pro Ser Leu
    50   55   60
Lys Asn Arg Ile Ser Ile Thr Arg Asp Thr Ser Lys Asn Gln Phe Phe
65   70   75   80
Leu Lys Leu Asn Ser Val Thr Thr Glu Asp Thr Ala Thr Tyr Tyr Cys
                85   90   95
Ala Arg Arg His Asp Tyr Leu Ser Phe Ala Tyr Trp Gly Gln Gly Thr
            100   105   110
Leu Val Ile Val Ser Ala
        115

<210> 1290
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<223> VL domain of murine antibody 305A

<400> 1290
Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
 1   5   10   15
Gln Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Val Asp Tyr Asp
            20   25   30
Gly Asp Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
        35   40   45
Lys Leu Leu Ile Tyr Ala Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala
    50   55   60
Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His
65   70   75   80
Pro Val Glu Glu Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Ser Asp
                85   90   95
Glu Asp Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 1291
<211> 10
<212> PRT
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<220>
<223> h128A VH CDR1

<400> 1291
Gly Tyr Thr Phe Thr Asp Tyr Gly Met His
 1   5   10

<210> 1292
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR1 according to IMGT

<400> 1292

Gly Tyr Thr Phe Thr Asp Tyr Gly
1 5

<210> 1293
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR1 according to Kabat

<400> 1293
Asp Tyr Gly Met His
1 5

<210> 1294
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR1 according to Chothia

<400> 1294
Gly Tyr Thr Phe Thr Asp Tyr
1 5

<210> 1295
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR1 according to Contact

<400> 1295
Thr Asp Tyr Gly Met His
1 5

<210> 1296
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR1 Exemplary sequence

<400> 1296
Gly Phe Ser Phe Thr Gly Tyr Thr Met Asn
1 5 10

<210> 1297
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR1 according to IMGT

<400> 1297
Gly Phe Ser Phe Thr Gly Tyr Thr
1 5

<210> 1298

<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR1 according to Kabat

<400> 1298
Gly Tyr Thr Met Asn
 1   5

<210> 1299
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR1 according to Chothia

<400> 1299
Gly Phe Ser Phe Thr Gly Tyr
 1   5

<210> 1300
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR1 according to Contact

<400> 1300
Thr Gly Tyr Thr Met Asn
 1   5

<210> 1301
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VH CDR1 exemplary sequence

<400> 1301
Gly Tyr Ser Phe Thr Gly Ser Asn Met Asn
 1   5   10

<210> 1302
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VH CDR1 according to IMGT

<400> 1302
Gly Tyr Ser Phe Thr Gly Ser Asn
 1   5

<210> 1303
<211> 5
<212> PRT
<213> Artificial Sequence

<220>

<223> 230A VH CDR1 according to Kabat

<400> 1303
Gly Ser Asn Met Asn
 1   5

<210> 1304
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VH CDR1 according to Chothia

<400> 1304
Gly Tyr Ser Phe Thr Gly Ser
 1   5

<210> 1305
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VH CDR1 according to Contact

<400> 1305
Thr Gly Ser Asn Met Asn
 1   5

<210> 1306
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR1 exemplary sequence

<400> 1306
Gly Tyr Thr Phe Thr Ser Tyr Phe Met His
 1   5   10

<210> 1307
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR1 according to IMGT

<400> 1307
Gly Tyr Thr Phe Thr Ser Tyr Phe
 1   5

<210> 1308
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR1 according to Kabat

<400> 1308
Ser Tyr Phe Met His
 1   5

<210> 1309
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR1 according to Chothia

<400> 1309
Gly Tyr Thr Phe Thr Ser Tyr
 1   5

<210> 1310
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR1 according to Contact

<400> 1310
Thr Ser Tyr Phe Met His
 1   5

<210> 1311
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A VH CDR1 exemplary sequence

<400> 1311
Gly Tyr Thr Phe Ser Ser Tyr Trp Ile Glu
 1   5   10

<210> 1312
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A VH CDR1 according to IMGT

<400> 1312
Gly Tyr Thr Phe Ser Ser Tyr Trp
 1   5

<210> 1313
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A VH CDR1 according to Kabat

<400> 1313
Ser Tyr Trp Ile Glu
 1   5

<210> 1314
<211> 7
<212> PRT

<213> Artificial Sequence

<220>
<223> 33A VH CDR1 according to Chothia

<400> 1314
Gly Tyr Thr Phe Ser Ser Tyr
 1   5

<210> 1315
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A VH CDR1 according to Contact

<400> 1315
Ser Ser Tyr Trp Ile Glu
 1   5

<210> 1316
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 39A VH CDR1 exemplary sequence

<400> 1316
Gly Tyr Thr Phe Ser Ser Asn Trp Ile Glu
 1   5   10

<210> 1317
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 39A VH CDR1 according to IMGT

<400> 1317
Gly Tyr Thr Phe Ser Ser Asn Trp
 1   5

<210> 1318
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> 39A VH CDR1 according to Kabat

<400> 1318
Ser Asn Trp Ile Glu
 1   5

<210> 1319
<211> 7
<212> PRT
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<220>
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<400> 1319
Gly Tyr Thr Phe Ser Ser Asn
 1   5

<210> 1320
<211> 6
<212> PRT
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<220>
<223> 39A VH CDR1 according to Contact

<400> 1320
Ser Ser Asn Trp Ile Glu
 1   5

<210> 1321
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 321D VH CDR1 exemplary sequence

<400> 1321
Gly Tyr Thr Phe Ser Ser His Trp Ile Glu
 1   5   10

<210> 1322
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 321D VH CDR1 according to IMGT

<400> 1322
Gly Tyr Thr Phe Ser Ser His Trp
 1   5

<210> 1323
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> 321D VH CDR1 according to Kabat

<400> 1323
Ser His Trp Ile Glu
 1   5

<210> 1324
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 321D VH CDR1 according to Chothia

<400> 1324
Gly Tyr Thr Phe Ser Ser His
 1   5

<210> 1325
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 321D VH CDR1 according to Contact

<400> 1325
Ser Ser His Trp Ile Glu
 1   5

<210> 1326
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR1 exemplary sequence

<400> 1326
Gly Phe Asp Phe Ser Arg Tyr Trp Met Asn
 1   5   10

<210> 1327
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR1 according to IMGT

<400> 1327
Gly Phe Asp Phe Ser Arg Tyr Trp
 1   5

<210> 1328
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR1 according to Kabat

<400> 1328
Arg Tyr Trp Met Asn
 1   5

<210> 1329
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR1 according to Chothia

<400> 1329
Gly Phe Asp Phe Ser Arg Tyr
 1   5

<210> 1330
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR1 according to Contact

<400> 1330
Ser Arg Tyr Trp Met Asn
 1   5

<210> 1331
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR1 exemplary sequence

<400> 1331
Gly Tyr Ser Ile Thr Ser Gly Tyr Tyr Trp Asn
 1   5   10

<210> 1332
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR1 according to IMGT

<400> 1332
Gly Tyr Ser Ile Thr Ser Gly Tyr Tyr
 1   5

<210> 1333
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR1 according to Kabat

<400> 1333
Ser Gly Tyr Tyr Trp Asn
 1   5

<210> 1334
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR1 according to Chothia

<400> 1334
Gly Tyr Ser Ile Thr Ser Gly Tyr
 1   5

<210> 1335
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR1 according to Contact

<400> 1335
Thr Ser Gly Tyr Tyr Trp Asn

1 5

<210> 1336
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR2 exemplary sequence

<400> 1336
Ile Ile Asp Thr Tyr Tyr Gly Asp Ala Thr Tyr Asn Gln Lys Phe Lys
1 5 10 15
Gly

<210> 1337
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR2 according to IMGT

<400> 1337
Ile Asp Thr Tyr Tyr Gly Asp Ala
1 5

<210> 1338
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR2 according to Chothia

<400> 1338
Thr Tyr Tyr Gly
1

<210> 1339
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR2 according to Contact

<400> 1339
Trp Ile Gly Ile Ile Asp Thr Tyr Tyr Gly Asp Ala Thr
1 5 10

<210> 1340
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR2 according to AbM

<400> 1340
Ile Ile Asp Thr Tyr Tyr Gly Asp Ala Thr
1 5 10

<210> 1341
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A VH CDR2 exmeplary sequence

<400> 1341
Ile Ile Asn Thr Tyr Tyr Gly Asp Ala Thr Tyr Asn Gln Lys Phe Lys
 1   5   10   15
Gly

<210> 1342
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A VH CDR2 according to IMGT

<400> 1342
Ile Asn Thr Tyr Tyr Gly Asp Ala
 1   5

<210> 1343
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A VH CDR2 according to Contact

<400> 1343
Trp Ile Gly Ile Ile Asn Thr Tyr Tyr Gly Asp Ala Thr
 1   5   10

<210> 1344
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A VH CDR2 according to AbM

<400> 1344
Ile Ile Asn Thr Tyr Tyr Gly Asp Ala Thr
 1   5   10

<210> 1345
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> 97A VH CDR2 exemplary sequence

<400> 1345
Val Ile Asp Thr Tyr Tyr Gly Asp Ala Ser Asn Asn Gln Lys Phe Lys
 1   5   10   15
Gly

<210> 1346

<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 97A VH CDR2 according to Contact

<400> 1346
Trp Ile Gly Val Ile Asp Thr Tyr Tyr Gly Asp Ala Ser
 1   5   10

<210> 1347
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 97A VH CDR2 according to AbM

<400> 1347
Val Ile Asp Thr Tyr Tyr Gly Asp Ala Ser
 1   5   10

<210> 1348
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> 128A VH CDR2 exemplary sequence

<400> 1348
Leu Ile Asp Thr Tyr Tyr Gly Asp Ala Thr Tyr Asn His Lys Phe Lys
 1   5   10   15
Gly

<210> 1349
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 128A VH CDR2 according to Contact

<400> 1349
Trp Ile Gly Leu Ile Asp Thr Tyr Tyr Gly Asp Ala Thr
 1   5   10

<210> 1350
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 128A VH CDR2 according to AbM

<400> 1350
Leu Ile Asp Thr Tyr Tyr Gly Asp Ala Thr
 1   5   10

<210> 1351
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> 108A VH CDR2 exemplary sequence

<400> 1351
Val Ile Asp Thr Tyr Tyr Gly Asp Ala Gly Tyr Asn Gln Lys Phe Lys
 1   5   10   15
Gly

<210> 1352
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 208A VH CDR2 according to Contact

<400> 1352
Trp Ile Gly Val Ile Asp Thr Tyr Tyr Gly Asp Ala Gly
 1   5   10

<210> 1353
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 208A VH CDR2 according to AbM

<400> 1353
Val Ile Asp Thr Tyr Tyr Gly Asp Ala Gly
 1   5   10

<210> 1354
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR2 exemplary sequence

<400> 1354
Leu Ile Ser Pro Tyr Asn Gly Gly Thr Ser Tyr Asn Gln Lys Phe Lys
 1   5   10   15
Gly

<210> 1355
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR2 according to IMGT

<400> 1355
Ile Ser Pro Tyr Asn Gly Gly Thr
 1   5

<210> 1356
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR2 according to Chothia

<400> 1356
Pro Tyr Asn Gly
 1

<210> 1357
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR2 according to Contact

<400> 1357
Trp Ile Gly Leu Ile Ser Pro Tyr Asn Gly Gly Thr Ser
 1   5   10

<210> 1358
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR2 according to AbM

<400> 1358
Leu Ile Ser Pro Tyr Asn Gly Gly Thr Ser
 1   5   10

<210> 1359
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VH CDR2 exemplary sequence

<400> 1359
Asn Ile Asp Pro Tyr Tyr Gly Ser Ala Ser Tyr Asn Gln Lys Phe Lys
 1   5   10   15
Gly

<210> 1360
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VH CDR2 according to IMGT

<400> 1360
Ile Asp Pro Tyr Tyr Gly Ser Ala
 1   5

<210> 1361
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VH CDR2 according to Chothia

<400> 1361
Pro Tyr Tyr Gly
 1

<210> 1362
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VH CDR2 according to Contact

<400> 1362
Trp Ile Gly Asn Ile Asp Pro Tyr Tyr Gly Ser Ala Ser
 1   5   10

<210> 1363
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VH CDR2 according to AbM

<400> 1363
Asn Ile Asp Pro Tyr Tyr Gly Ser Ala Ser
 1   5   10

<210> 1364
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VH CDR2 exemplary sequence

<400> 1364
Asn Ile Asp Pro Tyr Tyr Gly Tyr Thr Thr Tyr Asn Gln Lys Phe Lys
 1   5   10   15
Gly

<210> 1365
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VH CDR2 according to IMGT

<400> 1365
Ile Asp Pro Tyr Tyr Gly Tyr Thr
 1   5

<210> 1366
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VH CDR2 according to Contact

<400> 1366
Trp Ile Gly Asn Ile Asp Pro Tyr Tyr Gly Tyr Thr Thr
 1   5   10

<210> 1367
<211> 10
<212> PRT
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<220>
<223> 230A VH CDR2 according to AbM

<400> 1367
Asn Ile Asp Pro Tyr Tyr Gly Tyr Thr Thr
 1   5   10

<210> 1368
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR2 exemplary sequence

<400> 1368
Tyr Ile Tyr Pro Tyr Asn Asp Gly Thr Lys Tyr Asn Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 1369
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR2 according to IMGT

<400> 1369
Ile Tyr Pro Tyr Asn Asp Gly Thr
 1   5

<210> 1370
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR2 according to Chothia

<400> 1370
Pro Tyr Asn Asp
 1

<210> 1371
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR2 according to Contact

<400> 1371
Trp Ile Gly Tyr Ile Tyr Pro Tyr Asn Asp Gly Thr Lys
 1   5   10

<210> 1372

<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR2 according to AbM

<400> 1372
Tyr Ile Tyr Pro Tyr Asn Asp Gly Thr Lys
 1   5   10

<210> 1373
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 321D VH CDR2 according to Contact

<400> 1373
Trp Ile Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Asp
 1   5   10

<210> 1374
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 321D VH CDR2 according to AbM

<400> 1374
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asp
 1   5   10

<210> 1375
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR2 exmemplary sequence

<400> 1375
Glu Ile Asn Pro Asp Ser Ser Thr Ile Asn Tyr Thr Pro Ser Leu Lys
 1   5   10   15
Asp

<210> 1376
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR2 according to IMGT

<400> 1376
Ile Asn Pro Asp Ser Ser Thr Ile
 1   5

<210> 1377
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR2 according to Chothia

<400> 1377
Pro Asp Ser Ser
 1

<210> 1378
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR2 according to Contact

<400> 1378
Trp Ile Gly Glu Ile Asn Pro Asp Ser Ser Thr Ile Asn
 1   5   10

<210> 1379
<211> 10
<212> PRT
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<220>
<223> 353A VH CDR2 according to AbM

<400> 1379
Glu Ile Asn Pro Asp Ser Ser Thr Ile Asn
 1   5   10

<210> 1380
<211> 16
<212> PRT
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<220>
<223> 305A VH CDR2 exemplary sequence

<400> 1380
Tyr Ile Ser Tyr Asp Gly Ser Asn Asn Tyr Asn Pro Ser Leu Lys Asn
 1   5   10   15

<210> 1381
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR2 according to IMGT

<400> 1381
Ile Ser Tyr Asp Gly Ser Asn
 1   5

<210> 1382
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR2 according to Chothia

<400> 1382

Tyr Asp Gly
 1

<210> 1383
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR2 according to Contact

<400> 1383
Trp Met Gly Tyr Ile Ser Tyr Asp Gly Ser Asn Asn
 1   5   10

<210> 1384
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR2 according to AbM

<400> 1384
Tyr Ile Ser Tyr Asp Gly Ser Asn Asn
 1   5

<210> 1385
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> h128A VH CDR3

<400> 1385
Arg Ala Gly Asn Ala Met Asp Tyr
 1   5

<210> 1386
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR3 according to IMGT

<400> 1386
Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr
 1   5   10

<210> 1387
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR3 according to Chothia

<400> 1387
Ala Gly Asn Ala Met Asp
 1   5

<210> 1388

<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VH CDR3 according to Contact

<400> 1388
Ala Arg Arg Ala Gly Asn Ala Met Asp
 1   5

<210> 1389
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A VH CDR3 exemplary sequence

<400> 1389
Arg Ala Gly Thr Ala Met Asp Tyr
 1   5

<210> 1390
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A VH CDR3 according to IMGT

<400> 1390
Ala Arg Arg Ala Gly Thr Ala Met Asp Tyr
 1   5   10

<210> 1391
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A VH CDR3 according to Chothia

<400> 1391
Ala Gly Thr Ala Met Asp
 1   5

<210> 1392
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A VH CDR3 according to Contact

<400> 1392
Ala Arg Arg Ala Gly Thr Ala Met Asp
 1   5

<210> 1393
<211> 9
<212> PRT
<213> Artificial Sequence

<220>

<223> 215A VH CDR3 exemplary sequence

<400> 1393
Arg Ala Tyr Gly Tyr Ala Met Asp Tyr
 1   5

<210> 1394
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR3 according to IMGT

<400> 1394
Ala Arg Arg Ala Tyr Gly Tyr Ala Met Asp Tyr
 1   5   10

<210> 1395
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR3 according to Chothia

<400> 1395
Ala Tyr Gly Tyr Ala Met Asp
 1   5

<210> 1396
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VH CDR3 according to Contact

<400> 1396
Ala Arg Arg Ala Tyr Gly Tyr Ala Met Asp
 1   5   10

<210> 1397
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VH CDR3 exemplary sequence

<400> 1397
Ser Asn Tyr Gly Tyr Tyr Gly Tyr Phe Asp Val
 1   5   10

<210> 1398
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VH CDR3 according to IMGT

<400> 1398
Thr Arg Ser Asn Tyr Gly Tyr Tyr Gly Tyr Phe Asp Val
 1   5   10

<210> 1399
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VH CDR3 according to Chothia

<400> 1399
Asn Tyr Gly Tyr Tyr Gly Tyr Phe Asp
 1   5

<210> 1400
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VH CDR3 according to Contact

<400> 1400
Thr Arg Ser Asn Tyr Gly Tyr Tyr Gly Tyr Phe Asp
 1   5   10

<210> 1401
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VH CDR3 exemplary sequence

<400> 1401
Asp Tyr Asp Tyr Ala Leu Gly Tyr Phe Asp Val
 1   5   10

<210> 1402
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VH CDR3 according to IMGT

<400> 1402
Ala Arg Asp Tyr Asp Tyr Ala Leu Gly Tyr Phe Asp Val
 1   5   10

<210> 1403
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VH CDR3 according to Chothia

<400> 1403
Tyr Asp Tyr Ala Leu Gly Tyr Phe Asp
 1   5

<210> 1404
<211> 12
<212> PRT

<213> Artificial Sequence

<220>
<223> 230A VH CDR3 according to Contact

<400> 1404
Ala Arg Asp Tyr Asp Tyr Ala Leu Gly Tyr Phe Asp
 1   5   10

<210> 1405
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> ToBeDefined

<400> 1405
Phe Asp Tyr Asp Thr Leu Arg Tyr
 1   5

<210> 1406
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR3 exemplary sequence

<400> 1406
Ala Arg Phe Asp Tyr Asp Thr Leu Arg Tyr
 1   5   10

<210> 1407
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR3 according to IMGT

<400> 1407
Asp Tyr Asp Thr Leu Arg
 1   5

<210> 1408
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR3 according to Chothia

<400> 1408
Ala Arg Phe Asp Tyr Asp Thr Leu Arg
 1   5

<210> 1409
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VH CDR3 according to Contact

<400> 1409
Trp Leu Leu Tyr Tyr Tyr Ala Met Val Tyr
 1   5   10

<210> 1410
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A VH CDR3 according to IMGT

<400> 1410
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Val Tyr
 1   5   10

<210> 1411
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A VH CDR3 according to Chothia

<400> 1411
Leu Leu Tyr Tyr Tyr Ala Met Val
 1   5

<210> 1412
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A VH CDR3 according to Contact

<400> 1412
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Val
 1   5   10

<210> 1413
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 124A VH CDR3 exemplary sequence

<400> 1413
Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Phe
 1   5   10

<210> 1414
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 124A VH CDR3 according to IMGT

<400> 1414
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Phe
 1   5   10

<210> 1415
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> 51A VH CDR3 according to IMGT

<400> 1415
Ala Ser Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly Tyr
 1   5   10

<210> 1416
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 51A VH CDR3 according to Contact

<400> 1416
Ala Ser Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly
 1   5   10

<210> 1417
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR3 exemplary sequence

<400> 1417
Pro Gly Glu Ile Tyr Tyr Tyr Gly Ser Tyr Trp Phe Ala Tyr
 1   5   10

<210> 1418
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR3 according to IMGT

<400> 1418
Ala Arg Pro Gly Glu Ile Tyr Tyr Tyr Gly Ser Tyr Trp Phe Ala Tyr
 1   5   10   15

<210> 1419
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR3 according to Chothia

<400> 1419
Gly Glu Ile Tyr Tyr Tyr Gly Ser Tyr Trp Phe Ala
 1   5   10

<210> 1420
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VH CDR3 according to Contact

<400> 1420
Ala Arg Pro Gly Glu Ile Tyr Tyr Tyr Gly Ser Tyr Trp Phe Ala
 1   5   10   15

<210> 1421
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR3 exemplary sequence

<400> 1421
Arg His Asp Tyr Leu Ser Phe Ala Tyr
 1   5

<210> 1422
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR3 according to IMGT

<400> 1422
Ala Arg Arg His Asp Tyr Leu Ser Phe Ala Tyr
 1   5   10

<210> 1423
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR3 according to Chothia

<400> 1423
His Asp Tyr Leu Ser Phe Ala
 1   5

<210> 1424
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VH CDR3 according to Contact

<400> 1424
Ala Arg Arg His Asp Tyr Leu Ser Phe Ala
 1   5   10

<210> 1425
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VL CDR1 exemplary sequence

<400> 1425
Lys Ala Ser Gln Ser Val Ser Asn Asp Val Ala

1 5 10

<210> 1426
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VL CDR1 according to IMGT

<400> 1426
Gln Ser Val Ser Asn Asp
1 5

<210> 1427
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VL CDR1 according to Chothia

<400> 1427
Ser Gln Ser Val Ser Asn Asp
1 5

<210> 1428
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VL CDR1 according to Contact

<400> 1428
Ser Asn Asp Val Ala Trp Tyr
1 5

<210> 1429
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 128A VL CDR1 exemplary sequence

<400> 1429
Lys Ala Ser Gln Ser Val Ser Asn Asp Ile Ala
1 5 10

<210> 1430
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 128A VL CDR1 according to Contact

<400> 1430
Ser Asn Asp Ile Ala Trp Tyr
1 5

<210> 1431
<211> 10

<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VL CDR1 exemplary sequence

<400> 1431
Ser Ala Ser Ser Ser Val Ser Tyr Met Phe
 1   5   10

<210> 1432
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VL CDR1 according to IMGT

<400> 1432
Ser Ser Val Ser Tyr
 1   5

<210> 1433
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VL CDR1 according to Chothia

<400> 1433
Ser Ser Ser Val Ser Tyr
 1   5

<210> 1434
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VL CDR1 according to Contact

<400> 1434
Ser Tyr Met Phe Trp Tyr
 1   5

<210> 1435
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 26A VL CDR1 exemplary sequence

<400> 1435
Ser Ala Ser Ser Ser Val Ser Tyr Met Tyr
 1   5   10

<210> 1436
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 26A VL CDR1 according to Contact

<400> 1436
Ser Tyr Met Tyr Trp Tyr
 1   5

<210> 1437
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR1 exemplary sequence

<400> 1437
Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn Gln Lys Asn Tyr Leu
 1   5   10   15
Ala

<210> 1438
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR1 according to IMGT

<400> 1438
Gln Ser Val Leu Tyr Ser Ser Asn Gln Lys Asn Tyr
 1   5   10

<210> 1439
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR1 according to Chothia

<400> 1439
Ser Gln Ser Val Leu Tyr Ser Ser Asn Gln Lys Asn Tyr
 1   5   10

<210> 1440
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus CDRs of VH by paratope group (Fig. 18)

<220>
<221> VARIANT
<222> 1
<223> Xaa = Ile, Val or Leu

<220>
<221> VARIANT
<222> 3
<223> Xaa = Asn or Asp

<220>
<221> VARIANT
<222> 10
<223> Xaa = Thr, Ser or Gly

<220>
<221> VARIANT
<222> 11
<223> Xaa = Tyr or Asn

<220>
<221> VARIANT
<222> 13
<223> Xaa = Gln or His

<400> 1440
Xaa Ile Xaa Thr Tyr Tyr Gly Asp Ala Xaa Xaa Asn Xaa Lys Phe Lys
 1   5   10   15
Gly

<210> 1441
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus CDRs of VH by paratope group (Fig. 18)

<220>
<221> VARIANT
<222> 6
<223> Xaa = Ser or Thr

<220>
<221> VARIANT
<222> 7
<223> Xaa = Tyr, Asn or His

<400> 1441
Gly Tyr Thr Phe Ser Xaa Xaa Trp Ile Glu
 1   5   10

<210> 1442
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus CDRs of VH by paratope group (Fig. 18)

<220>
<221> VARIANT
<222> 10
<223> Xaa = Ser or Asp

<400> 1442
Glu Ile Leu Pro Gly Ser Gly Ser Thr Xaa Tyr Asn Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 1443
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus CDRs of VH by paratope group (Fig. 18)

<220>
<221> VARIANT

<222> 10
<223> Xaa = Val or Ile

<400> 1443
Lys Ala Ser Gln Ser Val Ser Asn Asp Xaa Ala
 1   5   10

<210> 1444
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus CDRs of VH by paratope group (Fig. 18)

<220>
<221> VARIANT
<222> 5
<223> Xaa = Ser or Gly

<400> 1444
Gln Gln Asp Tyr Xaa Ser Pro Arg Thr
 1   5

<210> 1445
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus CDRs of VH by paratope group (Fig. 18)

<220>
<221> VARIANT
<222> 2
<223> Xaa = Val or Ile

<400> 1445
Leu Xaa Ser Asn Arg Phe Ser
 1   5

<210> 1446
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus CDRs of VH by paratope group (Fig. 18)

<220>
<221> VARIANT
<222> 9
<223> Xaa = Ser or Asn

<400> 1446
Arg Ser Ser Gln Ser Ile Val His Xaa Asn Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1447
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus CDRs of VH by paratope group (Fig. 18)

<220>
<221> VARIANT
<222> 2
<223> Xaa = Val or Leu

<400> 1447
Lys Xaa Ser Asn Arg Phe Ser
 1   5

<210> 1448
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus CDRs of VH by paratope group (Fig. 18)

<220>
<221> VARIANT
<222> 6
<223> Xaa = Val or Phe

<400> 1448
Phe Gln Gly Ser His Xaa Pro Phe Thr
 1   5

<210> 1449
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Consensus CDRs of VH by paratope group (Fig. 18)

<400> 1449
Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Tyr
 1   5   10

<210> 1450
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR1 #1 according to Contact

<400> 1450
Leu Tyr Ser Ser Asn Gln Lys Asn Tyr Leu Ala Trp Tyr
 1   5   10

<210> 1451
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR1 #2 exemplary sequence

<400> 1451
Ser Ala Ser Ser Ser Val Ser Ser Ser Asn Leu His
 1   5   10

<210> 1452
<211> 7
<212> PRT

<213> Artificial Sequence

<220>
<223> 164A VL CDR1 #2 according to IMGT

<400> 1452
Ser Ser Val Ser Ser Ser Asn
 1   5

<210> 1453
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR1 #2 according to Chothia

<400> 1453
Ser Ser Ser Val Ser Ser Ser Asn
 1   5

<210> 1454
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VL CDR1 exemplary sequence

<400> 1454
Arg Ser Ser Gln Ser Leu Val His Ser Asn Gly Asn Thr Tyr Leu His
 1   5   10   15

<210> 1455
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VL CDR1 according to IMGT

<400> 1455
Gln Ser Leu Val His Ser Asn Gly Asn Thr Tyr
 1   5   10

<210> 1456
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VL CDR1 according to Chothia

<400> 1456
Ser Gln Ser Leu Val His Ser Asn Gly Asn Thr Tyr
 1   5   10

<210> 1457
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VL CDR1 according to Contact

<400> 1457
Val His Ser Asn Gly Asn Thr Tyr Leu His Trp Tyr
 1   5   10

<210> 1458
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VL CDR1 according to Kabat

<400> 1458
Lys Ser Thr Lys Ser Leu Leu Asn Ser Asp Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1459
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VL CDR1 according to IMGT

<400> 1459
Lys Ser Leu Leu Asn Ser Asp Gly Phe Thr Tyr
 1   5   10

<210> 1460
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VL CDR1 according to Chothia

<400> 1460
Thr Lys Ser Leu Leu Asn Ser Asp Gly Phe Thr Tyr
 1   5   10

<210> 1461
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VL CDR1 according to Contact

<400> 1461
Leu Asn Ser Asp Gly Phe Thr Tyr Leu Asp Trp Tyr
 1   5   10

<210> 1462
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> 39A VL CDR1 exemplary sequence

<400> 1462
Arg Ser Ser Gln Ser Ile Val His Asn Asn Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1463
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 39A VL CDR1 according to IMGT

<400> 1463
Gln Ser Ile Val His Asn Asn Gly Asn Thr Tyr
 1   5   10

<210> 1464
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 39A VL CDR1 according to Chothia

<400> 1464
Ser Gln Ser Ile Val His Asn Asn Gly Asn Thr Tyr
 1   5   10

<210> 1465
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> 39A VL CDR1 according to Contact

<400> 1465
Val His Asn Asn Gly Asn Thr Tyr Leu Glu Trp Tyr
 1   5   10

<210> 1466
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VL CDR1 exemplary sequence

<400> 1466
Arg Ala Ser Glu Ser Val Glu Tyr Tyr Gly Thr Ser Leu Met Gln
 1   5   10   15

<210> 1467
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VL CDR1 according to IMGT

<400> 1467
Glu Ser Val Glu Tyr Tyr Gly Thr Ser Leu
 1   5   10

<210> 1468
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VL CDR1 according to Chothia

<400> 1468
Ser Glu Ser Val Glu Tyr Tyr Gly Thr Ser Leu
 1   5   10

<210> 1469
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VL CDR1 according to IMGT

<400> 1469
Lys Ala Ser Gln Ser Val Asp Tyr Asp Gly Asp Ser Tyr Met Asn
 1   5   10   15

<210> 1470
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VL CDR1 exemplary sequence

<400> 1470
Gln Ser Val Asp Tyr Asp Gly Asp Ser Tyr
 1   5   10

<210> 1471
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VL CDR1 according to Chothia

<400> 1471
Ser Gln Ser Val Asp Tyr Asp Gly Asp Ser Tyr
 1   5   10

<210> 1472
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VL CDR1 according to Contact

<400> 1472
Asp Tyr Asp Gly Asp Ser Tyr Met Asn Trp Tyr
 1   5   10

<210> 1473
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VL CDR2 exemplary sequence

<400> 1473
Tyr Ala Ser Asn Arg Tyr Thr

1 5

<210> 1474
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VL CDR2 according to IMGT

<400> 1474
Tyr Ala Ser
1

<210> 1475
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VL CDR2 according to Contact

<400> 1475
Leu Leu Ile Tyr Tyr Ala Ser Asn Arg Tyr
1 5 10

<210> 1476
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VL CDR2 exemplary sequence

<400> 1476
Asp Thr Ser Asn Leu Ala Ser
1 5

<210> 1477
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VL CDR2 according to IMGT

<400> 1477
Asp Thr Ser
1

<210> 1478
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VL CDR2 according to Contact

<400> 1478
Leu Leu Ile Tyr Asp Thr Ser Asn Leu Ala
1 5 10

<210> 1479
<211> 7

<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR2 #2 exmeplary sequence

<400> 1479
Arg Thr Ser Asn Leu Ala Ser
 1   5

<210> 1480
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR2 #2 according to IMGT

<400> 1480
Arg Thr Ser
 1

<210> 1481
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR2 #2 according to Contact

<400> 1481
Phe Trp Ile Tyr Arg Thr Ser Asn Leu Ala
 1   5   10

<210> 1482
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VL CDR2 exemplary sequence

<400> 1482
Leu Val Ser Asn Arg Phe Ser
 1   5

<210> 1483
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VL CDR2 according to IMGT

<400> 1483
Leu Val Ser
 1

<210> 1484
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VL CDR2 according to Contact

<400> 1484
Leu Leu Ile Tyr Leu Val Ser Asn Arg Phe
 1   5   10

<210> 1485
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 259A VL CDR2 exemplary sequence

<400> 1485
Leu Ile Ser Asn Arg Phe Ser
 1   5

<210> 1486
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> 259A VL CDR2 according to IMGT

<400> 1486
Leu Ile Ser
 1

<210> 1487
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 259A VL CDR2 according to Contact

<400> 1487
Leu Leu Ile Tyr Leu Ile Ser Asn Arg Phe
 1   5   10

<210> 1488
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VL CDR2 exemplary sequence

<400> 1488
Ala Ala Ser Asn Val Glu Ser
 1   5

<210> 1489
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VL CDR2 according to IMGT

<400> 1489
Ala Ala Ser
 1

<210> 1490
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VL CDR2 according to Contact

<400> 1490
Leu Leu Ile Tyr Ala Ala Ser Asn Val Glu
 1   5   10

<210> 1491
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VL CDR2 exemplary sequence

<400> 1491
Ala Ala Ser Asn Leu Glu Ser
 1   5

<210> 1492
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VL CDR2 according to Contact

<400> 1492
Leu Leu Ile Tyr Ala Ala Ser Asn Leu Glu
 1   5   10

<210> 1493
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> h128A VL CDR3

<400> 1493
Gln Gln Asp Tyr Ser Ser Pro Arg Thr
 1   5

<210> 1494
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 5B VL CDR3 according to Chothia

<400> 1494
Asp Tyr Ser Ser Pro Arg
 1   5

<210> 1495
<211> 8
<212> PRT

<213> Artificial Sequence

<220>
<223> 5B VL CDR3 according to Contact

<400> 1495
Gln Gln Asp Tyr Ser Ser Pro Arg
 1   5

<210> 1496
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A VL CDR3 according to Kabat

<400> 1496
Gln Gln Asp Tyr Gly Ser Pro Arg Thr
 1   5

<210> 1497
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A VL CDR3 according to Chothia

<400> 1497
Asp Tyr Gly Ser Pro Arg
 1   5

<210> 1498
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 46A VL CDR3 according to Contact

<400> 1498
Gln Gln Asp Tyr Gly Ser Pro Arg
 1   5

<210> 1499
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VL CDR3 according to Kabat

<400> 1499
Gln Gln Trp Ser Ser Tyr Pro Phe Thr
 1   5

<210> 1500
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VL CDR3 according to Chothia

<400> 1500
Trp Ser Ser Tyr Pro Phe
 1   5

<210> 1501
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 215A VL CDR3 according to Contact

<400> 1501
Gln Gln Trp Ser Ser Tyr Pro Phe
 1   5

<210> 1502
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR3 #2 according to Kabat

<400> 1502
Gln Gln Trp Ser Gly Tyr Pro Arg Thr
 1   5

<210> 1503
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR3 #2 according to Chothia

<400> 1503
Trp Ser Gly Tyr Pro Arg
 1   5

<210> 1504
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR3 #2 according to Contact

<400> 1504
Gln Gln Trp Ser Gly Tyr Pro Arg
 1   5

<210> 1505
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VL CDR3 according to Kabat

<400> 1505
Ser Gln Ser Thr His Val Pro Tyr Thr
 1   5

<210> 1506
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VL CDR3 according to Chothia

<400> 1506
Ser Thr His Val Pro Tyr
 1   5

<210> 1507
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 230A VL CDR3 according to Contact

<400> 1507
Ser Gln Ser Thr His Val Pro Tyr
 1   5

<210> 1508
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VL CDR3 according to Kabat

<400> 1508
Phe Gln Ser Asn Tyr Phe Pro Trp Thr
 1   5

<210> 1509
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VL CDR3 according to Chothia

<400> 1509
Ser Asn Tyr Phe Pro Trp
 1   5

<210> 1510
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 53A VL CDR3 according to Contact

<400> 1510
Phe Gln Ser Asn Tyr Phe Pro Trp
 1   5

<210> 1511
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A VL CDR3 according to Kabat

<400> 1511
Phe Gln Gly Ser His Val Pro Tyr Thr
 1   5

<210> 1512
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A VL CDR3 according to Chothia

<400> 1512
Gly Ser His Val Pro Tyr
 1   5

<210> 1513
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 33A VL CDR3 according to Contact

<400> 1513
Phe Gln Gly Ser His Val Pro Tyr
 1   5

<210> 1514
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 321D VL CDR3 according to Kabat

<400> 1514
Phe Gln Gly Ser His Val Pro Phe Thr
 1   5

<210> 1515
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 321D VL CDR3 according to Chothia

<400> 1515
Gly Ser His Val Pro Phe
 1   5

<210> 1516
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 321D VL CDR3 according to Contact

<400> 1516
Phe Gln Gly Ser His Val Pro Phe

1 5

<210> 1517
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VL CDR3 according to Kabat

<400> 1517
Gln Gln Ser Arg Lys Asp Pro Trp Thr
1 5

<210> 1518
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VL CDR3 according to Chothia

<400> 1518
Ser Arg Lys Asp Pro Trp
1 5

<210> 1519
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 353A VL CDR3 according to Contact

<400> 1519
Gln Gln Ser Arg Lys Asp Pro Trp
1 5

<210> 1520
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VL CDR3 according to Kabat

<400> 1520
Gln Gln Ser Asp Glu Asp Pro Tyr Thr
1 5

<210> 1521
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VL CDR3 according to Chothia

<400> 1521
Ser Asp Glu Asp Pro Tyr
1 5

<210> 1522
<211> 8

<212> PRT
<213> Artificial Sequence

<220>
<223> 305A VL CDR3 according to Contact

<400> 1522
Gln Gln Ser Asp Glu Asp Pro Tyr
 1   5

<210> 1523
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR3 according to Kabat

<400> 1523
His Gln Phe Leu Ser Ser Tyr Thr
 1   5

<210> 1524
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR3 according to Chothia

<400> 1524
Phe Leu Ser Ser Tyr
 1   5

<210> 1525
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR3 according to Contact

<400> 1525
His Gln Phe Leu Ser Ser Tyr
 1   5

<210> 1526
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR2 according to Kabat

<400> 1526
Trp Ala Ser Thr Arg Glu Ser
 1   5

<210> 1527
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR2 according to IMGT

<400> 1527
Trp Ala Ser
 1

<210> 1528
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR2 according to Contact

<400> 1528
Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu
 1   5   10

<210> 1529
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VH domain of 26A

<400> 1529
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Ser Phe Thr Gly Tyr
            20   25   30
Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Leu Ile Ser Pro Tyr Asn Gly Gly Thr Ser Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Arg Ala Tyr Gly Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 1530
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VH domain of 26A

<400> 1530
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Phe Ser Phe Thr Gly Tyr
            20   25   30
Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35   40   45
Gly Leu Ile Ser Pro Tyr Asn Gly Gly Thr Ser Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Ala Thr Leu Thr Val Asp Thr Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Arg Ala Tyr Gly Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser

115

<210> 1531
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VH domain of 26A

<400> 1531
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Phe Ser Phe Thr Gly Tyr
            20   25   30
Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35   40   45
Gly Leu Ile Ser Pro Tyr Asn Gly Gly Thr Ser Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Ala Thr Leu Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Arg Ala Tyr Gly Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 1532
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VL domain of 26A

<400> 1532
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
            20   25   30
Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
        35   40   45
Asp Thr Ser Asn Leu Ala Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser
    50   55   60
Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu
65   70   75   80
Asp Phe Ala Val Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro Phe Thr
                85   90   95
Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 1533
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VL domain of 26A

<400> 1533
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Val Thr Met Ser Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
            20   25   30
Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
        35   40   45

Asp Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
    50   55   60
Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Met Glu Pro Glu
65   70   75   80
Asp Phe Ala Val Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro Phe Thr
                85   90   95
Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 1534
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VL domain of 26A

<400> 1534
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Met Ser Ala Ser Pro Gly
 1   5   10   15
Glu Arg Val Thr Met Ser Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
            20   25   30
Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
        35   40   45
Asp Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
    50   55   60
Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Met Glu Pro Glu
65   70   75   80
Asp Phe Ala Val Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro Phe Thr
                85   90   95
Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 1535
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VH domain of 128A

<400> 1535
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Leu Ile Asp Thr Tyr Tyr Gly Asp Ala Thr Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu
            100   105   110
Val Thr Val Ser Ser
        115

<210> 1536
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VH domain of 128A

<400> 1536
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Asp Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35   40   45
Gly Leu Ile Asp Thr Tyr Tyr Gly Asp Ala Thr Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Ala Thr Met Thr Val Asp Thr Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu
            100   105   110
Val Thr Val Ser Ser
        115

<210> 1537
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VH domain of 128A

<400> 1537
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Asp Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35   40   45
Gly Leu Ile Asp Thr Tyr Tyr Gly Asp Ala Thr Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Ala Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Arg Ala Gly Asn Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu
            100   105   110
Val Thr Val Ser Ser
        115

<210> 1538
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VL domain of 128A

<400> 1538
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Ser Asn Asp
            20   25   30
Ile Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Tyr Ser Ser Pro Arg
                85   90   95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 1539
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VL domain of 128A

<400> 1539
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Ser Asn Asp
            20   25   30
Ile Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Val Gln Pro
65   70   75   80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Tyr Ser Ser Pro Arg
                85   90   95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 1540
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VL domain of 128A

<400> 1540
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Ser Asn Asp
            20   25   30
Ile Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Val Gln Pro
65   70   75   80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Asp Tyr Ser Ser Pro Arg
                85   90   95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 1541
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VH domain of 124A

<400> 1541
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Ser Asn
            20   25   30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65   70   75   80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Phe Trp Gly Gln Gly
            100   105   110
Thr Leu Val Thr Val Ser Ser
        115

<210> 1542
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VH domain of 124A

<400> 1542
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Ser Asn
            20   25   30
Trp Ile Glu Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Ala Thr Phe Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Trp Leu Leu Tyr Tyr Tyr Ala Met Asp Phe Trp Gly Gln Gly
            100   105   110
Thr Leu Val Thr Val Ser Ser
        115

<210> 1543
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VH domain of 259A

<400> 1543
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20   25   30
Phe Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Tyr Ile Tyr Pro Tyr Asn Asp Gly Thr Lys Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Phe Asp Tyr Asp Thr Leu Arg Tyr Trp Gly Gln Gly Thr Leu
            100   105   110
Val Thr Val Ser Ser
        115

<210> 1544
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VH domain of 259A

<400> 1544
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20   25   30
Phe Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35   40   45
Gly Tyr Ile Tyr Pro Tyr Asn Asp Gly Thr Lys Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Ala Thr Leu Thr Ser Asp Thr Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Phe Asp Tyr Asp Thr Leu Arg Tyr Trp Gly Gln Gly Thr Leu
            100   105   110
Leu Thr Val Ser Ser
        115

<210> 1545
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VH domain of 259A

<400> 1545
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20   25   30
Phe Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35   40   45
Gly Tyr Ile Tyr Pro Tyr Asn Asp Gly Thr Lys Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Ala Thr Leu Thr Ser Asp Lys Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Phe Asp Tyr Asp Thr Leu Arg Tyr Trp Gly Gln Gly Thr Leu
            100   105   110
Leu Thr Val Ser Ser
        115

<210> 1546
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VL domain of 124A

<400> 1546
Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
 1   5   10   15
Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Asn
            20   25   30
Asn Gly Asn Thr Tyr Leu Glu Trp Phe Gln Gln Arg Pro Gly Gln Ser
        35   40   45
Pro Arg Arg Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65   70   75   80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
                85   90   95
Ser His Val Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 1547
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VL domain of 124A

<400> 1547
Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
 1   5   10   15
Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Asn
            20   25   30
Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Gln Gln Arg Pro Gly Gln Ser
        35   40   45
Pro Arg Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65   70   75   80
Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
                85   90   95
Ser His Val Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 1548
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VL domain of 259A

<400> 1548
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1   5   10   15
Glu Pro Ala Ser Ile Ser Cys Lys Ser Thr Lys Ser Leu Leu Asn Ser
            20   25   30
Asp Gly Phe Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35   40   45
Pro Gln Leu Leu Ile Tyr Leu Ile Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65   70   75   80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Ser
                85   90   95
Asn Tyr Phe Pro Trp Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 1549
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> humanized VL domain of 259A

<400> 1549
Asp Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1   5   10   15
Glu Pro Ala Ser Ile Ser Cys Lys Ser Thr Lys Ser Leu Leu Asn Ser
            20   25   30
Asp Gly Phe Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35   40   45
Pro Gln Leu Leu Ile Tyr Leu Ile Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65   70   75   80

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Ser
85 90 95
Asn Tyr Phe Pro Trp Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 1550
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR1

<400> 1550
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser
20 25

<210> 1551
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR1

<400> 1551
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Met Lys Val Ser Cys Lys Ala Ser
20 25

<210> 1552
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR1

<400> 1552
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala
1 5 10 15
Ser Met Lys Val Ser Cys Lys Ala Ser
20 25

<210> 1553
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR1

<400> 1553
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Ile Ser Cys Lys Ala Ser
20 25

<210> 1554
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR1

<400> 1554
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Met Lys Ile Ser Cys Lys Ala Ser
            20   25

<210> 1555
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR1

<400> 1555
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala
 1   5   10   15
Ser Met Lys Ile Ser Cys Lys Ala Ser
            20   25

<210> 1556
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH CDR2

<400> 1556
Leu Ile Ser Pro Tyr Gln Gly Gly Thr Ser
 1   5   10

<210> 1557
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH CDR2

<400> 1557
Leu Ile Ser Pro Tyr Ser Gly Gly Thr Ser
 1   5   10

<210> 1558
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH CDR2

<400> 1558
Leu Ile Ser Pro Tyr Ala Gly Gly Thr Ser
 1   5   10

<210> 1559
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH CDR2

<400> 1559
Leu Ile Ser Pro Tyr Asp Gly Gly Thr Ser
 1   5   10

<210> 1560
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR3

<400> 1560
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1561
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR3

<400> 1561
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1562
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR3

<400> 1562
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1563
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR3

<400> 1563
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser
 1   5   10   15

Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1564
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR3

<400> 1564
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1565
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR3

<400> 1565
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1566
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR3

<400> 1566
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1567
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VH FR3

<400> 1567
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30

Ala Val Tyr Tyr Cys Ala Arg
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<210> 1568
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1568
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1569
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1569
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1570
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1570
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1571
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1571
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1572
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1572
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1573
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1573
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1574
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1574
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1575
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1575
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1576
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1576
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1577
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1577
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1578
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1578
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1579
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1579
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1580
<211> 39

<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1580
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1581
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1581
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1582
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1582
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1583
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1583
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1584
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1584
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1585
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1585
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1586
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1586
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1587
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1587
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1588
<211> 39
<212> PRT
<213> Artificial Sequence

<220>

<223> H26A VH FR3

<400> 1588
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1589
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1589
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1590
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1590
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1591
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1591
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1592
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1592
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1593
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1593
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1594
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1594
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1595
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1595
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1596
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1596
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Thr Ser

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 1               5                  10                  15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1597
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1597
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Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Lys Ser
 1               5                  10                  15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1598
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1598
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Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Val Asp Lys Ser
 1               5                  10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1599
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1599
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Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Val Asp Thr Ser
 1               5                  10                  15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1600
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1600
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Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Lys Ser
 1               5                  10                  15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
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            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1601
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1601
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Val Asp Thr Ser
 1               5                  10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
        35


<210> 1602
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1602
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Arg Asp Lys Ser
 1               5                  10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
        35


<210> 1603
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1603
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Arg Asp Thr Ser
 1               5                  10                  15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1604
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1604
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Val Asp Lys Ser
 1               5                  10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1605
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1605
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1606
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1606
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1607
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1607
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1608
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1608
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1609
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1609
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1610
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1610
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1611
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1611
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1612
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1612
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1613

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

<220>
<223> H26A VH FR3

<400> 1613
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1614
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VH FR3

<400> 1614
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1615
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VL FR1

<400> 1615
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys
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<210> 1616
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1616
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Met Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys
            20

<210> 1617
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1617
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Ala Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys
            20

<210> 1618
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1618
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Val Thr Leu Ser Cys
            20

<210> 1619
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1619
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Met Ser Cys
            20

<210> 1620
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1620
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Met Ser Ala Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys
            20

<210> 1621
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1621
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Met Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Val Thr Leu Ser Cys
            20

<210> 1622
<211> 23

<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1622
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Met Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Met Ser Cys
            20

<210> 1623
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1623
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Ala Ser Pro Gly
 1   5   10   15
Glu Arg Val Thr Leu Ser Cys
            20

<210> 1624
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1624
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Ala Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Met Ser Cys
            20

<210> 1625
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1625
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Val Thr Met Ser Cys
            20

<210> 1626
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1626
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Met Ser Ala Ser Pro Gly
 1   5   10   15
Glu Arg Val Thr Leu Ser Cys

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<210> 1627
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1627
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Met Ser Ala Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Met Ser Cys
            20

<210> 1628
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1628
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Ala Ser Pro Gly
 1   5   10   15
Glu Arg Val Thr Met Ser Cys
            20

<210> 1629
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR1

<400> 1629
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Met Ser Ala Ser Pro Gly
 1   5   10   15
Glu Arg Val Thr Met Ser Cys
            20

<210> 1630
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VL CDR2

<400> 1630
Asp Thr Ser Gln Leu Ala Ser
 1   5

<210> 1631
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL CDR2

<400> 1631

Asp Thr Ser Ser Leu Ala Ser
 1   5

<210> 1632
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL CDR2

<400> 1632
Asp Thr Ser Ala Leu Ala Ser
 1   5

<210> 1633
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL CDR2

<400> 1633
Asp Thr Ser Asp Leu Ala Ser
 1   5

<210> 1634
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> h26A VL FR3

<400> 1634
Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20   25   30

<210> 1635
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1635
Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20   25   30

<210> 1636
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1636
Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr

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 1               5                  10                  15
Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20                  25                  30


<210> 1637
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1637
Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1               5                  10                  15
Leu Thr Ile Ser Ser Met Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20                  25                  30


<210> 1638
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1638
Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1               5                  10                  15
Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Ala Ala Val Tyr Tyr Cys
            20                  25                  30


<210> 1639
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1639
Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1               5                  10                  15
Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20                  25                  30


<210> 1640
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1640
Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1               5                  10                  15
Leu Thr Ile Ser Ser Met Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20                  25                  30


<210> 1641
<211> 32
<212> PRT
<213> Artificial Sequence
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<220>
<223> H26A VL FR3

<400> 1641
Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Ala Ala Val Tyr Tyr Cys
            20   25   30

<210> 1642
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1642
Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1   5   10   15
Leu Thr Ile Ser Ser Met Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20   25   30

<210> 1643
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1643
Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Ala Ala Val Tyr Tyr Cys
            20   25   30

<210> 1644
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1644
Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Met Glu Pro Glu Asp Ala Ala Val Tyr Tyr Cys
            20   25   30

<210> 1645
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1645
Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1   5   10   15
Leu Thr Ile Ser Ser Met Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
            20   25   30

<210> 1646
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1646
Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Ala Ala Val Tyr Tyr Cys
            20   25   30

<210> 1647
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1647
Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1   5   10   15
Leu Thr Ile Ser Ser Met Glu Pro Glu Asp Ala Ala Val Tyr Tyr Cys
            20   25   30

<210> 1648
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H26A VL FR3

<400> 1648
Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr
 1   5   10   15
Leu Thr Ile Ser Ser Met Glu Pro Glu Asp Ala Ala Val Tyr Tyr Cys
            20   25   30

<210> 1649
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> h128A VH FR1

<400> 1649
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Gly Ser
            20   25

<210> 1650
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR1

<400> 1650
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala

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 1               5                   10                  15
Ser Val Lys Val Ser Cys Lys Gly Ser
            20                  25


<210> 1651
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR1

<400> 1651
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1               5                   10                  15
Ser Val Lys Ile Ser Cys Lys Gly Ser
            20                  25


<210> 1652
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR1

<400> 1652
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala
 1               5                   10                  15
Ser Val Lys Ile Ser Cys Lys Gly Ser
            20                  25


<210> 1653
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1653
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
 1               5                   10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Ile Tyr Tyr Cys Ala Arg
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<210> 1654
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1654
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
 1               5                   10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Ile Tyr Tyr Cys Ala Arg
        35


<210> 1655
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<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1655
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1656
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1656
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1657
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1657
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1658
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1658
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1659
<211> 39
<212> PRT

<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1659
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1660
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1660
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1661
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1661
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1662
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1662
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1663
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1663
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1664
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1664
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1665
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1665
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
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<210> 1666
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1666
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1667
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1667
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1668
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1668
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1669
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1669
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1670
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1670
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1671
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1671

Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1672
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1672
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1673
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1673
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1674
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1674
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Arg Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1675
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1675
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Val Asp Lys Ser
 1   5   10   15

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ile Tyr Tyr Cys Ala Arg
        35

<210> 1676
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1676
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1677
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1677
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ala Tyr Tyr Cys Ala Arg
        35

<210> 1678
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1678
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Ala Tyr Tyr Cys Ala Arg
        35

<210> 1679
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR3

<400> 1679
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Val Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30

Ala Ala Tyr Tyr Cys Ala Arg
        35

<210> 1680
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VH FR4

<400> 1680
Trp Gly Gln Gly Thr Leu Val Thr Ala Ser Ser
 1   5   10

<210> 1681
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR1

<400> 1681
Lys Ala Ser Gln Ser Val Ser Gln Asp Ile Ala
 1   5   10

<210> 1682
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR1

<400> 1682
Lys Ala Ser Gln Ser Val Ser Ser Asp Ile Ala
 1   5   10

<210> 1683
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR1

<400> 1683
Lys Ala Ser Gln Ser Val Ser Ala Asp Ile Ala
 1   5   10

<210> 1684
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR1

<400> 1684
Lys Ala Ser Gln Ser Val Ser Asp Asp Ile Ala
 1   5   10

<210> 1685

<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR2

<400> 1685
Tyr Ala Ser Gln Arg Tyr Thr
 1   5

<210> 1686
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR2

<400> 1686
Tyr Ala Ser Ser Arg Tyr Thr
 1   5

<210> 1687
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR2

<400> 1687
Tyr Ala Ser Ala Arg Tyr Thr
 1   5

<210> 1688
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR2

<400> 1688
Tyr Ala Ser Asp Arg Tyr Thr
 1   5

<210> 1689
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1689
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1690
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1690
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1691
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1691
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Phe Cys
            20   25   30

<210> 1692
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1692
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1693
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1693
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1694
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1694
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Leu Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1695
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1695
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Phe Cys
            20   25   30

<210> 1696
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1696
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Val Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1697
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1697
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Leu Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1698
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1698
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Phe Cys
            20   25   30

<210> 1699
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1699

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Phe Ala Thr Tyr Phe Cys
            20   25   30

<210> 1700
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1700
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Leu Ala Thr Tyr Phe Cys
            20   25   30

<210> 1701
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1701
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Val Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1702
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1702
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Leu Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1703
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1703
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Phe Cys
            20   25   30

<210> 1704
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1704
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Leu Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1705
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1705
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Phe Ala Thr Tyr Phe Cys
            20   25   30

<210> 1706
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1706
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Leu Ala Thr Tyr Phe Cys
            20   25   30

<210> 1707
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1707
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Val Gln Pro Glu Asp Leu Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1708
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1708
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Val Gln Pro Glu Asp Phe Ala Thr Tyr Phe Cys
            20   25   30

<210> 1709
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1709
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Leu Ala Thr Tyr Phe Cys
            20   25   30

<210> 1710
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1710
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Val Gln Pro Glu Asp Leu Ala Thr Tyr Tyr Cys
            20   25   30

<210> 1711
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1711
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Val Gln Pro Glu Asp Phe Ala Thr Tyr Phe Cys
            20   25   30

<210> 1712
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1712
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Leu Thr Ile Ser Ser Val Gln Pro Glu Asp Leu Ala Thr Tyr Phe Cys
            20   25   30

<210> 1713
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1713

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Val Gln Pro Glu Asp Leu Ala Thr Tyr Phe Cys
            20   25   30

<210> 1714
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> H128A VL CDR3

<400> 1714
Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr
 1   5   10   15
Phe Thr Ile Ser Ser Val Gln Pro Glu Asp Leu Ala Thr Tyr Phe Cys
            20   25   30

<210> 1715
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR1

<400> 1715
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Ile Lys Val Ser Cys Lys Ala Ser
            20   25

<210> 1716
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR1

<400> 1716
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Met Lys Pro Gly Ala
 1   5   10   15
Ser Ile Lys Val Ser Cys Lys Ala Ser
            20   25

<210> 1717
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH CDR1

<400> 1717
Gly Tyr Thr Phe Ser Ser Gln Trp Ile Glu
 1   5   10

<210> 1718
<211> 10
<212> PRT
<213> Artificial Sequence

<220>

<223> H124A VH CDR1

<400> 1718
Gly Tyr Thr Phe Ser Ser Ser Trp Ile Glu
 1   5   10

<210> 1719
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH CDR1

<400> 1719
Gly Tyr Thr Phe Ser Ser Ala Trp Ile Glu
 1   5   10

<210> 1720
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH CDR1

<400> 1720
Gly Tyr Thr Phe Ser Ser Asp Trp Ile Glu
 1   5   10

<210> 1721
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1721
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Phe Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1722
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1722
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1723
<211> 39
<212> PRT

<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1723
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Phe Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1724
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1724
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1725
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1725
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Phe Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1726
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1726
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1727
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1727
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Phe Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1728
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1728
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Phe Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1729
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1729
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1730
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1730
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Phe Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1731
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1731
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1732
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1732
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Phe Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1733
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1733
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Phe Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1734
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1734
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1735
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1735

Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Phe Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1736
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1736
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Phe Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1737
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1737
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1738
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1738
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Phe Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1739
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1739
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Phe Thr Ala Asp Thr Ser
 1   5   10   15

Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1740
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1740
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Phe Thr Arg Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1741
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1741
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1742
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VH FR3

<400> 1742
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Phe Thr Ala Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1743
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL FR1

<400> 1743
Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
 1   5   10   15
Gln Pro Ala Ser Ile Ser Cys
            20

<210> 1744
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1744
Arg Ser Ser Gln Ser Ile Val His Gln Asn Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1745
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1745
Arg Ser Ser Gln Ser Ile Val His Ala Asn Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1746
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1746
Arg Ser Ser Gln Ser Ile Val His Asp Asn Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1747
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1747
Arg Ser Ser Gln Ser Ile Val His Asn Gln Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1748
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1748
Arg Ser Ser Gln Ser Ile Val His Asn Ser Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1749
<211> 16
<212> PRT

<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1749
Arg Ser Ser Gln Ser Ile Val His Asn Ala Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1750
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1750
Arg Ser Ser Gln Ser Ile Val His Asn Asn Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1751
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1751
Arg Ser Ser Gln Ser Ile Val His Asn Asn Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1752
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1752
Arg Ser Ser Gln Ser Ile Val His Asn Asn Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1753
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1753
Arg Ser Ser Gln Ser Ile Val His Asn Asn Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1754
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1754
Arg Ser Ser Gln Ser Ile Val His Gln Gln Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1755
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1755
Arg Ser Ser Gln Ser Ile Val His Gln Ser Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1756
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1756
Arg Ser Ser Gln Ser Ile Val His Gln Ala Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1757
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1757
Arg Ser Ser Gln Ser Ile Val His Gln Asn Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1758
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1758
Arg Ser Ser Gln Ser Ile Val His Gln Asn Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1759
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1759
Arg Ser Ser Gln Ser Ile Val His Gln Asn Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1760
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1760
Arg Ser Ser Gln Ser Ile Val His Gln Asn Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1761
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1761
Arg Ser Ser Gln Ser Ile Val His Ala Gln Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1762
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1762
Arg Ser Ser Gln Ser Ile Val His Ala Ser Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1763
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1763
Arg Ser Ser Gln Ser Ile Val His Ala Ala Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1764
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1764
Arg Ser Ser Gln Ser Ile Val His Ala Asn Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1765
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1765
Arg Ser Ser Gln Ser Ile Val His Ala Asn Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1766
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1766
Arg Ser Ser Gln Ser Ile Val His Ala Asn Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1767
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1767
Arg Ser Ser Gln Ser Ile Val His Ala Asn Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1768
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1768
Arg Ser Ser Gln Ser Ile Val His Asp Gln Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1769
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1769
Arg Ser Ser Gln Ser Ile Val His Asp Ser Gly Asn Thr Tyr Leu Glu
 1   5   10   15

<210> 1770
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1770
Arg Ser Ser Gln Ser Ile Val His Asp Ala Gly Asn Thr Tyr Leu Glu

1 5 10 15

<210> 1771
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1771
Arg Ser Ser Gln Ser Ile Val His Asp Asn Gly Gln Thr Tyr Leu Glu
1 5 10 15

<210> 1772
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1772
Arg Ser Ser Gln Ser Ile Val His Asp Asn Gly Ser Thr Tyr Leu Glu
1 5 10 15

<210> 1773
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1773
Arg Ser Ser Gln Ser Ile Val His Asp Asn Gly Ala Thr Tyr Leu Glu
1 5 10 15

<210> 1774
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1774
Arg Ser Ser Gln Ser Ile Val His Asp Asn Gly Asp Thr Tyr Leu Glu
1 5 10 15

<210> 1775
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1775
Arg Ser Ser Gln Ser Ile Val His Asn Gln Gly Gln Thr Tyr Leu Glu
1 5 10 15

<210> 1776
<211> 16

<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1776
Arg Ser Ser Gln Ser Ile Val His Asn Gln Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1777
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1777
Arg Ser Ser Gln Ser Ile Val His Asn Gln Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1778
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1778
Arg Ser Ser Gln Ser Ile Val His Asn Gln Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1779
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1779
Arg Ser Ser Gln Ser Ile Val His Asn Ser Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1780
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1780
Arg Ser Ser Gln Ser Ile Val His Asn Ser Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1781
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1781
Arg Ser Ser Gln Ser Ile Val His Asn Ser Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1782
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<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1782
Arg Ser Ser Gln Ser Ile Val His Asn Ser Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1783
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<212> PRT
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<220>
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<400> 1783
Arg Ser Ser Gln Ser Ile Val His Asn Ala Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1784
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<220>
<223> H124A VL CDR1

<400> 1784
Arg Ser Ser Gln Ser Ile Val His Asn Ala Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1785
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1785
Arg Ser Ser Gln Ser Ile Val His Asn Ala Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1786
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1786
Arg Ser Ser Gln Ser Ile Val His Asn Ala Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1787
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1787
Arg Ser Ser Gln Ser Ile Val His Gln Gln Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1788
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1788
Arg Ser Ser Gln Ser Ile Val His Ala Gln Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1789
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1789
Arg Ser Ser Gln Ser Ile Val His Asp Gln Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1790
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1790
Arg Ser Ser Gln Ser Ile Val His Gln Ser Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1791
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1791
Arg Ser Ser Gln Ser Ile Val His Gln Ala Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1792
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1792
Arg Ser Ser Gln Ser Ile Val His Ala Ser Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1793
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1793
Arg Ser Ser Gln Ser Ile Val His Ala Ala Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1794
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1794
Arg Ser Ser Gln Ser Ile Val His Asp Ser Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1795
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1795
Arg Ser Ser Gln Ser Ile Val His Asp Ala Gly Gln Thr Tyr Leu Glu
 1   5   10   15

<210> 1796
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1796
Arg Ser Ser Gln Ser Ile Val His Gln Gln Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1797
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1797

Arg Ser Ser Gln Ser Ile Val His Ala Gln Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1798
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1798
Arg Ser Ser Gln Ser Ile Val His Asp Gln Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1799
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1799
Arg Ser Ser Gln Ser Ile Val His Gln Ser Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1800
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1800
Arg Ser Ser Gln Ser Ile Val His Gln Ala Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1801
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1801
Arg Ser Ser Gln Ser Ile Val His Ala Ser Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1802
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1802
Arg Ser Ser Gln Ser Ile Val His Ala Ala Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1803

<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1803
Arg Ser Ser Gln Ser Ile Val His Asp Ser Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1804
<211> 16
<212> PRT
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<220>
<223> H124A VL CDR1

<400> 1804
Arg Ser Ser Gln Ser Ile Val His Asp Ala Gly Ser Thr Tyr Leu Glu
 1   5   10   15

<210> 1805
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1805
Arg Ser Ser Gln Ser Ile Val His Gln Gln Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1806
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1806
Arg Ser Ser Gln Ser Ile Val His Ala Gln Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1807
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1807
Arg Ser Ser Gln Ser Ile Val His Asp Gln Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1808
<211> 16
<212> PRT
<213> Artificial Sequence

<220>

<223> H124A VL CDR1

<400> 1808
Arg Ser Ser Gln Ser Ile Val His Gln Ser Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1809
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1809
Arg Ser Ser Gln Ser Ile Val His Gln Ala Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1810
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1810
Arg Ser Ser Gln Ser Ile Val His Ala Ser Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1811
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1811
Arg Ser Ser Gln Ser Ile Val His Ala Ala Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1812
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1812
Arg Ser Ser Gln Ser Ile Val His Asp Ser Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1813
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1813
Arg Ser Ser Gln Ser Ile Val His Asp Ala Gly Ala Thr Tyr Leu Glu
 1   5   10   15

<210> 1814
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1814
Arg Ser Ser Gln Ser Ile Val His Gln Gln Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1815
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1815
Arg Ser Ser Gln Ser Ile Val His Ala Gln Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1816
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1816
Arg Ser Ser Gln Ser Ile Val His Asp Gln Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1817
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1817
Arg Ser Ser Gln Ser Ile Val His Gln Ser Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1818
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1818
Arg Ser Ser Gln Ser Ile Val His Gln Ala Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1819
<211> 16
<212> PRT

<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1819
Arg Ser Ser Gln Ser Ile Val His Ala Ser Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1820
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1820
Arg Ser Ser Gln Ser Ile Val His Ala Ala Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1821
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1821
Arg Ser Ser Gln Ser Ile Val His Asp Ser Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1822
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL CDR1

<400> 1822
Arg Ser Ser Gln Ser Ile Val His Asp Ala Gly Asp Thr Tyr Leu Glu
 1   5   10   15

<210> 1823
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL FR2

<400> 1823
Trp Phe Gln Gln Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile Tyr
 1   5   10   15

<210> 1824
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL FR2

<400> 1824
Trp Tyr Gln Gln Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile Tyr
 1   5   10   15

<210> 1825
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL FR2

<400> 1825
Trp Phe Gln Gln Arg Pro Gly Gln Ser Pro Arg Leu Leu Ile Tyr
 1   5   10   15

<210> 1826
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> H124A VL FR2

<400> 1826
Trp Tyr Gln Gln Arg Pro Gly Gln Ser Pro Arg Leu Leu Ile Tyr
 1   5   10   15

<210> 1827
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR1

<400> 1827
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Met Ser Cys Lys Ala Ser
            20   25

<210> 1828
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR1

<400> 1828
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Met Ser Cys Lys Ala Ser
            20   25

<210> 1829
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1829

Tyr Ile Tyr Pro Tyr Gln Asp Gly Thr Lys
 1   5   10

<210> 1830
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1830
Tyr Ile Tyr Pro Tyr Ser Asp Gly Thr Lys
 1   5   10

<210> 1831
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1831
Tyr Ile Tyr Pro Tyr Ala Asp Gly Thr Lys
 1   5   10

<210> 1832
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1832
Tyr Ile Tyr Pro Tyr Asp Asp Gly Thr Lys
 1   5   10

<210> 1833
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1833
Tyr Ile Tyr Pro Tyr Asn Glu Gly Thr Lys
 1   5   10

<210> 1834
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1834
Tyr Ile Tyr Pro Tyr Asn Ser Gly Thr Lys
 1   5   10

<210> 1835

<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1835
Tyr Ile Tyr Pro Tyr Asn Ala Gly Thr Lys
 1   5   10

<210> 1836
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1836
Tyr Ile Tyr Pro Tyr Gln Glu Gly Thr Lys
 1   5   10

<210> 1837
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1837
Tyr Ile Tyr Pro Tyr Gln Ser Gly Thr Lys
 1   5   10

<210> 1838
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1838
Tyr Ile Tyr Pro Tyr Gln Ala Gly Thr Lys
 1   5   10

<210> 1839
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1839
Tyr Ile Tyr Pro Tyr Ser Glu Gly Thr Lys
 1   5   10

<210> 1840
<211> 10
<212> PRT
<213> Artificial Sequence

<220>

<223> H259A VH CDR2

<400> 1840
Tyr Ile Tyr Pro Tyr Ser Ser Gly Thr Lys
 1   5   10

<210> 1841
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1841
Tyr Ile Tyr Pro Tyr Ser Ala Gly Thr Lys
 1   5   10

<210> 1842
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1842
Tyr Ile Tyr Pro Tyr Ala Glu Gly Thr Lys
 1   5   10

<210> 1843
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1843
Tyr Ile Tyr Pro Tyr Ala Ser Gly Thr Lys
 1   5   10

<210> 1844
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1844
Tyr Ile Tyr Pro Tyr Ala Ala Gly Thr Lys
 1   5   10

<210> 1845
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1845
Tyr Ile Tyr Pro Tyr Asp Glu Gly Thr Lys
 1   5   10

<210> 1846
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1846
Tyr Ile Tyr Pro Tyr Asp Ser Gly Thr Lys
 1   5   10

<210> 1847
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH CDR2

<400> 1847
Tyr Ile Tyr Pro Tyr Asp Ala Gly Thr Lys
 1   5   10

<210> 1848
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1848
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Phe Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1849
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1849
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Phe Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1850
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1850
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Phe Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1851
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1851
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Phe Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1852
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1852
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Phe Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1853
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1853
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Phe Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1854
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1854
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Phe Asp Thr Ser

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 1               5                  10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
        35
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<210> 1855
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1855
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Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Phe Asp Thr Ser
 1               5                  10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
        35
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<210> 1856
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1856
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Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Phe Asp Lys Ser
 1               5                  10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
        35
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<210> 1857
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1857
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Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Phe Asp Thr Ser
 1               5                  10                  15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
        35
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<210> 1858
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1858
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Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Phe Asp Thr Ser
 1               5                  10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
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            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
        35


<210> 1859
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1859
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Phe Asp Lys Ser
 1               5                  10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
        35


<210> 1860
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1860
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Phe Asp Thr Ser
 1               5                  10                  15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
        35


<210> 1861
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1861
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Phe Asp Lys Ser
 1               5                  10                  15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
        35


<210> 1862
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1862
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Phe Asp Thr Ser
 1               5                  10                  15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20                  25                  30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1863
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1863
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Phe Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1864
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1864
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Phe Asp Thr Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1865
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1865
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Phe Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1866
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1866
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Phe Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1867
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1867
Tyr Asn Gln Lys Phe Gln Gly Arg Val Thr Met Thr Phe Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1868
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1868
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Phe Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1869
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1869
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Phe Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1870
<211> 39
<212> PRT
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<220>
<223> H259A VH FR3

<400> 1870
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Met Thr Phe Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1871

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

<220>
<223> H259A VH FR3

<400> 1871
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Phe Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1872
<211> 39
<212> PRT
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<220>
<223> H259A VH FR3

<400> 1872
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Phe Asp Lys Ser
 1   5   10   15
Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1873
<211> 39
<212> PRT
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<220>
<223> H259A VH FR3

<400> 1873
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Phe Asp Thr Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
        35

<210> 1874
<211> 39
<212> PRT
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<220>
<223> H259A VH FR3

<400> 1874
Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Phe Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1875
<211> 39
<212> PRT

<213> Artificial Sequence

<220>
<223> H259A VH FR3

<400> 1875
Tyr Asn Gln Lys Phe Gln Gly Arg Ala Thr Leu Thr Phe Asp Lys Ser
 1   5   10   15
Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
            20   25   30
Ala Val Tyr Tyr Cys Ala Arg
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<210> 1876
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VL FR1

<400> 1876
Asp Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1   5   10   15
Glu Pro Ala Ser Ile Ser Cys
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<210> 1877
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VL FR1

<400> 1877
Asp Val Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1   5   10   15
Glu Pro Ala Ser Ile Ser Cys
            20

<210> 1878
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VL CDR1

<400> 1878
Lys Ser Thr Lys Ser Leu Leu Gln Ser Asp Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1879
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VL CDR1

<400> 1879
Lys Ser Thr Lys Ser Leu Leu Ser Ser Asp Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1880
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VL CDR1

<400> 1880
Lys Ser Thr Lys Ser Leu Leu Ala Ser Asp Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1881
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VL CDR1

<400> 1881
Lys Ser Thr Lys Ser Leu Leu Asp Ser Asp Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1882
<211> 16
<212> PRT
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<400> 1882
Lys Ser Thr Lys Ser Leu Leu Asn Ser Glu Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1883
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<212> PRT
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<220>
<223> H259A VL CDR1

<400> 1883
Lys Ser Thr Lys Ser Leu Leu Asn Ser Ser Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1884
<211> 16
<212> PRT
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<220>
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<400> 1884
Lys Ser Thr Lys Ser Leu Leu Asn Ser Ala Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1885
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<400> 1885
Lys Ser Thr Lys Ser Leu Leu Gln Ser Glu Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1886
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<400> 1886
Lys Ser Thr Lys Ser Leu Leu Gln Ser Ser Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1887
<211> 16
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<220>
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<400> 1887
Lys Ser Thr Lys Ser Leu Leu Gln Ser Ala Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1888
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<400> 1888
Lys Ser Thr Lys Ser Leu Leu Ser Ser Glu Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1889
<211> 16
<212> PRT
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<400> 1889
Lys Ser Thr Lys Ser Leu Leu Ser Ser Ser Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1890
<211> 16
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<220>
<223> H259A VL CDR1

<400> 1890
Lys Ser Thr Lys Ser Leu Leu Ser Ser Ala Gly Phe Thr Tyr Leu Asp

1 5 10 15

<210> 1891
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<400> 1891
Lys Ser Thr Lys Ser Leu Leu Ala Ser Glu Gly Phe Thr Tyr Leu Asp
1 5 10 15

<210> 1892
<211> 16
<212> PRT
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<220>
<223> H259A VL CDR1

<400> 1892
Lys Ser Thr Lys Ser Leu Leu Ala Ser Ser Gly Phe Thr Tyr Leu Asp
1 5 10 15

<210> 1893
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<400> 1893
Lys Ser Thr Lys Ser Leu Leu Ala Ser Ala Gly Phe Thr Tyr Leu Asp
1 5 10 15

<210> 1894
<211> 16
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<223> H259A VL CDR1

<400> 1894
Lys Ser Thr Lys Ser Leu Leu Asp Ser Glu Gly Phe Thr Tyr Leu Asp
1 5 10 15

<210> 1895
<211> 16
<212> PRT
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<220>
<223> H259A VL CDR1

<400> 1895
Lys Ser Thr Lys Ser Leu Leu Asp Ser Ser Gly Phe Thr Tyr Leu Asp
1 5 10 15

<210> 1896
<211> 16

<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VL CDR1

<400> 1896
Lys Ser Thr Lys Ser Leu Leu Asp Ser Ala Gly Phe Thr Tyr Leu Asp
 1   5   10   15

<210> 1897
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> H259A VL CDR2

<400> 1897
Leu Ile Ser Gln Arg Phe Ser
 1   5

<210> 1898
<211> 7
<212> PRT
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<220>
<223> H259A VL CDR2

<400> 1898
Leu Ile Ser Ser Arg Phe Ser
 1   5

<210> 1899
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<212> PRT
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<220>
<223> H259A VL CDR2

<400> 1899
Leu Ile Ser Ala Arg Phe Ser
 1   5

<210> 1900
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<212> PRT
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<220>
<223> H259A VL CDR2

<400> 1900
Leu Ile Ser Asp Arg Phe Ser
 1   5

<210> 1901
<211> 32
<212> PRT
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<220>
<223> H259A VL FR3

<400> 1901
Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 1   5   10   15
Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Leu Tyr Tyr Cys
            20   25   30

<210> 1902
<211> 98
<212> PRT
<213> Artificial Sequence

<220>
<223> Human germlineIMGT IGHV1-46*01 heavy chain

<400> 1902
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20   25   30
Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg

<210> 1903
<211> 98
<212> PRT
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<220>
<223> Human germlineIMGT IGHV3-74*01 heavy chain

<400> 1903
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
Trp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val
        35   40   45
Ser Arg Ile Asn Ser Asp Gly Ser Ser 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 Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg

<210> 1904
<211> 99
<212> PRT
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<220>
<223> Human germlineIMGT IGHV4-61*01 heavy chain

<400> 1904
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1   5   10   15
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Val Ser Ser Gly

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            20                  25                  30
Ser Tyr Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
        35                  40                  45
Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser
    50                  55                  60
Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
65                  70                  75                  80
Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
                85                  90                  95
Cys Ala Arg
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<210> 1905
<211> 101
<212> PRT
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<220>
<223> Human germlineIMGT IGKV2-28*01 light chain

<400> 1905
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Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1               5                  10                  15
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
            20                  25                  30
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
    50                  55                  60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
                85                  90                  95
Leu Gln Thr Pro Pro
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<210> 1906
<211> 101
<212> PRT
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<220>
<223> Human germlineIMGT IGKV2-29*02 light chain

<400> 1906
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Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly
 1               5                  10                  15
Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu His Ser
            20                  25                  30
Asp Gly Lys Thr Tyr Leu Tyr Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45
Pro Gln Leu Leu Ile Tyr Glu Val Ser Ser Arg Phe Ser Gly Val Pro
    50                  55                  60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65                  70                  75                  80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Gly
                85                  90                  95
Ile His Leu Pro Pro
            100
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<210> 1907
<211> 96
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<220>
<223> Human germlineIMGT IGKV1-39*01 light chain

<400> 1907
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro
                85   90   95

<210> 1908
<211> 97
<212> PRT
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<220>
<223> Human germlineIMGT IGKV3-20*01 light chain

<400> 1908
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
            20   25   30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
        35   40   45
Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
    50   55   60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65   70   75   80
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
                85   90   95
Pro

<210> 1909
<211> 97
<212> PRT
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<220>
<223> Human germlineIMGT IGKV3D-20*01 light chain

<400> 1909
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Gly Ala Ser Gln Ser Val Ser Ser Ser
            20   25   30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Leu Ala Pro Arg Leu Leu
        35   40   45
Ile Tyr Asp Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
    50   55   60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65   70   75   80
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
                85   90   95
Pro

<210> 1910
<211> 96
<212> PRT
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<220>
<223> Human germlineIMGT IGKV3-11*01 light chain

<400> 1910
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Tyr
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65   70   75   80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Pro
                85   90   95

<210> 1911
<211> 101
<212> PRT
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<220>
<223> Human germlineIMGT IGKV2-30*01 light chain

<400> 1911
Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
 1   5   10   15
Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val Tyr Ser
            20   25   30
Asp Gly Asn Thr Tyr Leu Asn Trp Phe Gln Gln Arg Pro Gly Gln Ser
        35   40   45
Pro Arg Arg Leu Ile Tyr Lys Val Ser Asn Arg Asp Ser Gly Val Pro
    50   55   60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65   70   75   80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Gly
                85   90   95
Thr His Trp Pro Pro
            100

<210> 1912
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<212> PRT
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<220>
<223> Human germlineIMGT IGKV2-30*02 light chain

<400> 1912
Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
 1   5   10   15
Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
            20   25   30
Asp Gly Asn Thr Tyr Leu Asn Trp Phe Gln Gln Arg Pro Gly Gln Ser
        35   40   45
Pro Arg Arg Leu Ile Tyr Lys Val Ser Asn Arg Asp Ser Gly Val Pro
    50   55   60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65   70   75   80
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Gly
                85   90   95
Thr His Trp Pro Pro
            100

<210> 1913

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<220>
<223> Human germlineIMGT IGKV4-1*01 light chain

<400> 1913
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1   5   10   15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
            20   25   30
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
        35   40   45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
    50   55   60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65   70   75   80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
                85   90   95
Tyr Tyr Ser Thr Pro Pro
            100

<210> 1914
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<400> 1914

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Met Gly Val Pro Xaa Xaa Xaa Glu Ala Xaa Ser Xaa Arg Trp Gly Xaa
1               5                   10                  15

Leu Leu Xaa Ala Xaa Phe Leu Ala Ala Ser Xaa Gly Xaa Val Ala Ala
            20                  25                  30

Phe Lys Val Xaa Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
        35                  40                  45

Asn Xaa Thr Leu Thr Cys Arg Xaa Leu Gly Pro Val Xaa Lys Gly His
    50                  55                  60

Asp Val Thr Xaa Tyr Lys Thr Trp Tyr Xaa Ser Ser Arg Gly Glu Val
65                  70                  75                  80

Gln Xaa Cys Xaa Glu Xaa Arg Pro Ile Arg Asn Xaa Thr Xaa Gln Xaa
                85                  90                  95

Leu Xaa Xaa His His Gly Xaa His Xaa Xaa Ala Asn Xaa Ser His Asp
            100                 105                 110

Xaa Xaa Gln Xaa His Gly Leu Glu Xaa Ala Ser Asp His His Gly Asn
        115                 120                 125

Phe Ser Ile Thr Xaa Arg Asn Xaa Thr Xaa Xaa Asp Ser Gly Leu Tyr
    130                 135                 140

Cys Cys Leu Val Xaa Glu Xaa Xaa Xaa His His Xaa Glu Xaa Arg Xaa
145                 150                 155                 160

Xaa Gly Xaa Met Glu Leu Gln Val Gln Xaa Gly Lys Xaa Xaa Xaa Ser
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165 170 175

Xaa Cys Xaa Xaa Xaa Xaa Ser Xaa Xaa Gln Asp Ser Xaa Xaa Ile Thr
180 185 190

Ala

<210> 1915
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> 164A VL CDR1 #2 according to Contact

<400> 1915
Ser Ser Ser Asn Leu His Trp Tyr
1 5

<210> 1916
<211> 417
<212> DNA
<213> Artificial Sequence

<220>
<223> 230A heavy chain variable region with signal sequence

<400> 1916
atgggatgga cctggatctt tattttaatc ctgtcagtaa ctacaggtgt ccactctgag 60
gtccagctgc agcagtctgg acctgagctg gagaagcctg gcgcttcagt gaagatatcc 120
tgcaaggctt ctggttactc attcactggc tccaacatga actgggtgaa gcagaacaat 180
ggaaagagcc ttgagtggat tggaaatatt gatccttact atggttatac tacctacaac 240
cagaagttca agggcaaggc cacattgact gtagacaaat cctccagcac agcctacatg 300
cagctcaaga gcctgacatc tgaggactct gcagtctatt actgtgcaag agactatgat 360
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<210> 1917
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> 124A VH CDR2 according to Contact

<400> 1917
Trp Met Gly Glu Ile Leu Pro Gly Ser Gly Ser Thr Ser
1 5 10

<210> 1918
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus CDRs of VH by paratope group (Fig. 18)

<400> 1918
Gly Tyr Thr Phe Ser Arg Tyr Trp Ile Glu
1 5 10

<210> 1919
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus CDRs of VH by paratope group (Fig. 18)

<400> 1919
Glu Ile Leu Pro Gly Ser Gly Ser Thr Asn Tyr Asn Glu Lys Phe Lys
 1   5   10   15
Gly

<210> 1920
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus CDRs of VH by paratope group (Fig. 18)

<400> 1920
Glu Glu Val Tyr Asp Gly Tyr Pro Trp Phe Gly Tyr
 1   5   10

<210> 1921
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus CDRs of VH by paratope group (Fig. 18)

<400> 1921
Arg Ala Ser Ser Ser Leu Ser Tyr Met His
 1   5   10

<210> 1922
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus CDRs of VH by paratope group (Fig. 18)

<400> 1922
Ala Thr Ser Asn Leu Ala Ser
 1   5

<210> 1923
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus CDRs of VH by paratope group (Fig. 18)

<400> 1923
Gln Gln Trp Ser Ser Asn Pro Tyr Thr
 1   5