SEQUENCE LISTING

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<120> Antibodies to CD1d

<130> 35115153/WJP

<150> AU 2011904190
<151> 2011-10-14

<150> US 61/547,307
<151> 2011-10-14

<160> 162

<170> PatentIn version 3.5

<210> 1
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> 401.11 variable heavy chain

<400> 1

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

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

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

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

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

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

Ala Lys Asp Met Cys Ser Ser Ser Gly Cys Pro Asp Gly Tyr Phe Asp
            100                 105                 110
```

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

<210> 2
<211> 108
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> 401.11 variable light chain

<400> 2

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile
35 40 45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Ser 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 3
<211> 121
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> 402.8 variable heavy chain

<400> 3

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

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

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
        35                  40                  45

Gly Glu Ile Asn His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
    50                  55                  60

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

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

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

Lys Gly Thr Thr Val Thr Val Ser Ser
        115                 120
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<210> 4
<211> 112
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> 402.8 variable light chain

<400> 4

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

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

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

Leu Ile Phe Ser Ala Ser Asn Lys His Ser Trp Thr Pro Ala Arg Phe
    50                  55                  60

Ser Gly Ser Leu Leu Gly Gly Lys Ala Val Leu Thr Leu Ser Gly Val
65                  70                  75                  80
```

Gln Pro Glu Asp Glu Ala Glu Tyr Tyr Cys Leu Leu Tyr Phe Gly Asp
85 90 95

Thr Gln Leu Gly Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly
100 105 110

<210> 5
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.28 variable heavy chain

<400> 5

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Met Cys Ser Ser Ser Gly Cys Pro Asp Gly Tyr Phe Asp
100 105 110

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

<210> 6
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.28 variable light chain

<400> 6

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1               5                  10                  15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
            20                  25                  30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn 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 Ala Asn Arg Phe Pro Leu
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105

<210>  7
<211>  121
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Synthetic; 402.8.45 variable heavy chain

<400>  7

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

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
        35                  40                  45

Gly Glu Ile Asn Pro Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
    50                  55                  60

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

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
                85                  90                  95
```

Arg Gly Glu Ile Tyr Asp Phe Trp Lys Ser Tyr Met Asp Val Trp Gly
100 105 110

Lys Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 8
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.53 variable heavy chain

<400> 8

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

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Glu Ile Asn His Ala Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
50 55 60

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

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

Arg Gly Glu Ile Tyr Asp Phe Trp Lys Ser Tyr Leu Asp Val Trp Gly
100 105 110

Lys Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 9
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.60 variable heavy chain

<400> 9

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

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

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Glu Ile Asn His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
50 55 60

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

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

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

Lys Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 10
<211> 372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> 401.11 variable heavy chain

<400> 10
caggtgcagc tggtggggtc tgggggaggc ttggtcaagc ctggcaggtc cctgagactc 60

tcctgtgcag cctctggatt cacctttgat gattatgcca tgcactgggt ccggcaagct 120

ccagggaagg gcctggagtg ggtcgcaact attatttgga atagtgctat cataggctat 180

gcggactctg tgaagggccg attcatcgtc tccagagaca acgccaagaa ctccctgtat 240

ctgcaaatga acagtctgag agcagaggac atggccttgt attactgtgc aaaagatatg 300

tgtagtagta gtggttgccc tgatggctac tttgactcct ggggccaggg aaccctggtg 360

acagtgtcct ca 372

<210> 11
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11 variable light chain

<400> 11
gacatccaga tgacccagtc tccatcttcc gtgtctgcat ctgtaggaga cagagtcacc 60

atcacttgtc gggcgagtca gcatattagc agctggttag cctggtatca gcagaaacca 120

gggaaagccc ctaatctcct gatctatgct gcatccagtt tgcaaagtgg ggtctcatca 180

aggttcagcg gcagtggatc tgggacggat ttcactctca ccatcagcag cctgcagcct 240

gaagattttg caacttacta ttgtcaacag gctaacaggt tcccgctcac tttcggcgga 300

gggaccaagc tggagatcaa acgg 324

<210> 12
<211> 363
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> 402.8 variable heavy chain

<400> 12
caggtgcagc tgcaggagtc gggcccagga ctggtgaggc cttcggagac cctgtccctc 60

acctgcgctg tctatggtgg gtccttcagt ggttactact ggagctggat tcgccagccc 120

ccagggaagg ggctggagtg gattggggaa atcaatcata gtggaagcac caactacaac 180

ccgtccctca agagtcgagt caccatatca gtagacacgt ccaagaacca gttctccctg 240

aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt actgtgcgag aggtgagatt 300

tacgattttt ggaactccta catggacgtc tggggcaaag ggaccacggt gacagtgtcc 360

tca 363

<210> 13
<211> 336
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> 402.8 variable light chain

<400> 13
cagactgtgg tgactcagga gccctcactg actgtgtccc caggagggac agtcactctc 60

acctgtgctt ccagctctgg agcagtcagc agtggtaact ttccaaactg gttccagcag 120

aaacctggac aagcaccccg ggcactaatt tttagtgcga gcaacaaaca ttcctggacc 180

cctgcccggt tttcaggctc cctccttggg ggcaaagctg tcctgacact gtcaggtgtg 240

cagccagagg acgaggctga atattactgc ctgctctact ttggtgatac tcaactaggg 300

gtgttcggcg gagggaccaa ggtgaccgtc ctaggt 336

<210> 14
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.28 variable heavy chain

<400> 14
caggtgcagc tcgtgggctc tggcggcgga ctggtcaagc ctggcagaag cctgcggctg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagct ctggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 15
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.28 variable light chain

<400> 15
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaacctgct gatctacgcc gccagcagcc tgcagagcgg cgtgccaagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 16
<211> 363

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.45 variable heavy chain

<400> 16
caggtgcagc tgcaggagtc gggcccagga ctggtgaagc cttcggagac cctgtccctc 60

acctgcgctg tctatggtgg gtccttcagt ggttactact ggagctggat tcgccagccc 120

ccagggaagg ggctggagtg gattggggaa atcaatccca gtggaagcac caactacaac 180

ccgtccctca agagtcgagt caccatatca gtagacacgt ccaagaacca gttctccctg 240

aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt actgtgcgag aggtgagatt 300

tacgattttt ggaagtccta catggacgtc tggggcaaag ggaccacggt gacagtgtcc 360

tca 363

<210> 17
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.53 variable heavy chain

<400> 17
caggtgcagc tgcaggagtc gggcccagga ctggtgaagc cttcggagac cctgtccctc 60

acctgcgctg tctatggtgg gtccttcagt ggttactact ggagctggat tcgccagccc 120

ccagggaagg ggctggagtg gattggggaa atcaatcatg ccggaagcac caactacaac 180

ccgtccctca agagtcgagt caccatatca gtagacacgt ccaagaacca gttctccctg 240

aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt actgtgcgag aggtgagatt 300

tacgattttt ggaagtccta cctggacgtc tggggcaaag ggaccacggt gacagtgtcc 360

tca 363

<210> 18
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.60 variable heavy chain

<400> 18
caggtgcagc tgcaggagtc gggcccagga ctggtgaggc cttcggagac cctgtccctc 60

acctgcgctg tctatggtgg gtccttcagt ggttactact ggagctggat tcgccagccc 120

ccagggaagg ggctggagtg gattggggaa atcaatcata gtggaagcac caactacaac 180

ccgtccctca agagtcgagt caccatatca gtagacacgt ccaagaacca gttctccctg 240

aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt actgtgcgag aggtgagatt 300

tacgattttt acaactccta catggacgtc tggggcaaag ggaccacggt gacagtgtcc 360

tca 363

<210> 19
<211> 322
<212> PRT
<213> Artificial Sequence

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<223> Synthetic; human CD1d synthetic construct

<400> 19

Met Gly Cys Leu Leu Phe Leu Leu Leu Trp Ala Leu Leu Gln Ala Trp
1 5 10 15

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

Ile Ser Ser Phe Ala Asn Ser Ser Trp Thr Arg Thr Asp Gly Leu Ala
35 40 45

Trp Leu Gly Glu Leu Gln Thr His Ser Trp Ser Asn Asp Ser Asp Thr
50 55 60

Val Arg Ser Leu Lys Pro Trp Ser Gln Gly Thr Phe Ser Asp Gln Gln
65 70 75 80

Trp Glu Thr Leu Gln His Ile Phe Arg Val Tyr Arg Ser Ser Phe Thr
85 90 95

Arg Asp Val Lys Glu Phe Ala Lys Met Leu Arg Leu Ser Tyr Pro Leu
100 105 110

Glu Leu Gln Val Ser Ala Gly Cys Glu Val His Pro Gly Asn Ala Ser
115 120 125

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

Gln Gly Thr Ser Trp Glu Pro Thr Gln Glu Ala Pro Leu Trp Val Asn
145 150 155 160

```
Leu Ala Ile Gln Val Leu Asn Gln Asp Lys Trp Thr Arg Glu Thr Val
                165                 170                 175

Gln Trp Leu Leu Asn Gly Thr Cys Pro Gln Phe Val Ser Gly Leu Leu
            180                 185                 190

Glu Ser Gly Lys Ser Glu Leu Lys Lys Gln Val Lys Pro Lys Ala Trp
        195                 200                 205

Leu Ser Arg Gly Pro Ser Pro Gly Pro Gly Arg Leu Leu Leu Val Cys
    210                 215                 220

His Val Ser Gly Phe Tyr Pro Lys Pro Val Trp Val Lys Trp Met Arg
225                 230                 235                 240

Gly Glu Gln Glu Gln Gln Gly Thr Gln Pro Gly Asp Ile Leu Pro Asn
                245                 250                 255

Ala Asp Glu Thr Trp Tyr Leu Arg Ala Thr Leu Asp Val Val Ala Gly
            260                 265                 270

Glu Ala Ala Gly Leu Ser Cys Arg Val Lys His Ser Ser Leu Glu Gly
        275                 280                 285

Gln Asp Ile Val Leu Tyr Trp Gly Gly Ser Tyr Thr Ser Gly Ser Leu
    290                 295                 300

Val Pro Arg Gly Ser Gly Ser Lys Arg Val His His His His His His
305                 310                 315                 320

His His
```

<210> 20
<211> 119
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> human beta-2-microglobulin

<400> 20

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Met Ser Arg Ser Val Ala Leu Ala Val Leu Ala Leu Leu Ser Leu Ser
1               5                   10                  15
```

```
Gly Leu Glu Ala Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg
            20                  25                  30

His Pro Ala Glu Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser
        35                  40                  45

Gly Phe His Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu
    50                  55                  60

Arg Ile Glu Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp
65                  70                  75                  80

Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp
                85                  90                  95

Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile
            100                 105                 110

Val Lys Trp Asp Arg Asp Met
        115
```

<210> 21
<211> 276
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> TCR alpha chain clone J3N.5

<400> 21

```
Met Lys Lys His Leu Thr Thr Phe Leu Val Ile Leu Trp Leu Tyr Phe
1               5                   10                  15

Tyr Arg Gly Asn Gly Lys Asn Gln Val Glu Gln Ser Pro Gln Ser Leu
            20                  25                  30

Ile Ile Leu Glu Gly Lys Asn Cys Thr Leu Gln Cys Asn Tyr Thr Val
        35                  40                  45

Ser Pro Phe Ser Asn Leu Arg Trp Tyr Lys Gln Asp Thr Gly Arg Gly
    50                  55                  60

Pro Val Ser Leu Thr Ile Met Thr Phe Ser Glu Asn Thr Lys Ser Asn
65                  70                  75                  80
```

```
Gly Arg Tyr Thr Ala Thr Leu Asp Ala Asp Thr Lys Gln Ser Ser Leu
                85                  90                  95

His Ile Thr Ala Ser Gln Leu Ser Asp Ser Ala Ser Tyr Ile Cys Val
            100                 105                 110

Val Ser Asp Arg Gly Ser Thr Leu Gly Arg Leu Tyr Phe Gly Arg Gly
        115                 120                 125

Thr Gln Leu Thr Val Trp Pro Asp Ile Gln Asn Pro Asp Pro Ala Val
    130                 135                 140

Tyr Gln Leu Arg Asp Ser Lys Ser Ser Asp Lys Ser Val Cys Leu Phe
145                 150                 155                 160

Thr Asp Phe Asp Ser Gln Thr Asn Val Ser Gln Ser Lys Asp Ser Asp
                165                 170                 175

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

Lys Ser Asn Ser Ala Val Ala Trp Ser Asn Lys Ser Asp Phe Ala Cys
        195                 200                 205

Ala Asn Ala Phe Asn Asn Ser Ile Ile Pro Glu Asp Thr Phe Phe Pro
    210                 215                 220

Ser Pro Glu Ser Ser Cys Asp Val Lys Leu Val Glu Lys Ser Phe Glu
225                 230                 235                 240

Thr Asp Thr Asn Leu Asn Phe Gln Asn Leu Ser Val Ile Gly Phe Arg
                245                 250                 255

Ile Leu Leu Leu Lys Val Ala Gly Phe Asn Leu Leu Met Thr Leu Arg
            260                 265                 270

Leu Trp Ser Ser
        275
```

<210> 22
<211> 315
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature

<223> TCR beta chain clone J3N.5

<400> 22

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Met Thr Ile Arg Leu Leu Cys Tyr Met Gly Phe Tyr Phe Leu Gly Ala
1               5                  10                  15

Gly Leu Met Glu Ala Asp Ile Tyr Gln Thr Pro Arg Tyr Leu Val Ile
            20                  25                  30

Gly Thr Gly Lys Lys Ile Thr Leu Glu Cys Ser Gln Thr Met Gly His
        35                  40                  45

Asp Lys Met Tyr Trp Tyr Gln Gln Asp Pro Gly Met Glu Leu His Leu
    50                  55                  60

Ile His Tyr Ser Tyr Gly Val Asn Ser Thr Glu Lys Gly Asp Leu Ser
65                  70                  75                  80

Ser Glu Ser Thr Val Ser Arg Ile Arg Thr Glu His Phe Pro Leu Thr
                85                  90                  95

Leu Glu Ser Ala Arg Pro Ser His Thr Ser Gln Tyr Leu Cys Ala Ser
            100                 105                 110

Ser Glu Ser Gln Tyr Gly Arg Ala Ala Tyr Asn Glu Gln Phe Phe Gly
        115                 120                 125

Pro Gly Thr Arg Leu Thr Val Leu Glu Asp Leu Lys Asn Val Phe Pro
    130                 135                 140

Pro Glu Val Ala Val Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr
145                 150                 155                 160

Gln Lys Ala Thr Leu Val Cys Leu Ala Thr Gly Phe Tyr Pro Asp His
                165                 170                 175

Val Glu Leu Ser Trp Trp Val Asn Gly Lys Glu Val His Ser Gly Val
            180                 185                 190

Ser Thr Asp Pro Gln Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser
        195                 200                 205

Arg Tyr Cys Leu Ser Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln
    210                 215                 220
```

```
Asn Pro Arg Asn His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser
225                 230                 235                 240

Glu Asn Asp Glu Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile
                245                 250                 255

Val Ser Ala Glu Ala Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Glu
            260                 265                 270

Ser Tyr Gln Gln Gly Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu
        275                 280                 285

Leu Gly Lys Ala Thr Leu Tyr Ala Val Leu Val Ser Ala Leu Val Leu
    290                 295                 300

Met Ala Met Val Lys Arg Lys Asp Ser Arg Gly
305                 310                 315
```

<210> 23
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.24 variable heavy chain protein sequence

<400> 23

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
                85                  90                  95

Ala Lys Asp Met Cys Ser Ser Ser Gly Cys Pro Asp Gly Tyr Phe Asp
            100                 105                 110
```

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

<210> 24
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.26 variable heavy chain protein sequence

<400> 24

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

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

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

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

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

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

Ala Lys Asp Met Cys Ser Ser Ser Gly Cys Pro Asp Gly Tyr Phe Asp
100 105 110

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

<210> 25
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> 401.11.86 variable heavy chain protein sequence

<400> 25

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

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

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

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

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

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

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
            100                 105                 110

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

<210> 26
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.151 variable heavy chain protein sequence

<400> 26

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Met Cys Ser Ser Ser Gly Cys Pro Asp Gly Tyr Phe Asp
100 105 110

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

<210> 27
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.152 variable heavy chain protein sequence

<400> 27

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Met Cys Ser Ser Ser Gly Cys Pro Asp Gly Tyr Phe Asp
100 105 110

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

<210> 28
<211> 124
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic; 401.11.154 variable heavy chain protein sequence

<400> 28

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Met Cys Ser Ser Ser Gly Cys Pro Asp Gly Tyr Phe Asp
100 105 110

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

<210> 29
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.155 variable heavy chain protein sequence

<400> 29

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

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

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

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

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

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

Ala Lys Asp Met Cys Ser Ser Ser Gly Cys Pro Asp Gly Tyr Phe Asp
            100                 105                 110

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

<210> 30
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.156 variable heavy chain protein sequence

<400> 30

```
Gln Val Gln Leu Val Gly Ser Gly Gly Gly Leu Val Lys Pro Gly Arg
1               5                   10                  15

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
                85                  90                  95

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
            100                 105                 110

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

<210> 31
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.157 variable heavy chain protein sequence

<400> 31

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
100 105 110

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

<210> 32
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.158 variable heavy chain protein sequence

<400> 32

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
                85                  90                  95

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
            100                 105                 110

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

<210>  33
<211>  124
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Synthetic; 401.11.159 variable heavy chain protein sequence

<400>  33

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

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

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

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

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

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

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
            100                 105                 110
```

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

<210> 34
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.160 variable heavy chain protein sequence

<400> 34

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

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

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

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

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

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

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
100 105 110

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

<210> 35
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.161 variable heavy chain protein sequence

<400> 35

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

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

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

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

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

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

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
100 105 110

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

<210> 36
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.165 variable heavy chain protein sequence

<400> 36

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
                85                  90                  95

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
            100                 105                 110

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


<210>  37
<211>  124
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Synthetic; 401.11.166 variable heavy chain protein sequence

<400>  37

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
                85                  90                  95

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
            100                 105                 110

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


<210>  38
<211>  124
<212>  PRT
<213>  Artificial Sequence

<220>
```

<223> Synthetic; 401.11.167 variable heavy chain protein sequence

<400> 38

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
                85                  90                  95

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
            100                 105                 110

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

<210> 39
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.158 variable heavy chain protein sequence

<400> 39

```
Gln Val Gln Leu Val Gly Ser Gly Gly Gly Leu Val Lys Pro Gly Arg
1               5                  10                  15

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
100 105 110

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

<210> 40
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.179 variable heavy chain protein sequence

<400> 40

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Glu Gly Tyr Phe Asp
100 105 110

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

<210> 41
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.180 variable heavy chain protein sequence

<400> 41

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
85 90 95

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

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

<210> 42
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.181 variable heavy chain protein sequence

<400> 42

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

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

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

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

Lys Gly Arg Phe Ile Val 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 Leu Tyr Tyr Cys
85 90 95

Ala Lys Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp
100 105 110

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

<210> 43
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.84 variable heavy chain protein sequence

<400> 43

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

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Glu Ile Asn His Ala Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
50 55 60

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

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

Arg Gly Glu Ile Tyr Asp Phe Tyr Lys Ser Tyr Leu Asp Val Trp Gly
100 105 110

Lys Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 44
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.86 variable heavy chain protein sequence

<400> 44

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

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Glu Ile Asn His Ala Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
50 55 60

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

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

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

Lys Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 45
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.87 variable heavy chain protein sequence

<400> 45

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

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
        35                  40                  45

Gly Glu Ile Asn His Ala Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
    50                  55                  60

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

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

Arg Gly Glu Ile Tyr Asp Phe Tyr Lys Ser Tyr Met Asp Val Trp Gly
            100                 105                 110

Lys Gly Thr Thr Val Thr Val Ser Ser
        115                 120
```

<210> 46
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.24 variable light chain protein sequence

<400> 46

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1               5                   10                  15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
            20                  25                  30

Leu Ala 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 Ser 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 47
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.26 variable light chain protein sequence

<400> 47

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 48
<211> 108
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> 401.11.26 variable light chain protein sequence

<220>
<221> misc_feature
<223> 401.11.86 variable light chain protein sequence

<400> 48

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile
35 40 45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Ser 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 49
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.151 variable light chain protein sequence

<400> 49

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 50
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.152 variable light chain protein sequence

<400> 50

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala 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 Ser 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 51
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.154 variable light chain protein sequence

<400> 51

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

```
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
            20                  25                  30

Leu Ala 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 Ala Asn Arg Phe Pro Leu
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105
```

<210> 52
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.155 variable light chain protein sequence

<400> 52

```
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1               5                   10                  15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
            20                  25                  30

Leu Ala 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 Ala Asn Arg Phe Pro Leu
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105
```

<210> 53
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.156 variable light chain protein sequence

<400> 53

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala 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 Ser 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 54
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.157 variable light chain protein sequence

<400> 54

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 55
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.158 variable light chain protein sequence

<400> 55

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 56
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.159 variable light chain protein sequence

<400> 56

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala 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 Ser 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 57
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.160 variable light chain protein sequence

<400> 57

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 58
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.161 variable light chain protein sequence

<400> 58

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 59
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.165 variable light chain protein sequence

<400> 59

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1               5                  10                  15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
            20                  25                  30

Leu Ala 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 Ala Asn Arg Phe Pro Leu
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105
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<210> 60
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.166 variable light chain protein sequence

<400> 60

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1               5                  10                  15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
            20                  25                  30

Leu Ala 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 Ser 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 Ala Asn Arg Phe Pro Leu
                85                  90                  95
```

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 61
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.167 variable light chain protein sequence

<400> 61

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 62
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.179 variable light chain protein sequence

<400> 62

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

```
Leu Ala 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 Ala Asn Arg Phe Pro Leu
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105
```

<210> 63
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.180 variable light chain protein sequence

<400> 63

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1               5                   10                  15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
            20                  25                  30

Leu Ala 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 Ala Asn Arg Phe Pro Leu
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105
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<210> 64
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.181 variable light chain protein sequence

<400> 64

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
20 25 30

Leu Ala 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 Ala Asn Arg Phe Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 65
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.84 variable light chain protein sequence

<400> 65

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

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

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

Leu Ile Phe Ser Ala Ser Asn Lys His Ser Trp Thr Pro Ala Arg Phe
50 55 60

Ser Gly Ser Leu Leu Gly Gly Lys Ala Val Leu Thr Leu Ser Gly Val
65 70 75 80

Gln Pro Glu Asp Glu Ala Glu Tyr Tyr Cys Leu Leu Tyr Phe Gly Asp
85 90 95

Thr Gln Leu Gly Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly
100 105 110

<210> 66
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.86 variable light chain protein sequence

<400> 66

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

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

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

Leu Ile Phe Ser Ala Ser Asn Lys His Ser Trp Thr Pro Ala Arg Phe
50 55 60

Ser Gly Ser Leu Leu Gly Gly Lys Ala Val Leu Thr Leu Ser Gly Val
65 70 75 80

Gln Pro Glu Asp Glu Ala Glu Tyr Tyr Cys Leu Leu Tyr Phe Gly Asp
85 90 95

Thr Gln Leu Gly Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly
100 105 110

<210> 67
<211> 112
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic; 402.8.87 variable light chain protein sequence

<400> 67

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

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

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

Leu Ile Phe Ser Ala Ser Asn Lys His Ser Trp Thr Pro Ala Arg Phe
50 55 60

Ser Gly Ser Leu Leu Gly Gly Lys Ala Val Leu Thr Leu Ser Gly Val
65 70 75 80

Gln Pro Glu Asp Glu Ala Glu Tyr Tyr Cys Leu Leu Tyr Phe Gly Asp
85 90 95

Thr Gln Leu Gly Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly
100 105 110

<210> 68
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.24 variable heavy chain nucleotide

<400> 68
caggtgcagc tcgtgggctc tggcggcgga ctggtcaagc ctggcagaag cctgcggctg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagct ctggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 69
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.26 variable heavy chain nucleotide

<400> 69
gaggtgcagc tggtggaatc tggcggcgga ctggtgcagc ccggcagaag cctgagactg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac atggccctgt actactgcgc caaggacatg 300

tgcagcagca gcggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 70
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.86 variable heavy chain nucleotide

<400> 70
caggtgcagc tcgtgggctc tggcggcgga ctggtcaagc ctggcagaag cctgcggctg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac atggccctgt actactgcgc caaggacatg 300

tgcagcagcg gcggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 71
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.151 variable heavy chain nucleotide

<400> 71
gaggtgcagc tggtggaatc tggcggcgga ctggtgcagc ccggcagaag cctgagactg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagca gcggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 72
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.152 variable heavy chain nucleotide

<400> 72
gaggtgcagc tggtggaatc tggcggcgga ctggtgcagc ccggcagaag cctgagactg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagca gcggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 73
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.154 variable heavy chain nucleotide

<400> 73
caggtgcagc tcgtgggctc tggcggcgga ctggtcaagc ctggcagaag cctgcggctg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagct ctggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 74
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.155 variable heavy nucleotide

<400> 74
gaggtgcagc tggtggaatc tggcggcgga ctggtgcagc ccggcagaag cctgagactg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac atggccctgt actactgcgc caaggacatg 300

tgcagcagca gcggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 75
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.156 variable heavy chain nucleotide

<400> 75
caggtgcagc tcgtgggctc tggcggcgga ctggtcaagc ctggcagaag cctgcggctg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagcg gtggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 76
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.157 variable heavy chain nucleotide

<400> 76
caggtgcagc tcgtgggctc tggcggcgga ctggtcaagc ctggcagaag cctgcggctg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagcg gtggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 77
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.158 variable heavy chain nucleotide

<400> 77
caggtgcagc tcgtgggctc tggcggcgga ctggtcaagc ctggcagaag cctgcggctg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagcg gtggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 78
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.159 variable heavy chain nucleotide

<400> 78
gaggtgcagc tggtggaatc tggcggcgga ctggtgcagc ccggcagaag cctgagactg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac atggccctgt actactgcgc caaggacatg 300

tgcagcagcg gtggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 79
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.160 variable heavy chain nucleotide

<400> 79
gaggtgcagc tggtggaatc tggcggcgga ctggtgcagc ccggcagaag cctgagactg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac atggccctgt actactgcgc caaggacatg 300

tgcagcagcg gtggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 80
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.161 variable heavy chain nucleotide

<400> 80
gaggtgcagc tggtggaatc tggcggcgga ctggtgcagc ccggcagaag cctgagactg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac atggccctgt actactgcgc caaggacatg 300

tgcagcagcg gtggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 81
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.165 variable heavy chain nucleotide

<400> 81
gaggtgcagc tggtggaatc tggcggcgga ctggtgcagc ccggcagaag cctgagactg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagcg gtggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 82
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.166 variable heavy chain nucleotide

<400> 82
gaggtgcagc tggtggaatc tggcggcgga ctggtgcagc ccggcagaag cctgagactg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagcg gtggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 83
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.167 variable heavy chain nucleotide

<400> 83
gaggtgcagc tggtggaatc tggcggcgga ctggtgcagc ccggcagaag cctgagactg 60

agctgtgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgacaggcc 120

cctggcaagg gcctggaatg ggtggccacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tcccgggata acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagcg gtggctgccc cgacggctac ttcgattctt ggggccaggg caccctggtc 360

accgtgtcct ca 372

<210> 84
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.158 variable heavy chain nucleotide

<400> 84
caggtgcagc tggtgggctc tggcggcgga ctggtgaaac ccggcagaag cctgagactg 60

agctgcgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgccaggcc 120

cctggcaagg gactggaatg ggtggcaacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tccagagaca acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagcg ggggctgccc cgacggctac tttgatagct ggggccaggg caccctggtg 360

acagtgtcct ca 372

<210> 85
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.179 variable heavy chain nucleotide

<400> 85
caggtgcagc tggtgggctc tggcggcgga ctggtgaaac ccggcagaag cctgagactg 60

agctgcgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgccaggcc 120

cctggcaagg gactggaatg ggtggcaacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tccagagaca acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagcg ggggctgccc cgaaggctac tttgatagct ggggccaggg caccctggtg 360

acagtgtcct ca 372

<210> 86
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.180 variable heavy chain nucleotide

<400> 86
caggtgcagc tggtgggctc tggcggcgga ctggtgaaac ccggcagaag cctgagactg 60

agctgcgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgccaggcc 120

cctggcaagg gactggaatg ggtggcaacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tccagagaca acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacctg 300

tgcagcagcg ggggctgccc cgaaggctac tttgatagct ggggccaggg caccctggtg 360

acagtgtcct ca 372

<210> 87
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.181 variable heavy chain nucleotide

<400> 87
caggtgcagc tggtggaatc tggcggcgga ctggtgaaac ccggcagaag cctgagactg 60

agctgcgccg ccagcggctt caccttcgac gactacgcca tgcactgggt ccgccaggcc 120

cctggcaagg gactggaatg ggtggcaacc atcatctgga acagcgccat catcggctac 180

gccgacagcg tgaagggccg gttcatcgtg tccagagaca acgccaagaa cagcctgtac 240

ctgcagatga acagcctgcg ggccgaggac accgccctgt actactgcgc caaggacatg 300

tgcagcagcg ggggctgccc cgacggctac tttgatagct ggggccaggg caccctggtg 360

acagtgtcct ca 372

<210> 88
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.84 variable heavy chain nucleotide

<400> 88
caggtgcagc tgcaggagtc gggcccagga ctggtgaagc cttcggagac cctgtccctc 60

acctgcgctg tctatggtgg gtccttcagt ggttactact ggagctggat tcgccagccc 120

ccagggaagg ggctggagtg gattggggaa atcaatcatg ccggaagcac caactacaac 180

ccgtccctca agagtcgagt caccatatca gtagacacgt ccaagaacca gttctccctg 240

aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt actgtgcgag aggtgagatt 300

tacgattttt acaagtccta cctggacgtc tggggcaaag ggaccacggt gacagtgtcc 360

tca 363

<210> 89
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.86 variable heavy chain nucleotide

<400> 89
caggtgcagc tgcaggagtc gggcccagga ctggtgaagc cttcggagac cctgtccctc 60

acctgcgctg tctatggtgg gtccttcagt ggttactact ggagctggat tcgccagccc 120

ccagggaagg ggctggagtg gattggggaa atcaatcatg ccggaagcac caactacaac 180

ccgtccctca agagtcgagt caccatatca gtagacacgt ccaagaacca gttctccctg 240

aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt actgtgcgag aggtgagatt 300

tacgattttt acaactccta catggacgtc tggggcaaag ggaccacggt gacagtgtcc 360

tca 363

<210> 90
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.87 variable heavy chain nucleotide

<400> 90
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acctgcgctg tctatggtgg gtccttcagt ggttactact ggagctggat tcgccagccc 120

ccagggaagg ggctggagtg gattggggaa atcaatcatg ccggaagcac caactacaac 180

ccgtccctca agagtcgagt caccatatca gtagacacgt ccaagaacca gttctccctg 240

aagctgagct ctgtgaccgc cgcggacacg gctgtgtatt actgtgcgag aggtgagatt 300

tacgattttt acaagtccta catggacgtc tggggcaaag ggaccacggt gacagtgtcc 360

tca 363

<210> 91
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.24 variable light chain nucleotide

<400> 91
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctgct gatctacgcc gccagcagcc tgcagagcgg cgtgtccagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 92
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.26 variable light chain nucleotide

<400> 92
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaacctgct gatctacgcc gccagcagcc tgcagagcgg cgtgccaagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 93
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.86 variable light chain nucleotide

<400> 93
gacatccaga tgacccagtc tccatcttcc gtgtctgcat ctgtaggaga cagagtcacc 60

atcacttgtc gggcgagtca gcatattagc agctggttag cctggtatca gcagaaacca 120

gggaaagccc ctaatctcct gatctatgct gcatccagtt tgcaaagtgg ggtctcatca 180

aggttcagcg gcagtggatc tgggacggat ttcactctca ccatcagcag cctgcagcct 240

gaagattttg caacttacta ttgtcaacag gctaacaggt tcccgctcac tttcggcgga 300

gggaccaagc tggagatcaa acgt 324

<210> 94
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.151 variable light chain nucleotide

<400> 94
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctgct gatctacgcc gccagcagcc tgcagagcgg cgtgcccagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 95
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.152 variable light chain nucleotide

<400> 95
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctgct gatctacgcc gccagcagcc tgcagagcgg cgtgtccagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 96
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.154 variable light chain nucleotide

<400> 96
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctgct gatctacgcc gccagcagcc tgcagagcgg cgtgcccagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 97
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.155 variable light chain nucleotide

<400> 97
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctgct gatctacgcc gccagcagcc tgcagagcgg cgtgcccagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 98
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.156 variable light chain nucleotide

<400> 98
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctgct gatctacgcc gccagcagcc tgcagagcgg cgtgtccagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 99
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.157 variable light chain nucleotide

<400> 99
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaacctgct gatctacgcc gccagcagcc tgcagagcgg cgtgccaagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 100
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.158 variable light chain nucleotide

<400> 100
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctgct gatctacgcc gccagcagcc tgcagagcgg cgtgcccagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 101
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.159 variable light chain nucleotide

<400> 101
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctgct gatctacgcc gccagcagcc tgcagagcgg cgtgtccagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 102
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.160 variable light chain nucleotide

<400> 102
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaacctgct gatctacgcc gccagcagcc tgcagagcgg cgtgccaagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 103
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.161 variable light chain nucleotide

<400> 103
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atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctgct gatctacgcc gccagcagcc tgcagagcgg cgtgcccagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 104
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.165 variable light chain nucleotide

<400> 104
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctgct gatctacgcc gccagcagcc tgcagagcgg cgtgcccagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 105
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.166 variable light chain nucleotide

<400> 105
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctgct gatctacgcc gccagcagcc tgcagagcgg cgtgtccagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

gaggacttcg ccacctacta ctgccagcag gccaaccggt tcccccctgac ctttggcgga 300

ggcaccaagc tggaaatcaa gcgt 324

<210> 106
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.167 variable light chain nucleotide

<400> 106
gacatccaga tgacccagag ccccagcagc gtgtccgcca gcgtgggcga cagagtgacc 60

atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaacctgct gatctacgcc gccagcagcc tgcagagcgg cgtgccaagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

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ggcaccaagc tggaaatcaa gcgt 324

<210> 107
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.179 variable light chain nucleotide

<400> 107
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atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

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ggcaccaagc tggaaatcaa gcgg 324

<210> 108
<211> 324

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.180 variable light chain nucleotide

<400> 108
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atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctcct gatctacgcc gccagctctc tgcagtctgg cgtgccaagc 180

agattcagcg gcagcggctc cggcaccgac ttcaccctga ccatcagctc cctgcagccc 240

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ggcaccaagc tggaaatcaa gcgg 324

<210> 109
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 401.11.181 variable light chain nucleotide

<400> 109
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atcacctgtc gggccagcca gcacatcagc agctggctgg cctggtatca gcagaagccc 120

ggcaaggccc ccaagctcct gatctacgcc gccagctctc tgcagtctgg cgtgccaagc 180

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ggcaccaagc tggaaatcaa gcgg 324

<210> 110
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.45 variable light chain nucleotide

<400> 110
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acctgtgctt ccagctctgg agcagtcagc agtggtaact ttccaaactg gttccagcag 120

aaacctggac aagcaccccg ggcactaatt tttagtgcga gcaacaaaca ttcctggacc 180

cctgcccggt tttcaggctc cctccttggg ggcaaagctg tcctgacact gtcaggtgtg 240

cagcctgagg acgaggctga atattactgc ctgctctact ttggtgatac tcaactaggg 300

gtgttcggcg gagggaccaa ggtgaccgtc ctaggt 336

<210> 111
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.53 variable light chain nucleotide

<400> 111
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acctgtgctt ccagctctgg agcagtcagc agtggtaact ttccaaactg gttccagcag 120

aaacctggac aagcaccccg ggcactaatt tttagtgcga gcaacaaaca ttcctggacc 180

cctgcccggt tttcaggctc cctccttggg ggcaaagctg tcctgacact gtcaggtgtg 240

cagcctgagg acgaggctga atattactgc ctgctctact ttggtgatac tcaactaggg 300

gtgttcggcg gagggaccaa ggtgaccgtc ctaggt 336

<210> 112
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.60 variable light chain nucleotide

<400> 112
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acctgtgctt ccagctctgg agcagtcagc agtggtaact ttccaaactg gttccagcag 120

aaacctggac aagcaccccg ggcactaatt tttagtgcga gcaacaaaca ttcctggacc 180

cctgcccggt tttcaggctc cctccttggg ggcaaagctg tcctgacact gtcaggtgtg 240

cagcctgagg acgaggctga atattactgc ctgctctact ttggtgatac tcaactaggg 300

gtgttcggcg gagggaccaa ggtgaccgtc ctaggt 336

<210> 113
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.84 variable light chain nucleotide

<400> 113
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acctgtgctt ccagctctgg agcagtcagc agtggtaact ttccaaactg gttccagcag 120

aaacctggac aagcaccccg ggcactaatt tttagtgcga gcaacaaaca ttcctggacc 180

cctgcccggt tttcaggctc cctccttggg ggcaaagctg tcctgacact gtcaggtgtg 240

cagcctgagg acgaggctga atattactgc ctgctctact ttggtgatac tcaactaggg 300

gtgttcggcg gagggaccaa ggtgaccgtc ctaggt 336

<210> 114
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.86 variable light chain nucleotide

<400> 114
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acctgtgctt ccagctctgg agcagtcagc agtggtaact ttccaaactg gttccagcag 120

aaacctggac aagcaccccg ggcactaatt tttagtgcga gcaacaaaca ttcctggacc 180

cctgcccggt tttcaggctc cctccttggg ggcaaagctg tcctgacact gtcaggtgtg 240

cagcctgagg acgaggctga atattactgc ctgctctact ttggtgatac tcaactaggg 300

gtgttcggcg gagggaccaa ggtgaccgtc ctaggt 336

<210> 115
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; 402.8.87 variable light chain nucleotide

<400> 115
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acctgtgctt ccagctctgg agcagtcagc agtggtaact ttccaaactg gttccagcag 120

aaacctggac aagcaccccg ggcactaatt tttagtgcga gcaacaaaca ttcctggacc 180

cctgcccggt tttcaggctc cctccttggg ggcaaagctg tcctgacact gtcaggtgtg 240

cagcctgagg acgaggctga atattactgc ctgctctact ttggtgatac tcaactaggg 300

gtgttcggcg gagggaccaa ggtgaccgtc ctaggt 336

<210> 116
<211> 303
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic; human CD1d extracellular domain construct

<400> 116

Glu Val Pro Gln Arg Leu Phe Pro Leu Arg Cys Leu Gln Ile Ser Ser
1 5 10 15

Phe Ala Asn Ser Ser Trp Thr Arg Thr Asp Gly Leu Ala Trp Leu Gly
20 25 30

Glu Leu Gln Thr His Ser Trp Ser Asn Asp Ser Asp Thr Val Arg Ser
35 40 45

Leu Lys Pro Trp Ser Gln Gly Thr Phe Ser Asp Gln Gln Trp Glu Thr
50 55 60

Leu Gln His Ile Phe Arg Val Tyr Arg Ser Ser Phe Thr Arg Asp Val
65 70 75 80

Lys Glu Phe Ala Lys Met Leu Arg Leu Ser Tyr Pro Leu Glu Leu Gln
85 90 95

Val Ser Ala Gly Cys Glu Val His Pro Gly Asn Ala Ser Asn Asn Phe
100 105 110

Phe His Val Ala Phe Gln Gly Lys Asp Ile Leu Ser Phe Gln Gly Thr
115 120 125

Ser Trp Glu Pro Thr Gln Glu Ala Pro Leu Trp Val Asn Leu Ala Ile
130 135 140

Gln Val Leu Asn Gln Asp Lys Trp Thr Arg Glu Thr Val Gln Trp Leu
145 150 155 160

Leu Asn Gly Thr Cys Pro Gln Phe Val Ser Gly Leu Leu Glu Ser Gly
165 170 175

Lys Ser Glu Leu Lys Lys Gln Val Lys Pro Lys Ala Trp Leu Ser Arg
180 185 190

Gly Pro Ser Pro Gly Pro Gly Arg Leu Leu Leu Val Cys His Val Ser
195 200 205

Gly Phe Tyr Pro Lys Pro Val Trp Val Lys Trp Met Arg Gly Glu Gln
210 215 220

Glu Gln Gln Gly Thr Gln Pro Gly Asp Ile Leu Pro Asn Ala Asp Glu
225 230 235 240

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

Gly Leu Ser Cys Arg Val Lys His Ser Ser Leu Glu Gly Gln Asp Ile
260 265 270

Val Leu Tyr Trp Gly Gly Ser Tyr Thr Ser Gly Ser Leu Val Pro Arg
275 280 285

Gly Ser Gly Ser Lys Arg Val His His His His His His His His
290 295 300

<210> 117
<211> 305
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; murine CD1d extracellular domain construct

<400> 117

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

Asn Arg Ser Trp Ser Arg Thr Asp Ser Val Val Trp Leu Gly Asp Leu
20 25 30

Gln Thr His Arg Trp Ser Asn Asp Ser Ala Thr Ile Ser Phe Thr Lys
35 40 45

Pro Trp Ser Gln Gly Lys Leu Ser Asn Gln Gln Trp Glu Lys Leu Gln
50 55 60

His Met Phe Gln Val Tyr Arg Val Ser Phe Thr Arg Asp Ile Gln Glu
65 70 75 80

Leu Val Lys Met Met Ser Pro Lys Glu Asp Tyr Pro Ile Glu Ile Gln
85 90 95

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

Leu His Val Ala Phe Gln Gly Lys Tyr Val Val Arg Phe Trp Gly Thr
115 120 125

```
Ser Trp Gln Thr Val Pro Gly Ala Pro Ser Trp Leu Asp Leu Pro Ile
    130                 135                 140

Lys Val Leu Asn Ala Asp Gln Gly Thr Ser Ala Thr Val Gln Met Leu
145                 150                 155                 160

Leu Asn Asp Thr Cys Pro Leu Phe Val Arg Gly Leu Leu Glu Ala Gly
                165                 170                 175

Lys Ser Asp Leu Glu Lys Gln Glu Lys Pro Val Ala Trp Leu Ser Ser
            180                 185                 190

Val Pro Ser Ser Ala Asp Gly His Arg Gln Leu Val Cys His Val Ser
        195                 200                 205

Gly Phe Tyr Pro Lys Pro Val Trp Val Met Trp Met Arg Gly Asp Gln
    210                 215                 220

Glu Gln Gln Gly Thr His Arg Gly Asp Phe Leu Pro Asn Ala Asp Glu
225                 230                 235                 240

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

Gly Leu Ala Cys Arg Val Lys His Ser Ser Leu Gly Gly Gln Asp Ile
            260                 265                 270

Ile Leu Tyr Trp Asp Ala Arg Gln Ala Pro Val Gly Gly Ser Leu Val
        275                 280                 285

Pro Arg Gly Ser Gly Ser Lys Arg Val His His His His His His His
    290                 295                 300

His
305
```

<210> 118
<211> 303
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; mCD1dhu CD1d synthetic construct

<400> 118

```
Gln Gln Lys Asn Tyr Thr Phe Arg Cys Leu Gln Met Ser Ser Phe Ala
1               5                  10                  15

Asn Arg Ser Trp Ser Arg Thr Asp Ser Val Val Trp Leu Gly Asp Leu
            20                  25                  30

Gln Thr His Arg Trp Ser Asn Asp Ser Ala Thr Ile Ser Phe Thr Lys
        35                  40                  45

Pro Trp Ser Gln Gly Lys Leu Ser Asn Gln Gln Trp Glu Lys Leu Gln
    50                  55                  60

His Met Phe Gln Val Tyr Arg Val Ser Phe Thr Arg Asp Ile Gln Glu
65                  70                  75                  80

Leu Val Lys Met Leu Arg Leu Ser Tyr Pro Leu Glu Ile Gln Leu Ser
                85                  90                  95

Ala Gly Cys Glu Met Tyr Pro Gly Asn Ala Ser Glu Ser Phe Leu His
            100                 105                 110

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

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

Leu Asn Ala Asp Gln Gly Thr Ser Ala Thr Val Gln Met Leu Leu Asn
145                 150                 155                 160

Asp Thr Cys Pro Leu Phe Val Arg Gly Leu Leu Glu Ala Gly Lys Ser
                165                 170                 175

Asp Leu Glu Lys Gln Glu Lys Pro Val Ala Trp Leu Ser Ser Val Pro
            180                 185                 190

Ser Ser Ala Asp Gly His Arg Gln Leu Val Cys His Val Ser Gly Phe
        195                 200                 205

Tyr Pro Lys Pro Val Trp Val Met Trp Met Arg Gly Asp Gln Glu Gln
    210                 215                 220

Gln Gly Thr His Arg Gly Asp Phe Leu Pro Asn Ala Asp Glu Thr Trp
225                 230                 235                 240
```

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

Ala Cys Arg Val Lys His Ser Ser Leu Gly Gly Gln Asp Ile Ile Leu
260 265 270

Tyr Trp Asp Ala Arg Gln Ala Pro Val Gly Gly Ser Leu Val Pro Arg
275 280 285

Gly Ser Gly Ser Lys Arg Val His His His His His His His His
290 295 300

<210> 119
<211> 305
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic; hCD1dmu CD1d synthetic construct

<400> 119

Glu Val Pro Gln Arg Leu Phe Pro Leu Arg Cys Leu Gln Ile Ser Ser
1 5 10 15

Phe Ala Asn Ser Ser Trp Thr Arg Thr Asp Gly Leu Ala Trp Leu Gly
20 25 30

Glu Leu Gln Thr His Ser Trp Ser Asn Asp Ser Asp Thr Val Arg Ser
35 40 45

Leu Lys Pro Trp Ser Gln Gly Thr Phe Ser Asp Gln Gln Trp Glu Thr
50 55 60

Leu Gln His Ile Phe Arg Val Tyr Arg Ser Ser Phe Thr Arg Asp Val
65 70 75 80

Lys Glu Phe Ala Lys Met Met Ser Pro Lys Glu Asp Tyr Pro Ile Glu
85 90 95

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

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

Gly Thr Ser Trp Glu Pro Thr Gln Glu Ala Pro Leu Trp Val Asp Leu
130 135 140

```
Pro Ile Gln Val Leu Asn Gln Asp Lys Trp Thr Arg Glu Thr Val Gln
145                 150                 155                 160

Trp Leu Leu Asn Gly Thr Cys Pro Gln Phe Val Ser Gly Leu Leu Glu
                165                 170                 175

Ser Gly Lys Ser Glu Leu Lys Lys Gln Val Lys Pro Lys Ala Trp Leu
            180                 185                 190

Ser Arg Gly Pro Ser Pro Gly Pro Gly Arg Leu Leu Leu Val Cys His
        195                 200                 205

Val Ser Gly Phe Tyr Pro Lys Pro Val Trp Val Lys Trp Met Arg Gly
    210                 215                 220

Glu Gln Glu Gln Gln Gly Thr Gln Pro Gly Asp Ile Leu Pro Asn Ala
225                 230                 235                 240

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

Ala Ala Gly Leu Ser Cys Arg Val Lys His Ser Ser Leu Glu Gly Gln
            260                 265                 270

Asp Ile Val Leu Tyr Trp Gly Gly Ser Tyr Thr Ser Gly Ser Leu Val
        275                 280                 285

Pro Arg Gly Ser Gly Ser Lys Arg Val His His His His His His His
    290                 295                 300

His
305
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<210> 120
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; F1

<400> 120
gtgcctgctg tttctgctg 19

<210> 121
<211> 20

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic; R1

<400> 121
tgccctgata ggaagtttgc 20

<210> 122
<211> 6
<212> PRT
<213> Homo sapiens

<400> 122

Leu Ser Tyr Pro Leu Glu
1 5

<210> 123
<211> 17
<212> PRT
<213> Homo sapiens

<400> 123

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

Leu

<210> 124
<211> 5
<212> PRT
<213> Homo sapiens

<400> 124

Asp Tyr Ala Met His
1 5

<210> 125
<211> 5
<212> PRT
<213> Homo sapiens

<400> 125

Gly Tyr Tyr Trp Ser
1 5

<210> 126
<211> 15

<212> PRT
<213> Homo sapiens

<400> 126

Asp Met Cys Ser Ser Ser Gly Cys Pro Asp Gly Tyr Phe Asp Ser
1 5 10 15

<210> 127
<211> 13
<212> PRT
<213> Homo sapiens

<400> 127

Gly Glu Ile Tyr Asp Phe Trp Asn Ser Tyr Met Asp Val
1 5 10

<210> 128
<211> 13
<212> PRT
<213> Homo sapiens

<400> 128

Gly Glu Ile Tyr Asp Phe Trp Lys Ser Tyr Met Asp Val
1 5 10

<210> 129
<211> 13
<212> PRT
<213> Homo sapiens

<400> 129

Gly Glu Ile Tyr Asp Phe Trp Lys Ser Tyr Leu Asp Val
1 5 10

<210> 130
<211> 13
<212> PRT
<213> Homo sapiens

<400> 130

Gly Glu Ile Tyr Asp Phe Tyr Asn Ser Tyr Met Asp Val
1 5 10

<210> 131
<211> 17
<212> PRT
<213> Homo sapiens

<400> 131

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

Gly

<210> 132
<211> 16
<212> PRT
<213> Homo sapiens

<400> 132

Glu Ile Asn His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys Ser
1 5 10 15

<210> 133
<211> 16
<212> PRT
<213> Homo sapiens

<400> 133

Glu Ile Asn Pro Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys Ser
1 5 10 15

<210> 134
<211> 16
<212> PRT
<213> Homo sapiens

<400> 134

Glu Ile Asn His Ala Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys Ser
1 5 10 15

<210> 135
<211> 7
<212> PRT
<213> Homo sapiens

<400> 135

Gly Phe Thr Phe Asp Asp Tyr
1 5

<210> 136
<211> 7
<212> PRT
<213> Homo sapiens

<400> 136

Gly Gly Ser Phe Ser Gly Tyr

1 5

<210> 137
<211> 6
<212> PRT
<213> Homo sapiens

<400> 137

Ile Trp Asn Ser Ala Ile
1 5

<210> 138
<211> 5
<212> PRT
<213> Homo sapiens

<400> 138

Asn His Ser Gly Ser
1 5

<210> 139
<211> 5
<212> PRT
<213> Homo sapiens

<400> 139

Asn Pro Ser Gly Ser
1 5

<210> 140
<211> 5
<212> PRT
<213> Homo sapiens

<400> 140

Asn His Ala Gly Ser
1 5

<210> 141
<211> 11
<212> PRT
<213> Homo sapiens

<400> 141

Arg Ala Ser Gln His Ile Ser Ser Trp Leu Ala
1 5 10

<210> 142
<211> 14

<212> PRT
<213> Homo sapiens

<400> 142

Ala Ser Ser Ser Gly Ala Val Ser Ser Gly Asn Phe Pro Asn
1 5 10

<210> 143
<211> 9
<212> PRT
<213> Homo sapiens

<400> 143

Gln Gln Ala Asn Arg Phe Pro Leu Thr
1 5

<210> 144
<211> 11
<212> PRT
<213> Homo sapiens

<400> 144

Leu Leu Tyr Phe Gly Asp Thr Gln Leu Gly Val
1 5 10

<210> 145
<211> 7
<212> PRT
<213> Homo sapiens

<400> 145

Ala Ala Ser Ser Leu Gln Ser
1 5

<210> 146
<211> 7
<212> PRT
<213> Homo sapiens

<400> 146

Ser Ala Ser Asn Lys His Ser
1 5

<210> 147
<211> 7
<212> PRT
<213> Homo sapiens

<400> 147

Leu Ser Tyr Pro Leu Glu Leu
1 5

<210> 148
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> Xaa is Q or E

<220>
<221> misc_feature
<222> (6)..(6)
<223> Xaa is G or E

<220>
<221> misc_feature
<222> (13)..(13)
<223> Xaa is K or Q

<220>
<221> misc_feature
<222> (91)..(91)
<223> Xaa is M or T

<220>
<221> misc_feature
<222> (100)..(100)
<223> Xaa is M or L

<220>
<221> misc_feature
<222> (104)..(104)
<223> Xaa is S or G

<220>
<221> misc_feature
<222> (108)..(108)
<223> Xaa is D or E

<400> 148

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

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

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

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

```
    50                  55                  60

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

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Xaa Ala Leu Tyr Tyr Cys
                85                  90                  95

Ala Lys Asp Xaa Cys Ser Ser Xaa Gly Cys Pro Xaa Gly Tyr Phe Asp
            100                 105                 110

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

<210>  149
<211>  108
<212>  PRT
<213>  Homo sapiens

<220>
<221>  misc_feature
<222>  (45)..(45)
<223>  X is N or K

<220>
<221>  misc_feature
<222>  (59)..(59)
<223>  X is S or P

<400>  149

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1               5                   10                  15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln His Ile Ser Ser Trp
            20                  25                  30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Xaa Leu Leu Ile
        35                  40                  45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Xaa 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 Ala Asn Arg Phe Pro Leu
                85                  90                  95
```

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 150
<211> 121
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)..(13)
<223> X is R or K

<220>
<221> misc_feature
<222> (53)..(53)
<223> X is H or P

<220>
<221> misc_feature
<222> (54)..(54)
<223> X is S or A

<220>
<221> misc_feature
<222> (104)..(104)
<223> X is W or Y

<220>
<221> misc_feature
<222> (105)..(105)
<223> X is N or K

<220>
<221> misc_feature
<222> (108)..(108)
<223> X is M or L

<400> 150

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

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

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45

Gly Glu Ile Asn Xaa Xaa Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu

65 70 75 80

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

Arg Gly Glu Ile Tyr Asp Phe Xaa Xaa Ser Tyr Xaa Asp Val Trp Gly
100 105 110

Lys Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 151
<211> 112
<212> PRT
<213> Homo sapiens

<400> 151

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

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

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

Leu Ile Phe Ser Ala Ser Asn Lys His Ser Trp Thr Pro Ala Arg Phe
50 55 60

Ser Gly Ser Leu Leu Gly Gly Lys Ala Val Leu Thr Leu Ser Gly Val
65 70 75 80

Gln Pro Glu Asp Glu Ala Glu Tyr Tyr Cys Leu Leu Tyr Phe Gly Asp
85 90 95

Thr Gln Leu Gly Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly
100 105 110

<210> 152
<211> 15
<212> PRT
<213> Homo sapiens

<400> 152

Asp Leu Cys Ser Ser Gly Gly Cys Pro Glu Gly Tyr Phe Asp Ser
1 5 10 15

<210> 153
<211> 15
<212> PRT
<213> Homo sapiens

<400> 153

Asp Met Cys Ser Ser Gly Gly Cys Pro Asp Gly Tyr Phe Asp Ser
1 5 10 15

<210> 154
<211> 15
<212> PRT
<213> Homo sapiens

<400> 154

Asp Met Cys Ser Ser Gly Gly Cys Pro Glu Gly Tyr Phe Asp Ser
1 5 10 15

<210> 155
<211> 13
<212> PRT
<213> Homo sapiens

<400> 155

Gly Glu Ile Tyr Asp Phe Tyr Lys Ser Tyr Leu Asp Val
1 5 10

<210> 156
<211> 13
<212> PRT
<213> Homo sapiens

<400> 156

Gly Glu Ile Tyr Asp Phe Tyr Lys Ser Tyr Met Asp Val
1 5 10

<210> 157
<211> 335
<212> PRT
<213> Homo sapiens

<400> 157

Met Gly Cys Leu Leu Phe Leu Leu Leu Trp Ala Leu Leu Gln Ala Trp
1 5 10 15

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

```
Ile Ser Ser Phe Ala Asn Ser Ser Trp Thr Arg Thr Asp Gly Leu Ala
        35                  40                  45

Trp Leu Gly Glu Leu Gln Thr His Ser Trp Ser Asn Asp Ser Asp Thr
    50                  55                  60

Val Arg Ser Leu Lys Pro Trp Ser Gln Gly Thr Phe Ser Asp Gln Gln
65                  70                  75                  80

Trp Glu Thr Leu Gln His Ile Phe Arg Val Tyr Arg Ser Ser Phe Thr
                85                  90                  95

Arg Asp Val Lys Glu Phe Ala Lys Met Leu Arg Leu Ser Tyr Pro Leu
            100                 105                 110

Glu Leu Gln Val Ser Ala Gly Cys Glu Val His Pro Gly Asn Ala Ser
        115                 120                 125

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

Gln Gly Thr Ser Trp Glu Pro Thr Gln Glu Ala Pro Leu Trp Val Asn
145                 150                 155                 160

Leu Ala Ile Gln Val Leu Asn Gln Asp Lys Trp Thr Arg Glu Thr Val
                165                 170                 175

Gln Trp Leu Leu Asn Gly Thr Cys Pro Gln Phe Val Ser Gly Leu Leu
            180                 185                 190

Glu Ser Gly Lys Ser Glu Leu Lys Lys Gln Val Lys Pro Lys Ala Trp
        195                 200                 205

Leu Ser Arg Gly Pro Ser Pro Gly Pro Gly Arg Leu Leu Leu Val Cys
    210                 215                 220

His Val Ser Gly Phe Tyr Pro Lys Pro Val Trp Val Lys Trp Met Arg
225                 230                 235                 240

Gly Glu Gln Glu Gln Gln Gly Thr Gln Pro Gly Asp Ile Leu Pro Asn
                245                 250                 255

Ala Asp Glu Thr Trp Tyr Leu Arg Ala Thr Leu Asp Val Val Ala Gly
            260                 265                 270
```

Glu Ala Ala Gly Leu Ser Cys Arg Val Lys His Ser Ser Leu Glu Gly
275 280 285

Gln Asp Ile Val Leu Tyr Trp Gly Gly Ser Tyr Thr Ser Met Gly Leu
290 295 300

Ile Ala Leu Ala Val Leu Ala Cys Leu Leu Phe Leu Leu Ile Val Gly
305 310 315 320

Phe Thr Ser Arg Phe Lys Arg Gln Thr Ser Tyr Gln Gly Val Leu
325 330 335

<210> 158
<211> 330
<212> PRT
<213> Homo sapiens

<400> 158

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

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

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
50 55 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
65 70 75 80

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

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
115 120 125

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
130 135 140

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp

145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
165 170 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
180 185 190

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
195 200 205

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
210 215 220

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
225 230 235 240

Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
245 250 255

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
260 265 270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
275 280 285

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
290 295 300

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
305 310 315 320

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
325 330

<210> 159
<211> 327
<212> PRT
<213> Homo sapiens

<400> 159

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
1 5 10 15

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

```
Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
        35                  40                  45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
    50                  55                  60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr
65                  70                  75                  80

Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys
                85                  90                  95

Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro Ala Pro
            100                 105                 110

Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
        115                 120                 125

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
    130                 135                 140

Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp
145                 150                 155                 160

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe
                165                 170                 175

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
            180                 185                 190

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu
        195                 200                 205

Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
    210                 215                 220

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys
225                 230                 235                 240

Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp
                245                 250                 255

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
            260                 265                 270
```

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
275 280 285

Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser
290 295 300

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
305 310 315 320

Leu Ser Leu Ser Leu Gly Lys
325

<210> 160
<211> 327
<212> PRT
<213> Homo sapiens

<400> 160

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
1 5 10 15

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

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
50 55 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Lys Thr
65 70 75 80

Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys
85 90 95

Arg Val Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro
100 105 110

Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
115 120 125

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
130 135 140

```
Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp
145                 150                 155                 160

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe
                165                 170                 175

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
            180                 185                 190

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu
        195                 200                 205

Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
    210                 215                 220

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys
225                 230                 235                 240

Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp
                245                 250                 255

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
            260                 265                 270

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
        275                 280                 285

Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser
    290                 295                 300

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
305                 310                 315                 320

Leu Ser Leu Ser Leu Gly Lys
                325
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<210> 161
<211> 106
<212> PRT
<213> Homo sapiens

<400> 161

```
Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
1               5                   10                  15
```

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

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
35 40 45

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
50 55 60

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

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

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
100 105

<210> 162
<211> 105
<212> PRT
<213> Homo sapiens

<400> 162

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

Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe
20 25 30

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

Lys Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys
50 55 60

Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser
65 70 75 80

His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu
85 90 95

Lys Thr Val Ala Pro Thr Glu Cys Ser
100 105