SEQUENCE LISTING

<110> NovImmune SA
Masternak, Krzysztof
Leger, Olivier

<120> Anti-IL-17A/IL-17F Cross-Reactive Antibodies and Methods of Use Thereof

<130> 23135-415001WO

<140> IB2009/005796
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<150> US 61/126465
<151> 2008-05-05

<150> US 61/098369
<151> 2008-09-26

<160> 115

<170> PatentIn version 3.5

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gcacagaagt tccagggtag agtcaccatg accaggaaca cctccataag cacagcctac 240

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acggtcaccg tctcctca 378

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

Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Met Asn Pro Asp Ser Gly Val Ile Arg Tyr Ala Gln Lys Phe
50 55 60

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Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
65                  70                  75                  80

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

Ala Arg Glu Trp Phe Gly Glu Leu Pro Ser Tyr Tyr Phe Tyr Ser Gly
            100                 105                 110

Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115                 120                 125
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<210> 3
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ggccaggctc ccaggctcct catctatgat gcatccaaca gggccactgg catcccagcc      180

aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctagagcct      240

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            20                  25                  30

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

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

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65                  70                  75                  80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Pro
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Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
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cctggacaag ggcttgagtg gatgggatgg atcagcgctt acaatagtaa cacaaactat 180

gcacagaaag tccagggcag aatcaccatg accacagaca catccacgcg cacagcctac 240

atggagctga ggggcctgag atctgacgac acggccgtgt atttctgtgc gactttcttc 300

ggtggtcact ctggctacca ctacgggttg gacgtctggg gccaggggac cacggtcacc 360

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Ser Val Lys Val Ser Cys Lys Ala Phe Ala Tyr Thr Phe Ser Thr Tyr
20 25 30

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

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

Gln Gly Arg Ile Thr Met Thr Thr Asp Thr Ser Thr Arg Thr Ala Tyr
65 70 75 80

Met Glu Leu Arg Gly Leu Arg Ser Asp Asp Thr Ala Val Tyr Phe Cys
85 90 95

Ala Thr Phe Phe Gly Gly His Ser Gly Tyr His Tyr Gly Leu Asp Val
100 105 110

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

<210> 7
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<212> DNA
<213> Homo sapiens

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cctggacaag ggcttgagtg gatgggatgg atcagcgttt acaatggtaa tacaaactat 180

ggacagaatt tccagggcag agtcagcatg accacagaca catccacgag cacagcctac 240

atggagctga ggagcctgag atctgacgac acggccgtgt attactgtgc gagtttccac 300

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gtctcctca 369

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Ser Val Lys Val Ser Cys Lys Ala Ser Val Tyr Thr Phe Thr Thr Tyr
20 25 30

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

Gly Trp Ile Ser Val Tyr Asn Gly Asn Thr Asn Tyr Gly Gln Asn Phe
50 55 60

Gln Gly Arg Val Ser Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Ser Phe His Gly Gly His Ser Gly Tyr His Tyr Gly Leu Asp Val
100 105 110

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

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<212> DNA
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cctggacaag ggcttgagtg gatgggatgg atcaccgttt acaatggtaa cacaaactat 180

gcacagaagt tccacggcag agtcaccatg accacagaca catccacaag tacagcctac 240

atggagctga ggagcctgag atctgacgac acggccgtct attactgtgc gagtttccac 300

ggtggtcatt ctggctacca ctacggtttg gacgtctggg gccaagggac cacggtcacc 360

gtctcctca 369

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

<400> 10

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

Ser Val Lys Val Ser Cys Lys Ala Ser Val Tyr Thr Phe Thr Thr Tyr
20 25 30

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

Gly Trp Ile Thr Val Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Phe
50 55 60

His Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

Ala Ser Phe His Gly Gly His Ser Gly Tyr His Tyr Gly Leu Asp Val
100 105 110

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

<210> 11
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<223> n is a, c, g, or t

<220>
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ggccaggctc ccaggctcct catntatgat gcatccaaca gggccactgg catcccagcc 180

aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctagagcct 240

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caggggacca agctggagat caaa 324

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

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<223> Xaa can be any naturally occurring amino acid

<400> 12

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

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

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

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Pro
85 90 95

Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 13
<211> 363
<212> DNA
<213> Homo sapiens

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cagccccag ggaaggggct ggagtggatt gggagtatct attatagtgg gagcacctac 180

tacaacccgt ccctcaagag tcgagtcacc atatccgtag acacgtccaa gaaccagttc 240

tccctgaaag tgagttctgt gaccgccaca gacacggctg tgtattactg tgcgagagtc 300

agtggctgga acgggaactg gttcgacccc tggggccagg gaaccctggt cacggtctcc 360

tca 363

<210> 14
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<212> PRT
<213> Homo sapiens

<400> 14

Gln Leu 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 Ser Asp Asp Tyr Ile Ser Ser Arg
20 25 30

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

Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
50 55 60

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

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

Cys Ala Arg Val Ser Gly Trp Asn Gly Asn Trp Phe Asp Pro Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 15
<211> 324
<212> DNA
<213> Homo sapiens

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cctggccagg ctcccaggct cctcatctat ggtgcatcca gcagggccac tggcatccca 180

gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccatcag cagactggag 240

cctgaagatt ttgcagtgta ttactgtcag cagtatggta gctcaccgat caccttcggc 300

caagggacac gactggagat taaa 324

<210> 16
<211> 108
<212> PRT

<213> Homo sapiens

<400> 16

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

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

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

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

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

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

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

<210> 17
<211> 381
<212> DNA
<213> Homo sapiens

<400> 17
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tcctgcaagg cttctggagg caccctcagc agctatgctt tcagctgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggaggg atcatccctt tctttggaac aacaaattac 180

gcacagaagt tccagggcag agtcataatt accgcggacg aatccacgaa cacagcctac 240

atggagctga gcggcctgag atctgaggac acggccgtgt attattgtgc gagagacagg 300

gattactatg gtttggggag tcccttctac tactacggta tggacgtctg gggccaaggg 360

accacggtca ccgtctcctc a 381

<210> 18
<211> 127
<212> PRT
<213> Homo sapiens

<400> 18

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

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

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

Gly Gly Ile Ile Pro Phe Phe Gly Thr Thr Asn Tyr Ala Gln Lys Phe
50 55 60

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

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

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

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

<210> 19
<211> 381
<212> DNA
<213> Homo sapiens

<400> 19
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tcctgcaagg cttctggagg caccctcagc agctatgctt tcagctgggt gcgacaggcc 120

cctggacaag gccttgagtg gatgggaggg atcatccctt tctttggaac agtaaactac 180

gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgaa cactgcctat 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagagacagg 300

gattattatg gtttggggag tcccctccac tactacggtt tggacgtctg gggccaaggg 360

accacggtca ccgtctcctc a 381

<210> 20
<211> 127
<212> PRT
<213> Homo sapiens

<400> 20

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

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

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

Gly Gly Ile Ile Pro Phe Phe Gly Thr Val Asn Tyr Ala Gln Lys Phe
50 55 60

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

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

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

Gly Leu Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115                 120                 125
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<210> 21
<211> 321
<212> DNA
<213> Homo sapiens

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gatcagtctc caaagctcct catcaagtat gcttcccagt ccttctcagg ggtcccctcg 180

aggttcagtg gcagtggatc tgggacagat ttcaccctca ccatcaatag cctggaagct 240

gaagatgctg cagcgtatta ctgtcatcag agtagtagtt taccgtggac gttcggccaa 300

gggaccaagg tggaaatcaa a 321

<210> 22
<211> 107
<212> PRT
<213> Homo sapiens

<400> 22

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Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val Thr Pro Lys
1               5                   10                  15

Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Gly Ser Ser
            20                  25                  30

Leu His Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Leu Leu Ile
        35                  40                  45

Lys Tyr Ala Ser Gln Ser Phe Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60

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

Glu Asp Ala Ala Ala Tyr Tyr Cys His Gln Ser Ser Ser Leu Pro Trp
                85                  90                  95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100                 105
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<210> 23
<211> 375
<212> DNA
<213> Homo sapiens

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tcctgtgcag cctctgggtt caccttcagt ggctcttcta tgcactgggt ccgccaggct 120

tccgggaaag ggctggactg ggttggccgt attagaagca aagctaacag ttacgcgaca 180

gcatatgctg cgtcggtgat aggcaggttc accatctcca gagatgattc aaagaacacg 240

gcgtatctgc aaatgaacag cctgaaaacc gaggacacgg ccgtgtatta ctgtactaca 300

tcagtggcta ctacccttac tgactactac ggtatggacg tctggggcca agggaccacg 360

gtcaccgtct cctca 375

<210> 24
<211> 125
<212> PRT
<213> Homo sapiens

<400> 24

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

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

Ser Met His Trp Val Arg Gln Ala Ser Gly Lys Gly Leu Asp Trp Val
35 40 45

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

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

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

Tyr Cys Thr Thr Ser Val Ala Thr Thr Leu Thr Asp Tyr Tyr Gly Met
100 105 110

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

<210> 25
<211> 324
<212> DNA
<213> Homo sapiens

<400> 25

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ctctcctgca gggccagtca gagtgttagc agctacttag cctggtacca acagaaacct 120

ggccaggctc ccaggctcct catctatgat gcatccaaca gggccactgg catcccagcc 180

aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctagagcct 240

gaagattttg cagtttatta ctgtcaacag cgtagcaact ggcctccatt cactttcggc 300

cctgggacca aagtggatat caaa 324

<210> 26
<211> 108
<212> PRT
<213> Homo sapiens

<400> 26

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

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

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

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

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Pro
85 90 95

Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
100 105

<210> 27
<211> 357
<212> DNA
<213> Homo sapiens

<400> 27
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tcctgtgcag cctctggatt caccttcagt agctttaaca tggactgggt ccgccaggct 120

ccagggaagg ggctggagtg ggtttcatcc attagtacta ctagcagaat catatactct 180

gcagactctg tgaagggccg attcaccatc tccagagaca atgccaggaa ctcactgtat 240

ctgcaaatga acagcctgag agacgaggac acggctgtat attactgtgc gagagtcagt 300

tactatggcc acggatttga ctactggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 28

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

<400> 28

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

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

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

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

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

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

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

Thr Leu Val Thr Val Ser Ser
115

<210> 29
<211> 321
<212> DNA
<213> Homo sapiens

<400> 29
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atcacttgtc gggcgagtca gggtattagc agctggttag cctggtatca gcagaaacca 120

gagaaagccc ctaagtccct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180

aggttcagcg gcagtggatc tgggacagat ttcactctca ccatcagcag cctgcagcct 240

gaagattttg caacttatta ctgccaacag tataatagtt accctctcac tttcggcgga 300

gggaccaagg tggagatcaa a 321

<210> 30
<211> 107
<212> PRT
<213> Homo sapiens

<400> 30

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Glu Lys Ala Pro Lys Ser 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 Tyr Asn Ser Tyr Pro Leu
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100                 105
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<210> 31
<211> 381
<212> DNA
<213> Homo sapiens

<400> 31

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cctggacaag ggcttgagtg gatgggagga atcatccctt tctttggaac agcacactac      180

gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgaa cacagcctac      240

atggagctga gcagcctgag atctgaggac acggccgtat attactgtgc gagagatagg      300

gactactatg gttcggggag tcccttccac ttctccggtt tggacgtctg gggccaaggg      360

accacggtca ccgtctcctc a                                                381
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<210> 32
<211> 127
<212> PRT
<213> Homo sapiens

<400> 32

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

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

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

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

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

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

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

<210> 33
<211> 369
<212> DNA
<213> Homo sapiens

<400> 33
gaagtacagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60

tcctgtgcag cctctggatt cacctttgat gattttgcca tgcactgggt ccggcaagct 120

ccagggaagg gcctggagtg ggtctcaggt attaattgga atagtggtag cataggctat 180

gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240

ctgcaaatga acagtctgag agccgaggac acggccttgt attactgtgc aaaagatata 300

gcagcagctg gtgaattcta cttcgatatg gacgtctggg gccaagggac cacggtcacc 360

gtctcctca 369

<210> 34
<211> 123
<212> PRT
<213> Homo sapiens

<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 Phe
20 25 30

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

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

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

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

Ala Lys Asp Ile Ala Ala Ala Gly Glu Phe Tyr Phe Asp Met Asp Val
100 105 110

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

<210> 35
<211> 321
<212> DNA
<213> Homo sapiens

<400> 35
gaaattgtgt tgacacagtc tccagccacc ctgtctttgt ctccagggga aagagccacc 60

ctctcctgca gggccagtca gagtgttagc agctacttag cctggtacca acagaaacct 120

ggccaggctc ccaggctcct catctatgat gcatccaaca gggccactgg catcccagcc 180

aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctagagcct 240

gaagattttg cagtttatta ctgtcagcag cgtagcaact ggcctccgac ttttggccag 300

gggaccaagc tggagatcaa a 321

<210> 36
<211> 107
<212> PRT
<213> Homo sapiens

<400> 36

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

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

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

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

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Pro
85 90 95

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

<210> 37
<211> 369
<212> DNA
<213> Homo sapiens

<400> 37

gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60

tcctgtgcag cctctggatt cacctttgat gattatgcca tgcactgggt ccggcaagct 120

ccagggaagg gcctggagtg ggtctcaggt attaattgga atagtggtgg cataggctat 180

gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240

ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgc aagagatatg 300

gggggttcg gggagtttta ctggaacttc ggtctctggg gccgtggcac cctggtcact 360

gtctcctca 369

<210> 38
<211> 123
<212> PRT
<213> Homo sapiens

<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

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

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

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

Ala Arg Asp Met Gly Gly Phe Gly Glu Phe Tyr Trp Asn Phe Gly Leu
100 105 110

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

<210> 39
<211> 324
<212> DNA
<213> Homo sapiens

<400> 39
gaaattgtgt tgacacagtc tccagccacc ctgtctttgt ctccagggga aagagccacc 60

ctctcctgca gggccagtca gagtgttaga agctacttag cctggtacca acagaaacct 120

ggccaggctc ccaggctcct catctatgat gcatccaaca gggccactgg catcccagcc 180

aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctagagcct 240

gaagattttg cagtttatta ctgtcagcag cgtagcaact ggcctccggc cactttcggc 300

ggagggacca aggtggagat caaa 324

<210> 40
<211> 108
<212> PRT
<213> Homo sapiens

<400> 40

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

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

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

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

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Pro
85 90 95

Ala Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 41
<400> 41
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<210> 42
<400> 42
000

<210> 43
<211> 375
<212> DNA
<213> Homo sapiens

<400> 43
caggtgcagc tggtgcagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60

tcctgtgcag cctctggatt cacctttgat gattatgcca tgcactgggt ccggcaagct 120

ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtggtac cataggctat 180

gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240

ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgc aaaagaactg 300

tatatcagtg actgggactc ctactcctac ggtatggacg tctggggcca agggaccacg 360

gtcaccgtct cctca 375

<210> 44
<211> 125
<212> PRT
<213> Homo sapiens

<400> 44

Gln Val Gln Leu Val Gln 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

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

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

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

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

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

<210> 45
<211> 318
<212> DNA
<213> Homo sapiens

<400> 45
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 60

ctctcctgca gggccagtca gagtgttagc agcagctact tagcctggta ccagcagaaa 120

cctggccagg ctcccaggct cctcatctat ggtgcatcca gcagggccac tggcatccca 180

gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccatcag cagactggag 240

cctgaagatt ttgcagtgta ttactgtcag cagtatggta gctcaccttt cggcggaggg 300

accaaggtgg agatcaaa 318

<210> 46
<211> 106
<212> PRT
<213> Homo sapiens

<400> 46

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

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

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

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

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

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

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 47
<211> 372
<212> DNA
<213> Homo sapiens

<400> 47
gaggtgcagc tggtggagtc tgggggaggc ttggtaaagc ctgggggGtc ccttagactc 60

tcctgtgcag cctctggatt cactttcagt aacgcctgga tgagctgggt ccgccaggct 120

ccagggaagg ggctggaatg ggttggccgt attaaaagca aaactgatgg tgggacaaca 180

gactacgttg cacccgtgaa aggcagattc accatctcaa gagatgattc aaaaaacacc 240

ctgtatctgc aaatgaacag cctgaaaacc gaggacacag ccgtatatta ctgtaccaca 300

tcgtatagca gttactggtt cccctactac tttgactact ggggccaggg aaccctggtc 360

accgtctcct ca 372

<210> 48
<211> 124
<212> PRT
<213> Homo sapiens

<400> 48

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

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

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

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

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

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

Tyr Cys Thr Thr Ser Tyr Ser Ser Tyr Trp Phe Pro Tyr Tyr Phe Asp
100 105 110

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

<210> 49
<211> 321
<212> DNA
<213> Homo sapiens

<400> 49
gacatccaga tgacccagtc tccatcctca ctgtctgcat ctgtaggaga cagagtcacc 60

atcacttgtc gggcgagtca gggtattagc agctggttag cctggtatca gcagaaacca 120

gagaaagccc ctaagtccct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180

aggttcagcg gcagtggatc tgggacagat ttcactctca ccatcagcag cctgcagcct 240

gaagattttg caacttatta ctgccaacag tataatagtt acccgatcac cttcggccaa 300

gggacacgac tggagattaa a 321

<210> 50
<211> 107
<212> PRT
<213> Homo sapiens

<400> 50

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

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

Leu Ala Trp Tyr Gln Gln Lys Pro Glu Lys Ala Pro Lys Ser 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 Tyr Asn Ser Tyr Pro Ile
85 90 95

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

<210> 51
<211> 378
<212> DNA
<213> Homo sapiens

<400> 51
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60

tcctgcaagg cttctggata caccttcacc agttatgata tcaactgggt gcgacaggcc 120

actggacaag ggcttgagtg gatgggatgg ctgaaccctg acagtggtgt catacgttat 180

gcacagaagt tccagggtag agtcaccatg accagggaca cctccataag cacagcctac 240

atggagctaa gcagcctgag atctgaggac acggccgtgt attactgtgc gagagaatgg 300

ttcggggagt taccctctta ctacttctac tccggtatgg acgtctgggg ccaagggacc 360

acggtcaccg tctcctca 378

<210> 52
<211> 126
<212> PRT
<213> Homo sapiens

<400> 52

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

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

Asp Ile Asn Trp Val Arg Gln Ala Thr Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Leu Asn Pro Asp Ser Gly Val Ile Arg Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Glu Trp Phe Gly Glu Leu Pro Ser Tyr Tyr Phe Tyr Ser Gly
100 105 110

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

<210> 53
<211> 369
<212> DNA
<213> Homo sapiens

<400> 53
gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60

tcctgtgcag cctctggatt cacctttgat gattatgcca tgcactgggt ccggcaagct 120

ccagggaagg gcctggagtg ggtctcaggt attaattgga gcagtggtgg cataggctat 180

gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240

ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgc aagagatatc 300

gggggttcg gggagtttta ctggaacttc ggtctctggg gccgtggcac cctggtcact 360

gtctcctca 369

<210> 54
<211> 123
<212> PRT
<213> Homo sapiens

<400> 54

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

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

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

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

Ala Arg Asp Ile Gly Gly Phe Gly Glu Phe Tyr Trp Asn Phe Gly Leu
100 105 110

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

<210> 55
<211> 321
<212> DNA
<213> Homo sapiens

<400> 55
gaaattgtgt tgacacagtc tccagacttt cagtctgtga ctccaaagga gaaagtcacc 60

atcacctgcc gggccagtca gagcattggt agtagcttac actggtacca gcagaaacca 120

gatcagtctc caaagctcct catcaagtat gcttcccagt ccttctcagg ggtcccctcg 180

aggttcagtg gcagtggatc tgggacagat ttcaccctca ccatcaatag cctggaagct 240

gaagatgctg caacgtatta ctgtcatcag agtagtagtt taccgtggac gttcggccaa 300

gggaccaagg tggaaatcaa a 321

<210> 56
<211> 107
<212> PRT
<213> Homo sapiens

<400> 56

Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val Thr Pro Lys
1 5 10 15

Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Gly Ser Ser
20 25 30

Leu His Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Leu Leu Ile
35 40 45

Lys Tyr Ala Ser Gln Ser Phe Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 57
<211> 5
<212> PRT
<213> Homo sapiens

<400> 57

Ser Tyr Asp Ile Asn
1 5

<210> 58
<211> 17
<212> PRT
<213> Homo sapiens

<400> 58

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

Gly

<210> 59
<211> 17
<212> PRT
<213> Homo sapiens

<400> 59

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

Val

<210> 60
<211> 5
<212> PRT
<213> Homo sapiens

<400> 60

Thr Tyr Gly Ile Ser
1 5

<210> 61
<211> 17
<212> PRT
<213> Homo sapiens

<400> 61

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

Gly

<210> 62
<211> 14
<212> PRT
<213> Homo sapiens

<400> 62

Phe Phe Gly Gly His Ser Gly Tyr His Tyr Gly Leu Asp Val
1 5 10

<210> 63
<211> 17
<212> PRT
<213> Homo sapiens

<400> 63

Trp Ile Ser Val Tyr Asn Gly Asn Thr Asn Tyr Gly Gln Asn Phe Gln
1 5 10 15

Gly

<210> 64

<211> 14
<212> PRT
<213> Homo sapiens

<400> 64

Phe His Gly Gly His Ser Gly Tyr His Tyr Gly Leu Asp Val
1 5 10

<210> 65
<211> 17
<212> PRT
<213> Homo sapiens

<400> 65

Trp Ile Thr Val Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Phe His
1 5 10 15

Gly

<210> 66
<211> 7
<212> PRT
<213> Homo sapiens

<400> 66

Ser Arg Ser Tyr Tyr Trp Gly
1 5

<210> 67
<211> 16
<212> PRT
<213> Homo sapiens

<400> 67

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

<210> 68
<211> 11
<212> PRT
<213> Homo sapiens

<400> 68

Val Ser Gly Trp Asn Gly Asn Trp Phe Asp Pro
1 5 10

<210> 69
<211> 5
<212> PRT
<213> Homo sapiens

<400> 69

Ser Tyr Ala Phe Ser
1 5

<210> 70
<211> 17
<212> PRT
<213> Homo sapiens

<400> 70

Gly Ile Ile Pro Phe Phe Gly Thr Thr Asn Tyr Ala Gln Lys Phe Gln
1 5 10 15

Gly

<210> 71
<211> 18
<212> PRT
<213> Homo sapiens

<400> 71

Asp Arg Asp Tyr Tyr Gly Leu Gly Ser Pro Phe Tyr Tyr Tyr Gly Met
1 5 10 15

Asp Val

<210> 72
<211> 17
<212> PRT
<213> Homo sapiens

<400> 72

Gly Ile Ile Pro Phe Phe Gly Thr Val Asn Tyr Ala Gln Lys Phe Gln
1 5 10 15

Gly

<210> 73
<211> 18
<212> PRT
<213> Homo sapiens

<400> 73

Asp Arg Asp Tyr Tyr Gly Leu Gly Ser Pro Leu His Tyr Tyr Gly Leu
1 5 10 15

Asp Val

<210> 74
<211> 17
<212> PRT
<213> Homo sapiens

<400> 74

Gly Ile Ile Pro Phe Phe Gly Thr Ala His Tyr Ala Gln Lys Phe Gln
1 5 10 15

Gly

<210> 75
<211> 18
<212> PRT
<213> Homo sapiens

<400> 75

Asp Arg Asp Tyr Tyr Gly Ser Gly Ser Pro Phe His Phe Ser Gly Leu
1 5 10 15

Asp Val

<210> 76
<211> 5
<212> PRT
<213> Homo sapiens

<400> 76

Gly Ser Ser Met His
1 5

<210> 77
<211> 19
<212> PRT
<213> Homo sapiens

<400> 77

Arg Ile Arg Ser Lys Ala Asn Ser Tyr Ala Thr Ala Tyr Ala Ala Ser
1 5 10 15

Val Ile Gly

<210> 78
<211> 14
<212> PRT
<213> Homo sapiens

<400> 78

Ser Val Ala Thr Thr Leu Thr Asp Tyr Tyr Gly Met Asp Val
1 5 10

<210> 79
<211> 5
<212> PRT
<213> Homo sapiens

<400> 79

Ser Phe Asn Met Asp

1 5

<210> 80
<211> 17
<212> PRT
<213> Homo sapiens

<400> 80

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

Gly

<210> 81
<211> 10
<212> PRT
<213> Homo sapiens

<400> 81

Val Ser Tyr Tyr Gly His Gly Phe Asp Tyr
1 5 10

<210> 82
<211> 5
<212> PRT
<213> Homo sapiens

<400> 82

Asp Phe Ala Met His
1 5

<210> 83
<211> 17
<212> PRT
<213> Homo sapiens

<400> 83

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

Gly

<210> 84
<211> 14
<212> PRT
<213> Homo sapiens

<400> 84

Asp Ile Ala Ala Ala Gly Glu Phe Tyr Phe Asp Met Asp Val
1 5 10

<210> 85
<211> 5

<212> PRT
<213> Homo sapiens

<400> 85

Asp Tyr Ala Met His
1 5

<210> 86
<211> 17
<212> PRT
<213> Homo sapiens

<400> 86

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

Gly

<210> 87
<211> 14
<212> PRT
<213> Homo sapiens

<400> 87

Asp Met Gly Gly Phe Gly Glu Phe Tyr Trp Asn Phe Gly Leu
1 5 10

<210> 88
<211> 17
<212> PRT
<213> Homo sapiens

<400> 88

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

Gly

<210> 89
<211> 16
<212> PRT
<213> Homo sapiens

<400> 89

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

<210> 90
<211> 5
<212> PRT
<213> Homo sapiens

<400> 90

Asn Ala Trp Met Ser
1 5

<210> 91
<211> 19
<212> PRT
<213> Homo sapiens

<400> 91

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

Val Lys Gly

<210> 92
<211> 13
<212> PRT
<213> Homo sapiens

<400> 92

Ser Tyr Ser Ser Tyr Trp Phe Pro Tyr Tyr Phe Asp Tyr
1 5 10

<210> 93
<211> 17
<212> PRT
<213> Homo sapiens

<400> 93

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

Gly

<210> 94
<211> 17
<212> PRT
<213> Homo sapiens

<400> 94

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

Gly

<210> 95
<211> 14
<212> PRT
<213> Homo sapiens

<400> 95

Asp Ile Gly Gly Phe Gly Glu Phe Tyr Trp Asn Phe Gly Leu

1 5 10

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

<400> 96

Arg Ala Ser Gln Ser Val Ser Ser Tyr Leu Ala
1 5 10

<210> 97
<211> 7
<212> PRT
<213> Homo sapiens

<400> 97

Asp Ala Ser Asn Arg Ala Thr
1 5

<210> 98
<211> 9
<212> PRT
<213> Homo sapiens

<400> 98

Gln Gln Arg Ser Asn Trp Pro Pro Thr
1 5

<210> 99
<211> 10
<212> PRT
<213> Homo sapiens

<400> 99

Gln Gln Arg Ser Asn Trp Pro Pro Tyr Thr
1 5 10

<210> 100
<211> 10
<212> PRT
<213> Homo sapiens

<400> 100

Gln Gln Arg Ser Asn Trp Pro Pro Phe Thr
1 5 10

<210> 101
<211> 12
<212> PRT
<213> Homo sapiens

<400> 101

Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala
1 5 10

<210> 102
<211> 7
<212> PRT
<213> Homo sapiens

<400> 102

Gly Ala Ser Ser Arg Ala Thr
1 5

<210> 103
<211> 9
<212> PRT
<213> Homo sapiens

<400> 103

Gln Gln Tyr Gly Ser Ser Pro Ile Thr
1 5

<210> 104
<211> 11
<212> PRT
<213> Homo sapiens

<400> 104

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

<210> 105
<211> 7
<212> PRT
<213> Homo sapiens

<400> 105

Tyr Ala Ser Gln Ser Phe Ser
1 5

<210> 106
<211> 9
<212> PRT
<213> Homo sapiens

<400> 106

His Gln Ser Ser Ser Leu Pro Trp Thr
1 5

<210> 107
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Ala His Ser Ala Phe Ala
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Met Pro Leu Leu Leu Leu Leu Pro Leu Leu Trp Ala Gly Ala Leu
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Ala Met Asp