SEQUENCE LISTING

<110> ARPI MATOSSIAN-ROGERS

<120> PEPTIDES FOR TREATMENT AND DIAGNOSIS OF AUTOIMMUNE DISEASE

<130> P044578WO

<150> GB 0516527.9
<151> 2005-08-11

<150> GB 0609920.4
<151> 2006-05-18

<150> GB 0609921.2
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<160> 176

<170> SeqWin99, version 1.02

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<400> 1
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aaggccttga gtggatcgga aatatttatc cttctgatag ttatactaac tacaatcaaa 240
agttcaagga caaggccaca gtgactgtag acaaatcctc cagcacagcc tacatgcagc 300
tcagcagccc gacatctgag gactctgcgg tctattattg tacaagattg aggggtttat 360
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<210> 2
<211> 131
<212> PRT
<213> Mus musculus

<220>
<221> Protein heavy chain variable

<400> 2
Leu Val Ala Thr Ala Thr Gly Val His Ser Gln Val Gln Leu Gln Gln
1 5 10 15

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

Lys Ala Ser Gly Tyr Thr Phe Thr Arg Asn Trp Ile Asn Trp Val Lys
35 40 45

Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile Gly Asn Ile Tyr Pro Ser
50 55 60

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

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

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

Leu Pro Asp Tyr Trp Gly Gln Gly Thr Ile Leu Thr Val Ser Ser Glu
        115                 120                 125

Ser Gln Ser
    130
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<210> 3
<211> 440
<212> DNA
<213> Mus musculus

<220>
<221> DNA encoding light chain variable

<400> 3

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gggaattcat ggagtcacag acccaggtct ttgtatacat gttgctgtgg ttgtctggtg   60
ttgatggaga cattgtgatg acccagtctc aaaaattcat gtccacatca gtaggagaca   120
gggtcagcgt cacctgcaag gccagtcaga atgtggatac taatgtagcc tggtatcaac   180
agaaaccagg gcaatctcct aaagcactga tttactcggc atcctaccgg tacagtggag   240
tccctgatcg cttcacaggc agtggatctg ggacagattt cactctcacc atcagcaatg   300
tgcagtctga agacttggca gagtatttct gtcagcaata taacagctat cctctcacgt   360
tcggtgctgg gaccaagctg gagctgaaac gggctgatgc tgcaccaact gtatccatct   420
tcccaccatc cagtaagctt                                               440
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<210> 4
<211> 127
<212> PRT
<213> Mus musculus

<220>
<221> Protein light chain variable

<400> 4

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1               5                   10                  15

Thr Gln Ser Gln Lys Phe Met Ser Thr Ser Val Gly Asp Arg Val Ser
            20                  25                  30

Val Thr Cys Lys Ala Ser Gln Asn Val Asp Thr Asn Val Ala Trp Tyr
        35                  40                  45

Gln Gln Lys Pro Gly Gln Ser Pro Lys Ala Leu Ile Tyr Ser Ala Ser
    50                  55                  60

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

Thr Asp Phe Thr Leu Thr Ile Ser Asn Val Gln Ser Glu Asp Leu Ala
                85                  90                  95

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

Gly Thr Lys Leu Glu Leu Lys Arg Ala Asp Ala Ala Pro Thr Val
115 120 125

<210> 5
<211> 33
<212> DNA
<213> Mus musculus

<220>
<221> DNA Heavy chain HV1

<400> 5
ggctacacct tcaccaggaa ctggataaac tgg 33

<210> 6
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Protein Heavy chain HV1

<400> 6
Gly Tyr Thr Phe Thr Arg Asn Trp Ile Asn Trp
1 5 10

<210> 7
<211> 51
<212> DNA
<213> Mus musculus

<220>
<221> DNA Heavy chain HV2

<400> 7
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<210> 8
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> Protein Heavy chain HV2

<400> 8
Asn Ile Tyr Pro Ser Asp Ser Tyr Thr Asn Tyr Asn Gln Lys Phe Lys
1 5 10 15

Asp

<210> 9
<211> 24
<212> DNA
<213> Mus musculus

<220>
<221> DNA Heavy Chain HV3

<400> 9
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<210> 10
<211> 8
<212> PRT
<213> Mus musculus

<220>
<221> Protein Heavy Chain HV3

<400> 10
Leu Arg Gly Leu Leu Pro Asp Tyr
1 5

<210> 11
<211> 33
<212> DNA
<213> Mus musculus

<220>
<221> DNA Light Chain HV1

<400> 11
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<210> 12
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Protein Light Chain HV1

<400> 12
Lys Ala Ser Gln Asn Val Asp Thr Asn Val Ala
1 5 10

<210> 13
<211> 21
<212> DNA
<213> Mus musculus

<220>
<221> DNA Light chain HV2

<400> 13
tcggcatcct accggtacag t 21

<210> 14
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> Protein Light chain HV2

<400> 14
Ser Ala Ser Tyr Arg Tyr Ser
1 5

<210> 15
<211> 27
<212> DNA
<213> Mus musculus

<220>
<221> DNA Light chain HV3

<400> 15
cagcaatata acagctatcc tctcacg 27

<210> 16
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> Protein Light chain HV3

<400> 16
Gln Gln Tyr Asn Ser Tyr Pro Leu Thr
1 5

<210> 17
<211> 359
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 13.42a VH-1 DNA Sequence

<400> 17
aggtcaagct gcaggagtca ggacctgagc tggtgaagcc tggggcttca gtgaaggtat 60
cctgcaaggc ttctggttat gcattcacta gctacaacat gttctgggtg aagcagagcc 120
atggaaagag ccttgagtgg attggatata ttgatcctta caatggtgat actagataca 180
gccagaagtt caagggcaag gccacattga ctgttgacaa gtcctccagc acagcctaca 240
tgcatctcaa cagcctgaca tctgaagact ctgcagtcta ttactgtgca agaaagggga 300
tgacgacggg ctatgctatg gactactggg gccaagggac cacggtcacc gtctcctca 359

<210> 18
<211> 119
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 13.42a VH-1 Amino Acid Sequence

<400> 18
Val Lys Leu Gln Glu Ser Gly Pro Glu Leu Val Lys Pro Gly Ala Ser
1 5 10 15

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

Met Phe Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile Gly
35 40 45

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

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Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr Met
65                  70                  75                  80

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

Arg Lys Gly Met Thr Thr Gly Tyr Ala Met Asp Tyr Trp Gly Gln Gly
            100                 105                 110

Thr Thr Val Thr Val Ser Ser
        115
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<210> 19
<211> 321
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 13.42a VL DNA sequence

<400> 19

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atcagttgta gggcaagtca ggacattagt aattatttaa actggtatca gcagaaacca   120
gatggaactg ttaaactcct gctctactac acatcaagat tacactcagg agtcccatca   180
aggttcagtg gcagtgggtc tggaacagat tattctctca ccattagcaa cctggaacaa   240
gaagatgttg ccacttactt ttgccaacag ggtaatacgt ttccgacgtt cggtggaggc   300
accaagctgg aaatcaaacg g                                             321
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<210> 20
<211> 107
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 13.42a VL Amino acid sequence

<400> 20

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

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr
            20                  25                  30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Leu
        35                  40                  45

Tyr Tyr Thr Ser Arg Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65                  70                  75                  80

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

Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105
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<210> 21
<211> 33
<212> DNA

<213> Mus musculus

<220>
<221> Cell line 13.42a DNA Heavy chain HV1

<400> 21
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<210> 22
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 13.42a Protein Heavy chain HV1

<400> 22
Gly Tyr Ala Phe Thr Ser Tyr Asn Met Phe Trp
1 5 10

<210> 23
<211> 51
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 13.42a DNA Heavy chain HV2

<400> 23
tatattgatc cttacaatgg tgatactaga tacagccaga agttcaaggg c 51

<210> 24
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 13.42a Protein Heavy chain HV2

<400> 24
Tyr Ile Asp Pro Tyr Asn Gly Asp Thr Arg Tyr Ser Gln Lys Phe Lys
1 5 10 15

Gly

<210> 25
<211> 24
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 13.42a DNA Heavy chain HV3

<400> 25
aaggggatga cgacgggcta tgct 24

<210> 26
<211> 8
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 13.42a Protein Heavy Chain HV3

<400> 26
Lys Gly Met Thr Thr Gly Tyr Ala
1 5

<210> 27
<211> 33
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 13.42a DNA Light Chain HV1

<400> 27
agggcaagtc aggacattag taattattta aac 33

<210> 28
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 13.42a Protein Light Chain HV1

<400> 28
Arg Ala Ser Gln Asp Ile Ser Asn Tyr Leu Asn
1 5 10

<210> 29
<211> 21
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 13.42a DNA Light chain HV2

<400> 29
tacacatcaa gattacactc a 21

<210> 30
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 13.42a Protein Light chain HV2

<400> 30
Tyr Thr Ser Arg Leu His Ser
1 5

<210> 31
<211> 27
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 13.42a DNA Light chain HV3

<400> 31
caacagggta atacgtttcc gacgttc 27

<210> 32
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 13.42a Protein Light chain HV3

<400> 32
Gln Gln Gly Asn Thr Phe Pro Thr Phe
1 5

<210> 33
<211> 356
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.15 VH DNA sequence

<400> 33
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cctgcaaggc ttctgggtat accttcacaa actatggaat gaactgggtg aagcaggctc 120
caggaaaggg tttaaagtgg atgggctgga taaacaccta cactggagag ccaacatatg 180
ctgatgactt caagggacgg tttgccttct ctttggaaac ctctgccagc actgcctatt 240
tgcagatcaa caacctcaaa aatgaggaca cggctacata tttctgtgca agggaagggt 300
tgtatggtaa ctactttgac tactggggcc aagggaccac ggtcaccgtc tcctca 356

<210> 34
<211> 118
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.15 VH Amino acid sequence

<400> 34
Val Gln Leu Gln Glu Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu Thr
1 5 10 15

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

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

Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe Lys
50 55 60

Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr Leu
65 70 75 80

Gln Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Tyr Phe Cys Ala
85 90 95

Arg Glu Gly Leu Tyr Gly Asn Tyr Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser
115

<210> 35
<211> 324
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.15 VL DNA sequence

<400> 35
gacatccaga tgacacagtc tccaaaattc atgtccacat cagtaggaga cagggtcagc 60
gtcacctgca aggccagtca gaatgtgggt actaatgtag cctggtatca acagaaacca 120
gggcaatctc ctaaagcact gatttactcg gcatcctacc ggtacagtgg agtccctgat 180
cgcttcacag gcagtggatc tgggacagat ttcactctca ccatcagcaa tgtgcagtct 240
gaagacttgg cagagtattt ctgtcagcaa tataacagct atcctctcac gttcggtgct 300
gggaccaagc tggagctgaa acgg 324

<210> 36
<211> 108
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.15 VL Amino acid sequence

<400> 36
Asp Ile Gln Met Thr Gln Ser Pro Lys Phe Met Ser Thr Ser Val Gly
1 5 10 15

Asp Arg Val Ser Val Thr Cys Lys Ala Ser Gln Asn Val Gly Thr Asn
20 25 30

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

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

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

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

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

<210> 37
<211> 33
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.15 DNA Heavy chain HV1

<400> 37
gggtatacct tcacaaacta tggaatgaac tgg 33

<210> 38
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.15 Protein Heavy chain HV1

<400> 38
Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn Trp
1 5 10

<210> 39
<211> 51
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.15 DNA Heavy chain HV2

<400> 39
tggataaaca cctacactgg agagccaaca tatgctgatg acttcaaggg a 51

<210> 40
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.15 Protein Heavy chain HV2

<400> 40
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe Lys
1 5 10 15

Gly

<210> 41
<211> 24
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.15 DNA Heavy Chain HV3

<400> 41
gaagggttgt atggtaacta cttt 24

<210> 42
<211> 8
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.15 Protein Heavy Chain HV3

<400> 42
Glu Gly Leu Tyr Gly Asn Tyr Phe
1 5

<210> 43
<211> 33
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.15 DNA Light Chain HV1

<400> 43
aaggccagtc agaatgtggg tactaatgta gcc 33

<210> 44
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.15 Protein Light Chain HV1

<400> 44
Lys Ala Ser Gln Asn Val Gly Thr Asn Val Ala
1 5 10

<210> 45
<211> 21
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.15 DNA Light chain HV2

<400> 45
tcggcatcct accggtacag t 21

<210> 46
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.15 Protein Light chain HV2

<400> 46
Ser Ala Ser Tyr Arg Tyr Ser
1 5

<210> 47
<211> 27
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.15 DNA Light chain HV3

<400> 47
cagcaatata acagctatcc tctcacg 27

<210> 48
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.15 Protein Light chain HV3

<400> 48
Gln Gln Tyr Asn Ser Tyr Pro Leu Thr
1 5

<210> 49
<211> 350
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.17 VH DNA sequence

<400> 49
aggtcaaact gcaggagtca ggggctgagc tggtgaggcc tggggcttca gtgaagctgt 60
cctgcaaggc ttctggctac accttcacca ggaactggat aaactgggtg aagcagaggc 120
ctggacaagg ccttgagtgg atcggaaata tttatccttc tgatagttat actaactaca 180
atcaaaagtt caaggacaag gccacagtga ctgtagacaa atcctccagc acagcctaca 240
tgcagctcag cagcccgaca tctgaggact ctgcggtcta ttattgtaca agattgaggg 300
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<210> 50
<211> 116
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.17 VH Amino acid sequence

<400> 50
Val Lys Leu Gln Glu Ser Gly Ala Glu Leu Val Arg Pro Gly Ala Ser
1 5 10 15

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

Ile Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile Gly
35 40 45

Asn Ile Tyr Pro Ser Asp Ser Tyr Thr Asn Tyr Asn Gln Lys Phe Lys
50 55 60

Asp Lys Ala Thr Val Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr Met
65 70 75 80

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

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

Thr Val Ser Ser
115

<210> 51
<211> 327
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.17 VL DNA sequence

<400> 51
gacattgtgc taacccaatc tccagtatcc ataactgcat ctcgagggga gaaggtcacc 60
atcacctgcc gtgccagctc aagtataagt tccaattact tacactgtta ccagcagaag 120
ccaggatcct cccctaaact tttgatttat aggacatcca tcctggcatc tggagtccta 180
gacagcttca gtggcagtgg gtctgagagc tcttacactc tgacaatcag ctgcatgcag 240
gacgaagttg ctgccactta ctattgtcag caggggagta gtagcccccc cacgttcggt 300
gctgggacca agctggagct gaaacgg 327

<210> 52
<211> 109
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.17 VL Amino acid sequence

<400> 52
Asp Ile Val Leu Thr Gln Ser Pro Val Ser Ile Thr Ala Ser Arg Gly
1 5 10 15

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

Tyr Leu His Cys Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Leu Leu
35 40 45

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

Gly Ser Gly Ser Glu Ser Ser Tyr Thr Leu Thr Ile Ser Cys Met Gln
65 70 75 80

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

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

<210> 53
<211> 30
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.17 DNA Heavy chain HV1

<400> 53
ggctacacct tcaccaggaa ctggataaac 30

<210> 54
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.17 Protein Heavy chain HV1

<400> 54
Gly Tyr Thr Phe Thr Arg Asn Trp Ile Asn Trp
1 5 10

<210> 55
<211> 51
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.17 DNA Heavy chain HV2

<400> 55
aatatttatc cttctgatag ttatactaac tacaatcaaa agttcaagga c 51

<210> 56
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.17 Protein Heavy chain HV2

<400> 56
Asn Ile Tyr Pro Ser Asp Ser Tyr Thr Asn Tyr Asn Gln Lys Phe Lys
1 5 10 15

Asp

<210> 57
<211> 24
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.17 DNA Heavy Chain HV3

<400> 57
ttgaggggtt tattacctga ctac 24

<210> 58
<211> 8
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.17 Protein Heavy Chain HV3

<400> 58
Leu Arg Gly Leu Leu Pro Asp Tyr
1 5

<210> 59
<211> 42
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.17 DNA Light Chain HV1

<400> 59
atcacctgcc gtgccagctc aagtataagt tccaattact ta 42

<210> 60
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.17 Protein Light Chain HV1

<400> 60
Arg Ala Ser Ser Ser Ile Ser Ser Asn Tyr Leu
1 5 10

<210> 61
<211> 21
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.17 DNA Light chain HV2

<400> 61
aggacatcca tcctggcatc t 21

<210> 62
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.17 Protein Light chain HV2

<400> 62
Arg Thr Ser Ile Leu Ala Ser
1 5

<210> 63
<211> 27
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.17 DNA Light chain HV3

<400> 63
cagcagggga gtagtagccc cctcacg 27

<210> 64
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.17 Protein Light chain HV3

<400> 64
Gln Gln Gly Ser Ser Ser Pro Leu Thr
1 5

<210> 65
<211> 350
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.75 VH DNA sequence

<400> 65
aggtcaaact gcaggagtca ggggctgagc tggtgaggcc tggggcttca gtgaagctgt 60
cctgcaaggc ttctggctac accttcacca ggaactggat aaactgggtg aagcagaggc 120
ctggacaagg ccttgagtgg atcggaaata tttatccttc tgatagttat actaactaca 180
atcaaaagtt caaggacaag gccacagtga ctgtagacaa atcctccagc acagcctaca 240
tgcagctcag cagcccgaca tctgaggact ctgcggtcta ttattgtaca agattgaggg 300
gtttattacc tgactactgg ggccaaggga ccacggtcac cgtctcctca 350

<210> 66
<211> 116
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.75 VH Amino acid sequence

<400> 66
Val Lys Leu Gln Glu Ser Gly Ala Glu Leu Val Arg Pro Gly Ala Ser
1 5 10 15

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

Ile Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile Gly
35 40 45

Asn Ile Tyr Pro Ser Asp Ser Tyr Thr Asn Tyr Asn Gln Lys Phe Lys
50 55 60

Asp Lys Ala Thr Val Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr Met
65 70 75 80

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

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

Thr Val Ser Ser
115

<210> 67
<211> 324
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.75 VL DNA sequence

<400> 67
gacatccaga tgacacagtc tccaaaattc atgtccacat cagtaggaga cagggtcagc 60
gtcacctgca aggccagtca gaatgtggat actaatgtag cctggtatca acagaaacca 120
gggcaatctc ctaaagcact gatttactcg gcatcctacc ggtacagtgg agtccctgat 180

cgcttcacag gcagtggatc tgggacagat ttcactctca ccatcagcaa tgtgcagtct 240
gaagacttgg cagagtattt ctgtcagcaa tataacagct atcctcctac gttcggtgct 300
gggaccaagc tggagctgaa acgg 324

<210> 68
<211> 108
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.75 VL Amino acid sequence

<400> 68
Asp Ile Gln Met Thr Gln Ser Pro Lys Phe Met Ser Thr Ser Val Gly
1 5 10 15

Asp Arg Val Ser Val Thr Cys Lys Ala Ser Gln Asn Val Asp Thr Asn
20 25 30

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

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

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

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

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

<210> 69
<211> 33
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.75 DNA Heavy chain HV1

<400> 69
ggctacacct tcaccaggaa ctggataaac tgg 33

<210> 70
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.75 Protein Heavy chain HV1

<400> 70
Gly Tyr Thr Phe Thr Arg Asn Trp Ile Asn Trp
1 5 10

<210> 71
<211> 51
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.75 DNA Heavy chain HV2

<400> 71
aatatttatc cttctgatag ttatactaac tacaatcaaa agttcaagga c 51

<210> 72
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.75 Protein Heavy chain HV2

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

Asp

<210> 73
<211> 24
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.75 DNA Heavy Chain HV3

<400> 73
ttgaggggtt tattacctga ctac 24

<210> 74
<211> 8
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.75 Protein Heavy Chain HV3

<400> 74
Leu Arg Gly Leu Leu Pro Asp Tyr
1 5

<210> 75
<211> 33
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.75 DNA Light Chain HV1

<400> 75
aaggccagtc agaatgtgga tactaatgta gcc 33

<210> 76
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.75 Protein Light Chain HV1

<400> 76
Lys Ala Ser Gln Asn Val Asp Thr Asn Val Ala
1 5 10

<210> 77
<211> 21
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.75 DNA Light chain HV2

<400> 77
tcggcatcct accggtacag t 21

<210> 78
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.75 Protein Light chain HV2

<400> 78
Ser Ala Ser Tyr Arg Tyr Ser
1 5

<210> 79
<211> 27
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.75 DNA Light chain HV3

<400> 79
cagcaatata acagctatcc tcctacg 27

<210> 80
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.75 Protein Light chain HV3

<400> 80
Gln Gln Tyr Asn Ser Tyr Pro Pro Thr
1 5

<210> 81
<211> 356
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.2 VH-1 DNA sequence

<400> 81
aggtgaagct gcaggagtca ggacctgagc tgaagaagcc tggagagaca gtcaagatct 60
cctgcaaggc ttctgggtat accttcacaa actatggaat gaactgggtg aagcaggctc 120
caggaaaggg tttaaagtgg atgggctgga taaacaccta cactggagag ccaacatatg 180
ctgatgactt caagggacgg tttgccttct ctttggaaac ctctgccagc actgcctatt 240
tgcagatcaa caacctcaaa aatgaggaca cggctacata tttctgtgca agggaagggt 300
tgtatggtaa ctactttgac tactggggcc aagggaccac ggtcaccgtc tcctca 356

<210> 82
<211> 118
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.2 VH-1 Amino acid sequence

<400> 82
Val Lys Leu Gln Glu Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu Thr
1 5 10 15

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

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

Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe Lys
50 55 60

Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr Leu
65 70 75 80

Gln Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Tyr Phe Cys Ala
85 90 95

Arg Glu Gly Leu Tyr Gly Asn Tyr Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Thr Val Thr Val Ser Ser
115

<210> 83
<211> 324
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.2 VL DNA sequence

<400> 83
gacatccaga tgacccagtc tccaaaattc atgtccacat cagtaggaga cagggtcagc 60
gtcacctgca aggccagtca gaatgtgggt actaatgtag cctggtatca acagaaacca 120
gggcaatctc ctaaagcact gatttactcg gcatcctacc ggtacagtgg agtccctgat 180
cgcttcacag gcagtggatc tgggacagat ttcactctca ccatcagcaa tgtgcagtct 240
gaagacttgg cagagtattt ctgtcagcaa tataacagct atcctctcac gttcggtgct 300
gggaccaagc tggaaataaa acgg 324

<210> 84
<211> 108
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.2 VL Amino acid sequence

<400> 84
Asp Ile Gln Met Thr Gln Ser Pro Lys Phe Met Ser Thr Ser Val Gly
1 5 10 15

Asp Arg Val Ser Val Thr Cys Lys Ala Ser Gln Asn Val Gly Thr Asn
20 25 30

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

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

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

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

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

<210> 85
<211> 33
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.2 DNA Heavy chain HV1

<400> 85
gggtatacct tcacaaacta tggaatgaac tgg 33

<210> 86
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.2 Protein Heavy chain HV1

<400> 86
Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn Trp
1 5 10

<210> 87
<211> 51
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.2 DNA Heavy chain HV2

<400> 87
tggataaaca cctacactgg agagccaaca tatgctgatg acttcaaggg a 51

<210> 88

<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.2 Protein Heavy chain HV2

<400> 88
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Asp Phe Lys
1 5 10 15

Gly

<210> 89
<211> 24
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.2 DNA Heavy Chain HV3

<400> 89
gaagggttgt atggtaacta cttt 24

<210> 90
<211> 8
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.2 Protein Heavy Chain HV3

<400> 90
Glu Gly Leu Tyr Gly Asn Tyr Phe
1 5

<210> 91
<211> 33
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.2 DNA Light Chain HV1

<400> 91
aaggccagtc agaatgtggg tactaatgta gcc 33

<210> 92
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.2 Protein Light Chain HV1

<400> 92
Lys Ala Ser Gln Asn Val Gly Thr Asn Val Ala
1 5 10

<210> 93

<211> 21
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.2 DNA Light chain HV2

<400> 93
tcggcatcct accggtacag t 21

<210> 94
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.2 Protein Light chain HV2

<400> 94
Ser Ala Ser Tyr Arg Tyr Ser
1 5

<210> 95
<211> 27
<212> DNA
<213> Mus musculus

<220>
<221> Cell line 32.2 DNA Light chain HV3

<400> 95
cagcaatata acagctatcc tctcacg 27

<210> 96
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> Cell line 32.2 Protein Light chain HV3

<400> 96
Gln Gln Tyr Asn Ser Tyr Pro Leu Thr
1 5

<210> 97
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> A39276 CDR-H1

<400> 97
Gly Tyr Thr Phe Thr Asn Phe Trp Ile Gly Trp
1 5 10

<210> 98
<211> 11
<212> PRT
<213> Homo sapiens

<220>
<221> AAL59371.1 CDR-H1

<400> 98
Gly Tyr Thr Phe Thr Tyr Asn Ala Ile Gln Trp
1 5 10

<210> 99
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAB32203.1 CDR-H1

<400> 99
Gly Tyr Thr Phe Thr Ser Tyr Trp Met Gln Trp
1 5 10

<210> 100
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAT76246.1 CDR-H1

<400> 100
Gly Tyr Thr Phe Thr Thr Tyr Trp Met His Trp
1 5 10

<210> 101
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAR90999.1 CDR-H1

<400> 101
Gly Tyr Thr Phe Thr Asp Tyr Tyr Met Asn Trp
1 5 10

<210> 102
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAB46762.1 CDR-H1

<400> 102
Gly Tyr Thr Phe Thr Glu Tyr Tyr Val Asn Trp
1 5 10

<210> 103
<211> 11
<212> PRT
<213> Homo sapiens

<220>
<221> AAG33839.1 CDR-H1

<400> 103
Gly Tyr Thr Phe Thr Asp Tyr Tyr Ile His Trp
1 5 10

<210> 104
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAT76245.1 CDR-H1

<400> 104
Gly Tyr Thr Phe Thr Ser Tyr Trp Met His Trp
1 5 10

<210> 105
<211> 11
<212> PRT
<213> Homo sapiens

<220>
<221> CAA84376.1 CDR-H1

<400> 105
Gly Tyr Thr Phe Thr Gly Tyr Tyr Ile His Trp
1 5 10

<210> 106
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAB46761.1 CDR-H1

<400> 106
Gly Tyr Thr Phe Thr Ser Tyr Trp Met His Trp
1 5 10

<210> 107
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAB58061.1 CDR-H1

<400> 107
Gly Tyr Thr Phe Thr Asp Tyr Asn Met His Trp
1 5 10

<210> 108
<211> 11
<212> PRT
<213> Mus musculus

<220>

<221> F30502 CDR-H1

<400> 108
Gly Tyr Ser Phe Thr Gly Tyr Asn Met Asn Trp
1 5 10

<210> 109
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAR91003.1 CDR-H1

<400> 109
Gly Tyr Ala Phe Ser Ser Tyr Trp Met Asn Trp
1 5 10

<210> 110
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAT76236.1 CDR-H1

<400> 110
Gly Tyr Thr Phe Thr Ser Tyr Val Met His Trp
1 5 10

<210> 111
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> AAB32203.1 CDR-H2

<400> 111
Glu Ile Asp Pro Ser Asp Ser Tyr Thr Asn Tyr Asn Gln Lys Phe Lys
1 5 10 15

Gly

<210> 112
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> AAT68292.1 CDR-H2

<400> 112
Ala Ile Asp Thr Ser Asp Ser Tyr Thr Tyr Tyr Asn Gln Lys Phe Lys
1 5 10 15

Gly

<210> 113

<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> A39276 CDR-H2

<400> 113
Asn Ile Tyr Pro Gly Gly Asp Tyr Thr Asn Tyr Ile Glu Lys Phe Lys
1 5 10 15

Gly

<210> 114
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> AAB58061 CDR-H2

<400> 114
Tyr Ile Tyr Pro Tyr Thr Gly Gly Thr Gly Tyr Asn Gln Lys Phe Lys
1 5 10 15

Asn

<210> 115
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> 1921302A CDR-H2

<400> 115
Asn Ile Asn Pro Tyr Tyr Gly Ser Thr Ser Tyr Asn Gln Lys Phe Lys
1 5 10 15

Gly

<210> 116
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> AAR91004.1 CDR-H2

<400> 116
Trp Ile Asp Pro Ala Asn Gly Asp Thr Glu Tyr Ala Ser Lys Phe Gln
1 5 10 15

Gly

<210> 117
<211> 17

<212> PRT
<213> Mus musculus

<220>
<221> F30502 CDR-H2

<400> 117
Lys Ile Asn Pro Tyr Tyr Gly Ser Thr Ser Tyr Asn Gln Lys Phe Lys
1 5 10 15

Gly

<210> 118
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> AAT76236.1 CDR-H2

<400> 118
Tyr Ile Asn Pro Tyr Asn Asp Gly Thr Lys Tyr Asn Glu Lys Phe Lys
1 5 10 15

Gly

<210> 119
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> AAB46758 CDR-H2

<400> 119
Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Tyr Ala Pro Lys Phe Gln
1 5 10 15

Gly

<210> 120
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> AAE72083 CDR-H2

<400> 120
Leu Ile Asn Pro Phe Ser Gly Asp Thr Asn Tyr Ser Gln Lys Phe Thr
1 5 10 15

Gly

<210> 121
<211> 17
<212> PRT

<213> Mus musculus

<220>
<221> B30502 CDR-H2

<400> 121
Tyr Ile Asn Pro Tyr Asn Asp Gly Thr Lys Tyr Asn Glu Lys Phe Lys
1 5 10 15

Gly

<210> 122
<400> 122
000

<210> 123
<211> 17
<212> PRT
<213> Mus musculus

<220>
<221> AAR91007.1 CDR-H2

<400> 123
Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Tyr Ala Ser Lys Phe Gln
1 5 10 15

Gly

<210> 124
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAS01840.1 CDR-L1

<400> 124
Lys Ala Ser Gln Asn Val Gly Thr Asn Val Ala
1 5 10

<210> 125
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAS01841.1 CDR-L1

<400> 125
Lys Ala Ser Gln Asn Val Arg Thr Ala Val Ala
1 5 10

<210> 126
<211> 11
<212> PRT
<213> Mus musculus

<220>

<221> AAT76271.1 CDR-L1

<400> 126
Lys Ala Ser Gln Asp Val Ser Thr Ala Val Ala
1 5 10

<210> 127
<211> 15
<212> PRT
<213> Mus musculus

<220>
<221> AAB46763.1 CDR-L1

<400> 127
Lys Ala Ser Gln Ser Val Asp Tyr Asp Gly Asp Ser Tyr Met Asn
1 5 10 15

<210> 128
<211> 11
<212> PRT
<213> Homo sapiens

<220>
<221> AAA20447.1 CDR-L1

<400> 128
Arg Ala Ser Gln Ser Val Ser Ser Tyr Leu Ala
1 5 10

<210> 129
<211> 11
<212> PRT
<213> Homo sapiens

<220>
<221> PC4282 CDR-L1

<400> 129
Arg Ala Ser Gln Ser Val Ser Asn Tyr Leu Ala
1 5 10

<210> 130
<211> 12
<212> PRT
<213> Homo sapiens

<220>
<221> CAA56180.1 CDR-L1

<400> 130
Arg Ala Ser Gln Thr Val Arg Lys Asn Tyr Leu Ala
1 5 10

<210> 131
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> 1921302B CDR-L1

<400> 131
Arg Ala Ser Gln Ser Ile Ser Asn Tyr Leu His
1 5 10

<210> 132
<211> 11
<212> PRT
<213> Homo sapiens

<220>
<221> AAL59380.1 CDR-L1

<400> 132
Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn
1 5 10

<210> 133
<211> 11
<212> PRT
<213> Homo sapiens

<220>
<221> AAL59377.1 CDR-L1

<400> 133
Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn
1 5 10

<210> 134
<211> 11
<212> PRT
<213> Homo sapiens

<220>
<221> CAA63587.1 CDR-L1

<400> 134
Arg Ala Ser Gln Gly Ile Ser Asn Trp Leu Ala
1 5 10

<210> 135
<211> 11
<212> PRT
<213> Homo sapiens

<220>
<221> AAG30434.1 CDR-L1

<400> 135
Arg Ala Ser Gln Gly Ile Ser Ser Tyr Leu Ala
1 5 10

<210> 136
<211> 11
<212> PRT
<213> Homo sapiens

<220>
<221> CAA56181.1 CDR-L1

<400> 136
Arg Ala Ser Arg Gly Ile Ser Asn Tyr Leu Ala
1 5 10

<210> 137
<211> 11
<212> PRT
<213> Mus musculus

<220>
<221> AAE72082.1 CDR-L1

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

<210> 138
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> AAS01840.1 CDR-L2

<400> 138
Ser Ala Ser Tyr Arg Tyr Ser
1 5

<210> 139
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> G30502 CDR-L2

<400> 139
Trp Ala Ser Thr Arg Glu Ser
1 5

<210> 140
<211> 7
<212> PRT
<213> Homo sapiens

<220>
<221> AAL59376.1 CDR-L2

<400> 140
Trp Ala Ser Thr Arg Glu Ser
1 5

<210> 141
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> AAL59379.1 CDR-L2

<400> 141

Trp Ala Ser Thr Arg Glu Ser
1 5

<210> 142
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> AAT76280.1 CDR-L2

<400> 142
Leu Thr Ser Asn Leu Ala Ser
1 5

<210> 143
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> AAB46767.1 CDR-L2

<400> 143
Asp Thr Ser Lys Leu Ala Ser
1 5

<210> 144
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> AAB46765.1 CDR-L2

<400> 144
Asp Thr Ser Asn Leu Ala Ser
1 5

<210> 145
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> AAB46766.1 CDR-L2

<400> 145
Tyr Thr Ser Asn Leu Ala Pro
1 5

<210> 146
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> AAB46764.1 CDR-L2

<400> 146
Tyr Thr Ser Asn Leu Ala Pro

1 5

<210> 147
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> AAS01843.1 CDR-L2

<400> 147
Thr Thr Ser Asn Leu Ala Ser
1 5

<210> 148
<211> 7
<212> PRT
<213> Homo sapiens

<220>
<221> AAG30433.1 CDR-L2

<400> 148
Lys Thr Ser Val Leu Gly Ser
1 5

<210> 149
<211> 7
<212> PRT
<213> Mus musculus

<220>
<221> CAC22102.1 CDR-L2

<400> 149
Thr Thr Ser Asn Leu Ala Ser
1 5

<210> 150
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> AAS01840.1 CDR-L3

<400> 150
Gln Gln Tyr Asn Ser Tyr Pro Tyr Thr
1 5

<210> 151
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> AAB46766.1 CDR-L3

<400> 151
Gln Gln Trp Ser Ser Asp Pro Leu Thr
1 5

<210> 152
<211> 9
<212> PRT
<213> Homo sapiens

<220>
<221> PC4282 CDR-L3

<400> 152
Gln Gln Arg Ala Ser Trp Pro Leu Thr
1 5

<210> 153
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> S67940 CDR-L3

<400> 153
Gln Gln Tyr Gly Ser Ser Pro Tyr Thr
1 5

<210> 154
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> CAA56180.1 CDR-L3

<400> 154
Gln Gln Tyr Gly Ser Ser Pro Ile Thr
1 5

<210> 155
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> AAB58062.1 CDR-L3

<400> 155
Gln Gln Asn Asn Glu Asp Pro Tyr Thr
1 5

<210> 156
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> AAS01844.1 CDR-L3

<400> 156
Gln Gln Ser Asn Glu Asp Pro Arg Thr
1 5

<210> 157
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> C30502 CDR-L3

<400> 157
Gln Gln Thr Asn Ser Trp Pro Arg Thr
1 5

<210> 158
<211> 9
<212> PRT
<213> Mus musculus

<220>
<221> AAB46763.1 CDR-L3

<400> 158
Gln Gln Asn Asn Glu Asp Pro Phe Thr
1 5

<210> 159
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic monomer peptide

<220>
<221> B71 monomer peptide

<400> 159
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1 5 10 15

Lys Asp

<210> 160
<211> 9
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<213> Artificial Sequence

<220>
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<220>
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<400> 160
Cys Leu Arg Gly Leu Leu Pro Asp Tyr
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<210> 161
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
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<220>
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<210> 162
<211> 11
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<213> Consensus Sequence

<220>
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<400> 162
Gly Tyr Xaa Phe Thr Xaa Xaa Xaa Xaa Xaa Trp
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<210> 163
<211> 17
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<220>
<221> Consensus Sequence 2

<400> 163
Xaa Ile Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Tyr Xaa Xaa Xaa Phe Lys
1 5 10 15

Xaa

<210> 164
<211> 11
<212> PRT
<213> Consensus Sequence

<220>
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<400> 164
Xaa Ala Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10

<210> 165
<211> 7
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<220>
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<400> 165
Xaa Xaa Ser Xaa Xaa Xaa Ser
1 5

<210> 166
<211> 9
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Gln Gln Xaa Xaa Xaa Xaa Pro Xaa Xaa
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<211> 11
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Gly Tyr Thr Phe Thr Xaa Xaa Xaa Xaa Xaa Trp
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<210> 168
<211> 11
<212> PRT
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<400> 168
Gly Tyr Xaa Phe Xaa Xaa Tyr Xaa Met Xaa Trp
1 5 10

<210> 169
<211> 17
<212> PRT
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<220>
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<400> 169
Xaa Ile Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Tyr Xaa Xaa Xaa Phe Lys
1 5 10 15

Xaa

<210> 170
<211> 17
<212> PRT
<213> Consensus Sequence

<220>
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<400> 170

Xaa Ile Xaa Pro Xaa Xaa Xaa Xaa Thr Xaa Tyr Xaa Xaa Lys Phe Xaa
1 5 10 15

Gly

<210> 171
<211> 11
<212> PRT
<213> Consensus Sequence

<220>
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<400> 171
Xaa Ala Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10

<210> 172
<211> 11
<212> PRT
<213> Consensus Sequence

<220>
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<400> 172
Xaa Ala Ser Xaa Xaa Xaa Xaa Xaa Xaa Leu Xaa
1 5 10

<210> 173
<211> 7
<212> PRT
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<220>
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<400> 173
Xaa Xaa Ser Xaa Xaa Xaa Ser
1 5

<210> 174
<211> 7
<212> PRT
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<220>
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<400> 174
Xaa Thr Ser Xaa Leu Xaa Xaa
1 5

<210> 175
<211> 9
<212> PRT
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<400> 175
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1 5

<210> 176
<211> 9
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<400> 176
Gln Gln Xaa Asn Xaa Xaa Pro Xaa Xaa
1 5