

SEQUENCE LISTING

<110> FRED HUTCHINSON CANCER RESEARCH CENTER

<120> METHOD OF MEASURING ADAPTIVE IMMUNITY

<130> SG2840A

<150> US 61/220,344

<151> 2009-06-25

<160> 484

<170> PatentIn version 3.5

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 <210> 20
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<210> 23
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 ngcactctga actaaacctg agctctctg 29

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nccactctca agatccagcc tgcag 25

<210> 29
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<212> DNA
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<220>
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nctccactct caagatccag cctgcaa 27

<210> 30
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<220>
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<213> Artificial Sequence
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 <221> misc_feature
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 <223> Synthetic DNA: TRBV28

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 <223> Synthetic DNA: TRBV29-1

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<223> Synthetic DNA: TRBJ1-3

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<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t; 5 end modified with universal reverse primer

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nacctacaac agtgagccaa cttccctctc caaa 34

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<223> Synthetic DNA: TRBJ1-4

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<400> 49

nccaagacag agagctgggt tccactgcca aa

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ncggtgagcc gtgtccctgg cccgaa

26

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<210> 57
 <211> 24
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 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t; 5 end modified with universal reverse primer

 <400> 57
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 <210> 58
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 <400> 58
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 caciaa 65

 <210> 59
 <211> 65
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV3-1

 <400> 59
 caagcagaag acggcatacg agctcttccg atctgctcac ttaaattctt acatcaattc 60
 cctgg 65

 <210> 60
 <211> 60
 <212> DNA
 <213> Artificial Sequence

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 <223> Synthetic DNA: TRBV4-1

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 <210> 61
 <211> 60
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 <220>
 <223> Synthetic DNA: TRBV(4-2, 4-3)

 <400> 61
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 <210> 62
 <211> 60
 <212> DNA
 <213> Artificial Sequence

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 <223> Synthetic DNA: TRBV5-1

<400> 62
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<210> 63
 <211> 60
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV5-3

<400> 63
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 <211> 60
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 <223> Synthetic DNA: TRBV(5-4, 5-5, 5-6, 5-7, 5-8)

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<400> 65
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<400> 67
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 <210> 74
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<212> DNA
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 <223> Synthetic DNA: TRBV7-2
 <400> 74
 caagcagaag acggcatacg agctcttccg atctcactct gacgatccag cgcacac 57

<210> 75
 <211> 60
 <212> DNA
 <213> Artificial Sequence
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 <223> Synthetic DNA: TRBV7-3
 <400> 75
 caagcagaag acggcatacg agctcttccg atctctctac tctgaagatc cagcgcacag 60

<210> 76
 <211> 58
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic DNA: TRBV7-4
 <400> 76
 caagcagaag acggcatacg agctcttccg atctccactc tgaagatcca gcgcacag 58

<210> 77
 <211> 57
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic DNA: TRBV7-6
 <400> 77
 caagcagaag acggcatacg agctcttccg atctcactct gacgatccag cgcacag 57

<210> 78
 <211> 58
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic DNA: TRBV7-7
 <400> 78
 caagcagaag acggcatacg agctcttccg atctccactc tgacgattca gcgcacag 58

<210> 79
 <211> 58
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic DNA: TRBV7-8
 <400> 79
 caagcagaag acggcatacg agctcttccg atctccactc tgaagatcca gcgcacac 58

<210> 80
 <211> 57
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV7-9

 <400> 80
 caagcagaag acggcatacg agctcttccg atctcacctt ggagatccag cgcacag 57

<210> 81
 <211> 62
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV9

 <400> 81
 caagcagaag acggcatacg agctcttccg atctgcactc tgaactaaac ctgagctctc 60
 tg 62

<210> 82
 <211> 56
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV10-1

 <400> 82
 caagcagaag acggcatacg agctcttccg atctcccctc actctggagt ctgctg 56

<210> 83
 <211> 57
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV10-2

 <400> 83
 caagcagaag acggcatacg agctcttccg atctcccct cactctggag tcagcta 57

<210> 84
 <211> 57
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV10-3

 <400> 84
 caagcagaag acggcatacg agctcttccg atctcctcct cactctggag tccgcta 57

<210> 85
 <211> 58
 <212> DNA
 <213> Artificial Sequence

 <220>

<223> Synthetic DNA: TRBV(11-1, 11-3)

<400> 85
caagcagaag acggcatacg agctcttccg atctccactc tcaagatcca gcctgcag 58

<210> 86
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV11-2

<400> 86
caagcagaag acggcatacg agctcttccg atctctccac tctcaagatc cagcctgcaa 60

<210> 87
<211> 58
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV(12-3, 12-4, 12-5)

<400> 87
caagcagaag acggcatacg agctcttccg atctccactc tgaagatcca gccctcag 58

<210> 88
<211> 62
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV13

<400> 88
caagcagaag acggcatacg agctcttccg atctcattct gaactgaaca tgagctcctt 60
gg 62

<210> 89
<211> 58
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV14

<400> 89
caagcagaag acggcatacg agctcttccg atctctactc tgaagggtgca gcctgcag 58

<210> 90
<211> 62
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV15

<400> 90
caagcagaag acggcatacg agctcttccg atctgataac ttccaatcca ggaggccgaa 60
ca 62

<210> 91
 <211> 60
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV16

 <400> 91
 caagcagaag acggcatacg agctcttccg atctctgtag ccttgagatc caggctacga 60

 <210> 92
 <211> 58
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV17

 <400> 92
 caagcagaag acggcatacg agctcttccg atctcttcca cgctgaagat ccatccccg 58

 <210> 93
 <211> 58
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV18

 <400> 93
 caagcagaag acggcatacg agctcttccg atctgcatcc tgaggatcca gcaggtag 58

 <210> 94
 <211> 56
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV19

 <400> 94
 caagcagaag acggcatacg agctcttccg atctctcttc actgtgacat cggccc 56

 <210> 95
 <211> 60
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV20-1

 <400> 95
 caagcagaag acggcatacg agctcttccg atctcttgtc cactctgaca gtgaccagtg 60

 <210> 96
 <211> 57
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBV23-1

<400> 96
 caagcagaag acggcatacg agctcttccg atctcagcct ggcaatcctg tcctcag 57

<210> 97
 <211> 58
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV24-1

<400> 97
 caagcagaag acggcatacg agctcttccg atctctccct gtccttagag tctgccat 58

<210> 98
 <211> 55
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV25-1

<400> 98
 caagcagaag acggcatacg agctcttccg atctccctga ccctggagtc tgcca 55

<210> 99
 <211> 55
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV27

<400> 99
 caagcagaag acggcatacg agctcttccg atctccctga tcctggagtc gccca 55

<210> 100
 <211> 57
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV28

<400> 100
 caagcagaag acggcatacg agctcttccg atctctccct gattctggag tccgcc 57

<210> 101
 <211> 65
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV29-1

<400> 101
 caagcagaag acggcatacg agctcttccg atctctaaca ttctcaactc tgactgtgag 60
 caaca 65

<210> 102
 <211> 62
 <212> DNA

<213> Artificial Sequence
 <220>
 <223> Synthetic DNA: TRBV30
 <400> 102
 caagcagaag acggcatacg agctcttccg atctcggcag ttcatactga gttctaagaa 60
 gc 62
 <210> 103
 <211> 60
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic DNA: TRBJ1-1
 <400> 103
 aatgatacgg cgaccaccga gatctttacc tacaactgtg agtctggtgc cttgtccaaa 60
 <210> 104
 <211> 58
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic DNA: TRBJ1-3
 <400> 104
 aatgatacgg cgaccaccga gatctaccta caacagtggc ccaacttccc tctccaaa 58
 <210> 105
 <211> 56
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic DNA: TRBJ1-4
 <400> 105
 aatgatacgg cgaccaccga gatctccaag acagagagct gggttccact gccaaa 56
 <210> 106
 <211> 56
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic DNA: TRBJ1-6
 <400> 106
 aatgatacgg cgaccaccga gatctctgtc acagtggagc tgggtcccgtt cccaaa 56
 <210> 107
 <211> 50
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic DNA: TRBJ2-1
 <400> 107
 aatgatacgg cgaccaccga gatctcgggtg agccgtgtcc ctggcccgaa 50

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

 <220>
 <223> Synthetic DNA: TRBJ2-2

 <400> 108
 aatgatacgg cgaccaccga gatctccagt acggtcagcc tagagccttc tccaaa 56

<210> 109
 <211> 51
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBJ2-3

 <400> 109
 aatgatacgg cgaccaccga gatctactgt cagccgggtg cctgggcca a 51

<210> 110
 <211> 47
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBJ2-4

 <400> 110
 aatgatacgg cgaccaccga gatctagagc cggtgccgg cgccgaa 47

<210> 111
 <211> 47
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBJ2-5

 <400> 111
 aatgatacgg cgaccaccga gatctggagc cgcgtgcctg gcccgaa 47

<210> 112
 <211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBJ2-6

 <400> 112
 aatgatacgg cgaccaccga gatctgtcag cctgctgccg gccccgaa 48

<210> 113
 <211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: TRBJ2-7

<400> 113
aatgatacgg cgaccaccga gatctgtgag cctggtgccc ggccccgaa 48

<210> 114
<211> 284
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV1*01

<400> 114
gatactggaa ttaccagac accaaaatac ctggtcacag caatggggag taaaaggaca 60
atgaaacgtg agcatctggg acatgattct atgtattggt acagacagaa agctaagaaa 120
tccctggagt tcatgtttta ctacaactgt aaggaattca ttgaaaacaa gactgtgcca 180
aatcacttca cacctgaatg cctgacagc tctcgcttat accttcatgt ggtcgcactg 240
cagcaagaag actcagctgc gtatctctgc accagcagcc aaga 284

<210> 115
<211> 290
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV2*01

<400> 115
gaacctgaag tcaccagac tcccagccat caggtcacac agatgggaca ggaagtgatc 60
ttgcgctgtg tcccatctc taatcactta tacttctatt ggtacagaca aatcttgggg 120
cagaaagtcg agtttctggt ttccttttat aataatgaaa tctcagagaa gtctgaaata 180
ttcgatgatc aattctcagt tgaaaggcct gatggatcaa atttcactct gaagatccgg 240
tccacaaagc tggaggactc agccatgtac ttctgtgcca gcagtgaagc 290

<210> 116
<211> 288
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV2*03

<400> 116
gaacctgaag tcaccagac tcccagccat caggtcacac agatgggaca ggaagtgatc 60
ttgcgctgtg tcccatctc taatcactta tacttctatt ggtacagaca aatcttgggg 120
cagaaagtcg agtttctggt ttccttttat aataatgaaa tctcagagaa gtctgaaata 180
ttcgatgatc aattctcagt tgagaggcct gatggatcaa atttcactct gaagatccgg 240
tccacaaagc tggaggactc agccatgtac ttctgtgcca gcagtgaagc 288

<210> 117
<211> 287
<212> DNA
<213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV3-1*01

<400> 117
 gacacagctg tttcccagac tccaaaatac ctggtcacac agatgggaaa cgacaagtcc 60
 attaaatgtg aacaaaatct gggccatgat actatgtatt ggtataaaca ggactctaag 120
 aaatttctga agataatggt tagctacaat aataaggagc tcattataaa tgaaacagtt 180
 ccaaatcgct tctcacctaa atctccagac aaagctcact taaatcttca catcaattcc 240
 ctggagcttg gtgactctgc tgtgtatttc tgtgccagca gccaaga 287

<210> 118
 <211> 279
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV3-1*02

<400> 118
 gacacagctg tttcccagac tccaaaatac ctggtcacac agatgggaaa cgacaagtcc 60
 attaaatgtg aacaaaatct gggccatgat actatgtatt ggtataaaca ggactctaag 120
 aaatttctga agataatggt tagctacaat aacaaggaga tcattataaa tgaaacagtt 180
 ccaaatcgat tctcacctaa atctccagac aaagctaaat taaatcttca catcaattcc 240
 ctggagcttg gtgactctgc tgtgtatttc tgtgccagc 279

<210> 119
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV3-2*01

<400> 119
 gacacagccg tttcccagac tccaaaatac ctggtcacac agatgggaaa aaaggagtct 60
 cttaaagtga aacaaaatct gggccataat gctatgtatt ggtataaaca ggactctaag 120
 aaatttctga agacaatggt tatctacagt aacaaggagc caattttaaa tgaaacagtt 180
 ccaaatcgct tctcacctga ctctccagac aaagctcatt taaatcttca catcaattcc 240
 ctggagcttg gtgactctgc tgtgtatttc tgtgccagca gccaaga 287

<210> 120
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV3-2*02

<400> 120
 gacacagccg tttcccagac tccaaaatac ctggtcacac agatgggaaa aaaggagtct 60
 cttaaagtga aacaaaatct gggccataat gctatgtatt ggtataaaca ggactctaag 120

aaatttctga agacaatggt tatctacagt aacaaggagc caatttttaa tgaaacagtt 180
 ccaaatcgct tctcacctga ctctccagac aaagttcatt taaatcttca catcaattcc 240
 ctggagcttg gtgactctgc tgtgtatttc tgtgccagca gccaaga 287

<210> 121
 <211> 285
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV3-2*03

<400> 121
 gacacagccg tttcccagac tccaaaatac ctggtcacac agacgggaaa aaaggagtct 60
 cttaaattgag aacaaaatct gggccataat gctatgtatt ggtataaaca ggactctaag 120
 aaatttctga agacaatggt tatctacagt aacaaggagc caatttttaa tgaaacagtt 180
 ccaaatcgct tctcacctga ctctccagac aaagttcatt taaatcttca catcaattcc 240
 ctggagcttg gtgactctgc tgtgtatttc tgtgccagca gccaa 285

<210> 122
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV4-1*01

<400> 122
 gacactgaag ttaccagac accaaaacac ctggtcatgg gaatgacaaa taagaagtct 60
 ttgaaatgtg aacaacatat ggggcacagg gctatgtatt ggtacaagca gaaagctaag 120
 aagccaccgg agctcatgtt tgtctacagc tatgagaaac tctctataaa tgaaagtgtg 180
 ccaagtcgct tctcacctga atgccccaac agctctctct taaaccttca cctacacgcc 240
 ctgcagccag aagactcagc cctgtatctc tgcgccagca gccaaga 287

<210> 123
 <211> 258
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV4-1*02

<400> 123
 cacctggtca tgggaatgac aaataagaag tctttgaaat gtgaacaaca tatggggcac 60
 agggcaatgt attggtacaa gcagaaagct aagaagccac cggagctcat gtttgtctac 120
 agctatgaga aactctctat aaatgaaagt gtgccaagtc gcttctcacc tgaatgcccc 180
 aacagctctc tcttaaacct tcacctacac gccctgcagc cagaagactc agccctgtat 240
 ctctgcgcca gcagccaa 258

<210> 124
 <211> 287

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV4-2*01

<400> 124
gaaacgggag ttacgcagac accaagacac ctggatcatgg gaatgacaaa taagaagtct 60
ttgaaatgtg aacaacatct ggggcataac gctatgtatt ggtacaagca aagtgtctag 120
aagccactgg agctcatgtt tgtctacaac tttaaagaac agactgaaaa caacagtgtg 180
ccaagtcgct tctcacctga atgccccaac agctctcact tttccttca cctacacacc 240
ctgcagccag aagactcggc cctgtatctc tgtgccagca gccaga 287

<210> 125
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV4-2*02

<400> 125
gaaacgggag ttacgcagac accaagacac ctggatcatgg gaatgacaaa taagaagtct 60
ttgaaatgtg aacaacatct ggggcataac gctatgtatt ggtacaagca aagtgtctag 120
aagccactgg agctcatgtt tgtctacaac tttaaagaac agactgaaaa caacagtgtg 180
ccaagtcgct tctcacctga atgccccaac agctctcact tatgccttca cctacacacc 240
ctgcagccag aagactcggc cctgtatctc tgtgccagca cc 282

<210> 126
<211> 287
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV4-3*01

<400> 126
gaaacgggag ttacgcagac accaagacac ctggatcatgg gaatgacaaa taagaagtct 60
ttgaaatgtg aacaacatct ggggcataac gctatgtatt ggtacaagca aagtgtctag 120
aagccactgg agctcatgtt tgtctacagt cttgaagaac gggttgaaaa caacagtgtg 180
ccaagtcgct tctcacctga atgccccaac agctctcact tttccttca cctacacacc 240
ctgcagccag aagactcggc cctgtatctc tgcgccagca gccaga 287

<210> 127
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV4-3*02

<400> 127
gaaacgggag ttacgcagac accaagacac ctggatcatgg gaatgacaaa taagaagtct 60

ttgaaatgtg aacaacatct gggtcataac gctatgtatt ggtacaagca aagtgctaag	120
aagccactgg agctcatggt tgtctacagt cttgaagaac gggttgaaaa caacagtgtg	180
ccaagtcgct tctcacctga atgccccaac agctctcact tatcccttca cctacacacc	240
ctgcagccag aagactcggc cctgtatctc tgcgccagca gc	282

<210> 128
 <211> 282
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV4-3*03

<400> 128	
gaaacgggag ttacgcagac accaagacac ctggatcatgg gaatgacaaa taagaagtct	60
ttgaaatgtg aacaacatct gggtcataac gctatgtatt ggtacaagca aagtgctaag	120
aagccactgg agctcatggt tgtctacagt cttgaagaac gtgttgaaaa caacagtgtg	180
ccaagtcgct tctcacctga atgccccaac agctctcact tatcccttca cctacacacc	240
ctgcagccag aagactcggc cctgtatctc tgcgccagca gc	282

<210> 129
 <211> 231
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV4-3*04

<400> 129	
aagaagtctt tgaaatgtga acaacatctg gggcataacg ctatgtattg gtacaagcaa	60
agtgctaaga agccactgga gctcatgttt gtctacagtc ttgaagaacg ggttgaaaac	120
aacagtgtgc caagtcgctt ctcacctgaa tgccccaaaca gctctcactt attccttcac	180
ctacacaccc tgcagccaga agactcggcc ctgtatctct gcgccagcag c	231

<210> 130
 <211> 286
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV5-1*01

<400> 130	
aaggctggag tcaactcaaac tccaagatat ctgatcaaaa cgagaggaca gcaagtgaca	60
ctgagctgct cccctatctc tgggcatagg agtgatcctt ggtaccaaca gacccagga	120
cagggccttc agttcctctt tgaatacttc agtgagacac agagaaacaa aggaaacttc	180
cctggtcgat tctcagggcg ccagttctct aactctcgct ctgagatgaa tgtgagcacc	240
ttggagctgg gggactcggc cttttatctt tgcgccagca gcttgg	286

<210> 131
 <211> 285

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV5-1*02

<400> 131
agggctgggg tcactcaaac tccaagacat ctgatcaaaa cgagaggaca gcaagtgaca 60
ctgggctgct cccctatctc tgggcatagg agtgtatcct ggtaccaaca gaccctagga 120
cagggccttc agttcctctt tgaatacttc agtgagacac agagaaacaa aggaaacttc 180
cttggtcgat tctcagggcg ccagttctct aactctcgct ctgagatgaa tgtgagcacc 240
ttggagctgg gggactcggc cctttatctt tgcgccagcg cttgc 285

<210> 132
<211> 286
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV5-3*01

<400> 132
gaggctggag tcacccaaag tccacacac ctgatcaaaa cgagaggaca gcaagtgact 60
ctgagatgct ctcctatctc tgggcacagc agtgtgtcct ggtaccaaca ggccccgggt 120
caggggcccc agtttatctt tgaatatgct aatgagttaa ggagatcaga aggaaacttc 180
cctaactgat tctcagggcg ccagttccat gactgttgct ctgagatgaa tgtgagtgcc 240
ttggagctgg gggactcggc cctgtatctc tgtgccagaa gcttgg 286

<210> 133
<211> 286
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV5-3*02

<400> 133
gaggctggag tcacccaaag tccacacac ctgatcaaaa cgagaggaca gcaagtgact 60
ctgagatgct ctcctatctc tgggcacagc agtgtgtcct ggtaccaaca ggccccgggt 120
caggggcccc agtttatctt tgaatatgct aatgagttaa ggagatcaga aggaaacttc 180
cctaactgat tctcagggcg ccagttccat gactattgct ctgagatgaa tgtgagtgcc 240
ttggagctgg gggactcggc cctgtatctc tgtgccagaa gcttgg 286

<210> 134
<211> 286
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV5-4*01

<400> 134
gagactggag tcacccaaag tccacacac ctgatcaaaa cgagaggaca gcaagtgact 60

ctgagatgct cttctcagtc tgggcacaac actgtgtcct ggtaccaaca ggccctgggt	120
caggggcccc agtttatctt tcagtattat agggaggaag agaatggcag aggaaacttc	180
cctcctagat tctcaggtct ccagttccct aattatagct ctgagctgaa tgtgaacgcc	240
ttggagctgg acgactcggc cctgtatctc tgtgccagca gcttgg	286

<210> 135
 <211> 282
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV5-4*02

<400> 135	
gagactggag tcacccaaag tcccacacac ctgatcaaaa cgagaggaca gcaagtgact	60
ctgagatgct cttctcagtc tgggcacaac actgtgtcct ggtaccaaca ggccctgggt	120
caggggcccc agtttatctt tcagtattat agggaggaag agaatggcag aggaaacttc	180
cctcctagat tctcaggtct ccagttccct aattataact ctgagctgaa tgtgaacgcc	240
ttggagctgg acgactcggc cctgtatctc tgtgccagca gc	282

<210> 136
 <211> 234
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV5-4*03

<400> 136	
cagcaagtga cactgagatg ctcttctcag tctgggcaca aactgtgtc ctggtaccaa	60
cagggccttg gtcaggggcc ccagtttatac ttctcagtatt atagggagga agagaatggc	120
agaggaaact tccctcctag attctcaggt ctccagttcc ctaattatag ctctgagctg	180
aatgtgaacg ccttgagct ggacgactcg gccctgtatc tctgtgccag cagc	234

<210> 137
 <211> 192
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV5-4*04

<400> 137	
actgtgtcct ggtaccaaca ggccctgggt caggggcccc agtttatctt tcagtattat	60
aggaggaag agaatggcag aggaaactcc cctcctagat tctcaggtct ccagttccct	120
aattatagct ctgagctgaa tgtgaacgcc ttggagctgg acgactcggc cctgtatctc	180
tgtgccagca gc	192

<210> 138
 <211> 286
 <212> DNA
 <213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV5-5*01

<400> 138
gacgctggag tcacccaaag tcccacacac ctgatcaaaa cgagaggaca gcaagtgact 60
ctgagatgct ctcctatctc tgggcacaag agtgtgtcct ggtaccaaca ggtcctgggt 120
caggggcccc agtttatctt tcagtattat gagaaagaag agagaggaag aggaaacttc 180
cctgatcgat tctcagctcg ccagttccct aactatagct ctgagctgaa tgtgaacgcc 240
ttgttgctgg gggactcggc cctgtatctc tgtgccagca gcttgg 286

<210> 139
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV5-5*02

<400> 139
gacgctggag tcacccaaag tcccacacac ctgatcaaaa cgagaggaca gcacgtgact 60
ctgagatgct ctcctatctc tgggcacaag agtgtgtcct ggtaccaaca ggtcctgggt 120
caggggcccc agtttatctt tcagtattat gagaaagaag agagaggaag aggaaacttc 180
cctgatcgat tctcagctcg ccagttccct aactatagct ctgagctgaa tgtgaacgcc 240
ttgttgctgg gggactcggc cctgtatctc tgtgccagca gc 282

<210> 140
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV5-5*03

<400> 140
gacgctggag tcacccaaag tcccacacac ctgatcaaaa cgagaggaca gcaagtgact 60
ctgagatgct ctcctatctc tgagcacaag agtgtgtcct ggtaccaaca ggtcctgggt 120
caggggcccc agtttatctt tcagtattat gagaaagaag agagaggaag aggaaacttc 180
cctgatcgat tctcagctcg ccagttccct aactatagct ctgagctgaa tgtgaacgcc 240
ttgttgctgg gggactcggc cctgtatctc tgtgccagca gc 282

<210> 141
<211> 286
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV5-6*01

<400> 141
gacgctggag tcacccaaag tcccacacac ctgatcaaaa cgagaggaca gcaagtgact 60
ctgagatgct ctcctaagtc tgggcatgac actgtgtcct ggtaccaaca ggccctgggt 120

caggggcccc agtttatctt tcagtattat gaggaggaag agagacagag aggcaacttc 180
 cctgatcgat tctcaggtca ccagttccct aactatagct ctgagctgaa tgtgaacgcc 240
 ttgttgctgg gggactcggc cctctatctc tgtgccagca gcttgg 286

<210> 142
 <211> 286
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV5-7*01

<400> 142
 gacgctggag tcacccaaag tcccacacac ctgatcaaaa cgagaggaca gcacgtgact 60
 ctgagatgct ctcctatctc tgggcacacc agtgtgtcct cgtaccaaca ggccctgggt 120
 caggggcccc agtttatctt tcagtattat gagaaagaag agagaggaag aggaaacttc 180
 cctgatcaat tctcaggtca ccagttccct aactatagct ctgagctgaa tgtgaacgcc 240
 ttgttgctag gggactcggc cctctatctc tgtgccagca gcttgg 286

<210> 143
 <211> 286
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV5-8*01

<400> 143
 gaggctggag tcacacaaag tcccacacac ctgatcaaaa cgagaggaca gcaagcgact 60
 ctgagatgct ctcctatctc tgggcacacc agtgtgtact ggtaccaaca ggccctgggt 120
 ctgggcctcc agttcctcct ttggtatgac gagggtgaag agagaaacag aggaaacttc 180
 cctcctagat tttcaggtcg ccagttccct aattatagct ctgagctgaa tgtgaacgcc 240
 ttggagctgg aggactcggc cctgtatctc tgtgccagca gcttgg 286

<210> 144
 <211> 238
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV5-8*02

<400> 144
 aggacagcaa gcgactctga gatgctctcc tatctctggg cacaccagtg tgtactggta 60
 ccaacaggcc ctgggtctgg gcctccagct cctcctttgg tatgacgagg gtgaagagag 120
 aaacagagga aacttccctc ctagattttc aggtcgccag ttccctaatt atagctctga 180
 gctgaatgtg aacgccttgg agctggagga ctcgccctg tatctctgtg ccagcagc 238

<210> 145
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV6-1*01

<400> 145
 aatgctggtg tcactcagac cccaaaattc caggtcctga agacaggaca gagcatgaca 60
 ctgcagtgtg cccaggatat gaaccataac tccatgtact ggtatcgaca agaccaggc 120
 atgggactga ggctgattta ttactcagct tctgagggtg cactgacaa aggagaagtc 180
 cccaatggct acaatgtctc cagattaaac aaacgggagt tctgctcag gctggagtcg 240
 gctgctccct cccagacatc tgtgtacttc tgtgccagca gtgaagc 287

<210> 146
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV6-2*01

<400> 146
 aatgctggtg tcactcagac cccaaaattc cgggtcctga agacaggaca gagcatgaca 60
 ctgctgtgtg cccaggatat gaaccatgaa tacatgtact ggtatcgaca agaccaggc 120
 atggggctga ggctgattca ttactcagtt ggtgagggtg caactgcaa aggagaggtc 180
 cctgatggct acaatgtctc cagattaaaa aaacagaatt tcctgctggg gttggagtcg 240
 gctgctccct cccaaacatc tgtgtacttc tgtgccagca gttactc 287

<210> 147
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV6-3*01

<400> 147
 aatgctggtg tcactcagac cccaaaattc cgggtcctga agacaggaca gagcatgaca 60
 ctgctgtgtg cccaggatat gaaccatgaa tacatgtact ggtatcgaca agaccaggc 120
 atggggctga ggctgattca ttactcagtt ggtgagggtg caactgcaa aggagaggtc 180
 cctgatggct acaatgtctc cagattaaaa aaacagaatt tcctgctggg gttggagtcg 240
 gctgctccct cccaaacatc tgtgtacttc tgtgccagca gttactc 287

<210> 148
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV6-4*01

<400> 148
 attgctggga tcaccaggc accaacaatc cagatcctgg cagcaggacg gcgcatgaca 60
 ctgagatgta cccaggatat gagacataat gccatgtact ggtatagaca agatctagga 120

ctggggctaa ggctcatcca ttattcaaact actgcaggta ccaactggcaa aggagaagtc 180
 cctgatgggtt atagtgtctc cagagcaaac acagatgatt tccccctcac gttggcgtct 240
 gctgtaccct ctcagacatc tgtgtacttc tgtgccagca gtgactc 287

<210> 149
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV6-4*02

<400> 149
 actgctggga tcaccaggc accaacaatct cagatcctgg cagcaggacg gagcatgaca 60
 ctgagatgta cccaggatat gagacataat gccatgtact ggtatagaca agatctagga 120
 ctggggctaa ggctcatcca ttattcaaact actgcaggta ccaactggcaa aggagaagtc 180
 cctgatgggtt atagtgtctc cagagcaaac acagatgatt tccccctcac gttggcgtct 240
 gctgtaccct ctcagacatc tgtgtacttc tgtgccagca gtgactc 287

<210> 150
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV6-5*01

<400> 150
 aatgctggtg tcactcagac cccaaaattc caggtcctga agacaggaca gagcatgaca 60
 ctgcagtgtg cccaggatat gaaccatgaa tacatgtcct ggtatcgaca agaccaggc 120
 atggggctga ggctgattca ttactcagtt ggtgctggta tcactgacca aggagaagtc 180
 cccaatggct acaatgtctc cagatcaacc acagaggatt tcccgtcag gctgctgtcg 240
 gctgctccct cccagacatc tgtgtacttc tgtgccagca gttactc 287

<210> 151
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV6-6*01

<400> 151
 aatgctggtg tcactcagac cccaaaattc cgcacacctga agataggaca gagcatgaca 60
 ctgcagtgtg cccaggatat gaaccataac tacatgtact ggtatcgaca agaccaggc 120
 atggggctga agctgattta ttattcagtt ggtgctggta tcactgataa aggagaagtc 180
 ccgaatggct acaacgtctc cagatcaacc acagaggatt tcccgtcag gctggagttg 240
 gctgctccct cccagacatc tgtgtacttc tgtgccagca gttactc 287

<210> 152
 <211> 282

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV6-6*02

<400> 152
aatgctggtg tcactcagac cccaaaattc cgcctcctga agataggaca gagcatgaca 60
ctgcagtgtg cccaggatat gaaccataac tacatgtact ggtatcgaca agaccaggc 120
atggggctga agctgattta ttattcagtt ggtgctggtg tcactgacaa aggagaagtc 180
ccgaatggct acaacgtctc cagatcaacc acagaggatt tcccgtcag gctggagttg 240
gctgctccct cccagacatc tgtgtacttc tgtgccagca gt 282

<210> 153
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV6-6*03

<400> 153
aatgctggtg tcactcagac cccaaaattc cgcctcctga agataggaca gagcatgaca 60
ctgcagtgtg cccaggatat gaaccataac tacatgtact ggtatcgaca agaccaggc 120
atggggctga agctgattta ttattcagtt ggtgctggtg tcactgataa aggagaagtc 180
ccgaatggct acaacgtctc cagatcaacc acagaggatt tcccgtcag gctggagttg 240
gctgctccct cccagacatc tgtgtacttc tgtgccagca gt 282

<210> 154
<211> 285
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV6-6*04

<400> 154
aatgctggtg tcactcagac cccaaaattc cgcctcctga agataggaca gagcatgaca 60
ctgcagtgtg cccaggatat gaaccatgaa tacatgtact ggtatcgaca agaccaggc 120
atggggctga agctgattta ttattcagtt ggtgctggtg tcactgataa aggagaagtc 180
ccgaatggct acaatgtctc cagatcaacc acagaggatt tcccgtcag gctggagttg 240
gctgctccct cccagacatc tgtgtacttc tgtgccagca gtcga 285

<210> 155
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV6-6*05

<400> 155
aatgctggtg tcactcagac cccaaaattc cgcctcctga agataggaca gagcatgaca 60

ctgcagtgtg cccaggatat gaaccataac tacatgtact ggtatcgaca agaccaggc	120
atggggctga agctgattta ttattcagtt ggtgctggta tctactgacaa aggagaagtc	180
ccgaatggct acaacgtctc cagatcaacc acagaggatt tcccgtcag gctggagttg	240
gctgctgcct cccagacatc tgtgtacttc tgtgccagca gc	282

<210> 156
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV6-7*01

<400> 156	
aatgctggtg tctactcagac cccaaaattc cacgtcctga agacaggaca gagcatgact	60
ctgctgtgtg cccaggatat gaaccatgaa tacatgtatc ggtatcgaca agaccaggc	120
aaggggctga ggctgattta ctactcagtt gctgctgctc tctactgacaa aggagaagtt	180
cccaatggct acaatgtctc cagatcaaac acagaggatt tccccctcaa gctggagtca	240
gctgctccct ctgacttc tgtttacttc tgtgccagca gttactc	287

<210> 157
 <211> 284
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV6-8*01

<400> 157	
aatgctggtg tctactcagac cccaaaattc cacatcctga agacaggaca gagcatgaca	60
ctgcagtgtg cccaggatat gaaccatgga tacatgtcct ggtatcgaca agaccaggc	120
atggggctga gactgattta ctactcagct gctgctggta ctactgacaa agaagtcccc	180
aatggctaca atgtctctag attaaacaca gaggatttcc cactcaggct ggtgtcggct	240
gctccctccc agacatctgt gtacttgtgt gccagcagtt actc	284

<210> 158
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV6-9*01

<400> 158	
aatgctggtg tctactcagac cccaaaattc cacatcctga agacaggaca gagcatgaca	60
ctgcagtgtg cccaggatat gaaccatgga tacttgcct ggtatcgaca agaccaggc	120
atggggctga ggcgcattca ttactcagtt gctgctggta tctactgacaa aggagaagtc	180
cccgatggct acaatgtatc cagatcaaac acagaggatt tcccgtcag gctggagtca	240
gctgctccct cccagacatc tgtatacttc tgtgccagca gttattc	287

<210> 159
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-1*01

<400> 159
 ggtgctggag tctcccagtc cctgagacac aaggtagcaa agaagggaaa ggatgtagct 60
 ctcatatg atccaatttc aggtcataat gccctttatt ggtaccgaca gagcctgggg 120
 cagggcctgg agttttccaa ttacttccaa ggcaaggatg cagcagacaa atcggggcctt 180
 ccccgatgac ggttctctgc acagaggctt gagggatcca tctccactct gaagttccag 240
 cgcacacagc aggggggactt ggctgtgtat ctctgtgcc a gcagctcagc 290

<210> 160
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-2*01

<400> 160
 ggagctggag tctcccagtc cccagtaac aaggtcacag agaagggaaa ggatgtagag 60
 ctcatgtg atccaatttc aggtcatact gccctttact ggtaccgaca gagcctgggg 120
 cagggcctgg agtttttaaat ttacttccaa ggcaacagtg caccagacaa atcagggctg 180
 cccagtgatc gcttctctgc agagaggact gggggatccg tctccactct gacgatccag 240
 cgcacacagc aggaggactc ggccgtgtat ctctgtgcc a gcagcttagc 290

<210> 161
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-2*02

<400> 161
 ggagctggag tctcccagtc cccagtaac aaggtcacag agaagggaaa ggatgtagag 60
 ctcatgtg atccaatttc aggtcatact gccctttact ggtaccgaca gagcctgggg 120
 cagggcctgg agtttttaaat ttacttccaa ggcaacagtg caccagacaa atcagggctg 180
 cccagtgatc gcttctctgc agagaggact ggggaatccg tctccactct gacgatccag 240
 cgcacacagc aggaggactc ggccgtgtat ctctgtgcc a gcagcttagc 290

<210> 162
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-2*03

<400> 162

ggagctggag tctcccagtc cccagtaac aaggtcacag agaagggaaa ggatgtagag	60
ctcaggtgtg atccaatttc aggtcatact gccctttact ggtaccgaca gaggctgggg	120
cagggcctgg agtttttaat ttacttcaa ggcaacagtg caccagacaa atcagggctg	180
cccagtgatc gcttctctgc agagaggact ggggaatccg tctccactct gacgatccag	240
cgcacacagc aggaggactc ggccgtgtat ctctgtacca gcagcttagc	290

<210> 163
 <211> 288
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-2*04

<400> 163	
ggagctggag tttcccagtc cccagtaac aaggtcacag agaagggaaa ggatgtagag	60
ctcaggtgtg atccaatttc aggtcatact gccctttact ggtaccgaca gaggctgggg	120
cagggcctgg agtttttaat ttacttcaa ggcaacagtg caccagacaa atcagggctg	180
cccagtgatc gcttctctgc agagaggact gggggatccg tctccactct gacgatccag	240
cgcacacagc aggaggactc ggccgtgtat ctctgtgcca gcagctta	288

<210> 164
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-3*01

<400> 164	
ggtgctggag tctcccagac cccagtaac aaggtcacag agaagggaaa atatgtagag	60
ctcaggtgtg atccaatttc aggtcatact gccctttact ggtaccgaca aagcctgggg	120
cagggcccag agtttttaat ttacttcaa ggcacgggtg cggcagatga ctcagggctg	180
cccaacgatc ggttctttgc agtcaggcct gagggatccg tctctactct gaagatccag	240
cgcacagagc ggggggactc agccgtgtat ctctgtgcca gcagcttaac	290

<210> 165
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-3*02

<400> 165	
ggtgctggag tctcccagac cccagtaac aaggtcacag agaagggaaa agatgtagag	60
ctcaggtgtg atccaatttc aggtcatact gccctttact ggtaccgaca aagcctgggg	120
cagggcccag agtttttaat ttacttcaa ggcacgggtg cggcagatga ctcagggctg	180
cccaaagatc ggttctttgc agtcaggcct gagggatccg tctctactct gaagatccag	240
cgcacagagc agggggactc agccgtgtat ctccgtgcca gcagcttaac	290

<210> 166
 <211> 288
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-3*03

<400> 166
 ggtgctggag tctcccagac ccccagtaac aaggtcacag agaagggaaa agatgtagag 60
 ctcagggtg atccaatttc aggtcatact gccctttact ggtaccgaca aagcctgggg 120
 cagggcccag agtttctaata ttacttccaa ggcacgggtg cggcagatga ctcagggtg 180
 cccaaagatc ggttctttgc agtcaggcct gagggatccg tctctactct gaagatccag 240
 cgacacagagc aggggggactc agccgcgtat ctccgtgccg gcagctta 288

<210> 167
 <211> 285
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-3*04

<400> 167
 ggtgctggag tctcccagac ccccagtaac aaggtcacag agaagggaaa atatgtagag 60
 ctcagggtg atccaatttc aggtcatact gccctttact ggtaccgaca aagcctgggg 120
 cagggcccag agtttctaata ttacttccaa ggcacgggtg cggcagatga ctcagggtg 180
 cccaacgatc ggttctttgc agtcaggcct gagggatccg tctctactct gaagatccag 240
 cgacacagagc ggggggactc tgccgtgtat ctctgtgccg gcagc 285

<210> 168
 <211> 231
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-3*05

<400> 168
 tgggagctca ggtgtgatcc aatttcaggt catactgccc ttactggta ccgacaaagc 60
 ctggggcagg gccagagct tctaatttac ttccaaggca cgggtgcggc agatgactca 120
 gggctgccc aacatcggtt ctttgcagtc aggcctgagg gatccgtctc tactctgaag 180
 atccagcgca cagagcgggg ggactcagcc gtgtatctct gtgccagcag c 231

<210> 169
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-4*01

<400> 169

ggtgctggag tctcccagtc cccaaggtac aaagtcgcaa agaggggacg ggatgtagct	60
ctcaggtgtg attcaatttc gggtcagtga accctttatt ggtaccgaca gaccctgggg	120
cagggctcag aggttctgac ttactcccag agtgatgctc aacgagacaa atcagggcgg	180
cccagtggtc ggttctctgc agagaggcct gagagatccg tctccactct gaagatccag	240
cgcacagagc agggggactc agctgtgtat ctctgtgcca gcagcttagc	290

<210> 170
 <211> 288
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-5*01

<400> 170	
ggtgctggag tctcccagtc cccaaggtac gaagtcacac agaggggaca ggatgtagct	60
cccaggtgtg atccaatttc gggtcaggta accctttatt ggtaccgaca gaccctgggg	120
cagggccaag agtttctgac ttccttccag gatgaaactc aacaagataa atcagggctg	180
ctcagtgatc aattctccac agagaggctc gaggatcttt ctccacctga agatccagcg	240
cacagagcaa gggcgactcg gctgtgtatc tctgtgccag aagcttag	288

<210> 171
 <211> 289
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-5*02

<400> 171	
ggtgctggag tctcccagtc cccaaggtac gaagtcacac agaggggaca ggatgtagct	60
cccaggtgtg atccaatttc gggtcaggta accctttatt ggtaccgaca gaccctgggg	120
cagggccaag agtttctgac ttccttccag gatgaaactc aacaagataa atcagggctg	180
ctcagtgatc aattctccac agagaggctc gaggatcttt ctccacctga agatccagcg	240
cacagagcaa gggcgactcg gctgtgtatc tctgtgtcag aagcttagc	289

<210> 172
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-6*01

<400> 172	
ggtgctggag tctcccagtc tcccaggtac aaagtcacaa agaggggaca ggatgtagct	60
ctcaggtgtg atccaatttc gggtcagtga tccctttatt ggtaccgaca ggccctgggg	120
cagggcccag agtttctgac ttacttcaat tatgaagccc aacaagacaa atcagggctg	180
cccaatgatc ggttctctgc agagaggcct gagggatcca tctccactct gacgatccag	240
cgcacagagc agcgggactc ggccatgtat cgctgtgcca gcagcttagc	290

<210> 173
<211> 285
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV7-6*02

<400> 173
ggtgctggag tctccagtc tcccaggtac aaagtcacaa agaggggaca ggatgtagct 60
ctcaggtgtg atccaatctc gggcatgta tccctttatt ggtaccgaca ggccctgggg 120
cagggcccag agtttctgac ttacttcaat tatgaagccc aacaagacaa atcagggctg 180
cccaatgatc ggttctctgc agagaggcct gagggatcca tctccactct gacgatccag 240
cgcacagagc agcgggactc ggccatgtat cgctgtgcc a gcagc 285

<210> 174
<211> 290
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV7-7*01

<400> 174
ggtgctggag tctccagtc tcccaggtac aaagtcacaa agaggggaca ggatgtaact 60
ctcaggtgtg atccaatttc gagtcatgca accctttatt ggtatcaaca ggccctgggg 120
cagggcccag agtttctgac ttacttcaat tatgaagctc aaccagacaa atcagggctg 180
cccagtgatc ggttctctgc agagaggcct gagggatcca tctccactct gacgattcag 240
cgcacagagc agcgggactc agccatgtat cgctgtgcc a gcagcttagc 290

<210> 175
<211> 285
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV7-7*02

<400> 175
ggtgctggag tctccagtc tcccaggtac aaagtcacaa agaggggaca ggatgtaact 60
ctcaggtgtg atccaatttc gagtcatgta accctttatt ggtatcaaca ggccctgggg 120
cagggcccag agtttctgac ttacttcaat tatgaagctc aaccagacaa atcagggctg 180
cccagtgatc ggttctctgc agagaggcct gagggatcca tctccactct gacgattcag 240
cgcacagagc agcgggactc agccatgtat cgctgtgcc a gcagc 285

<210> 176
<211> 290
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV7-8*01

<400> 176
 ggtgctggag tctcccagtc ccctaggtac aaagtcgcaa agagaggaca ggatgtagct 60
 ctcagggtgtg atccaatttc gggtcatgta tccctttttt ggtaccaaca ggccttgggg 120
 cagggggccag agtttctgac ttatttccag aatgaagctc aactagacaa atcggggctg 180
 cccagtgatc gcttctttgc agaaaggcct gagggatccg tctccactct gaagatccag 240
 cgcacacagc aggaggactc cgccgtgtat ctctgtgcca gcagcttagc 290

<210> 177
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-8*02

<400> 177
 ggtgctggag tctcccagtc ccctaggtac aaagtcgcaa agagaggaca ggatgtagct 60
 ctcagggtgtg atccaatttc gggtcatgta tccctttttt ggtaccaaca ggccttgggg 120
 cagggggccag agtttctgac ttatttccag aatgaagctc aactagacaa atcggggctg 180
 cccagtgatc gcttctttgc agaaaggcct gagggatccg tctccactct gaagatccag 240
 cgcacacaga aggaggactc cgccgtgtat ctctgtgcca gcagcttagc 290

<210> 178
 <211> 288
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-8*03

<400> 178
 ggtgctggag tctcccagtc ccctaggtac aaagtcgcaa agagaggaca ggatgtagct 60
 ctcagggtgtg atccaatttc gggtcatgta tccctttttt ggtaccaaca ggccttgggg 120
 cagggggccag agtttctgac ttatttccag aatgaagctc aactagacaa atcggggctg 180
 cccagtgatc gcttctttgc agaaaggcct gagggatccg tctccactct gaagatccag 240
 cgcacacagc aggaggactc cgccgtgtat ctctgtgcca gcagccga 288

<210> 179
 <211> 288
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV7-9*05

<400> 179
 gatactggag tctcccagaa cccagacac aagatcacao agaggggaca gaatgtaact 60
 ttcagggtgtg atccaatttc tgaacacaac cgcctttatt ggtaccgaca gaccctgggg 120
 caggggccag agtttctgac ttacttccag aatgaagctc aactagaaaa atcaaggctg 180
 ctcagtgatc gggttctctgc agagaggcct aagggatctc tctccacctt ggagatccag 240

cgcacagagc aggggggactc ggccatgtat ctctgtgcca gcaccaaa 288

<210> 180
<211> 288
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV7-9*06

<400> 180
gatactggag tctcccagaa cccagacac aagatcaca agaggggaca gaatgtaact 60
ttcaggtgtg atccaatttc tgaacacaac cgcctttatt ggtaccgaca gaccctgggg 120
cagggcccag agtttctgac ttacttccag aatgaagctc aactagaaaa atcaaggctg 180
ctcagtgatc ggttctctgc agagaggcct aagggatctc tttccacctt ggagatccag 240
cgcacagagc aggggggactc ggccatgtat ctctgtgcca gcacgttg 288

<210> 181
<211> 285
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV7-9*03

<400> 181
gatactggag tctcccagga cccagacac aagatcaca agaggggaca gaatgtaact 60
ttcaggtgtg atccaatttc tgaacacaac cgcctttatt ggtaccgaca gaccctgggg 120
cagggcccag agtttctgac ttacttccag aatgaagctc aactagaaaa atcaaggctg 180
ctcagtgatc ggttctctgc agagaggcct aagggatctt tctccacctt ggagatccag 240
cgcacagagc aggggggactc ggccatgtat ctctgtgcca gcagc 285

<210> 182
<211> 290
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV7-9*01

<400> 182
gatactggag tctcccagaa cccagacac aagatcaca agaggggaca gaatgtaact 60
ttcaggtgtg atccaatttc tgaacacaac cgcctttatt ggtaccgaca gaccctgggg 120
cagggcccag agtttctgac ttacttccag aatgaagctc aactagaaaa atcaaggctg 180
ctcagtgatc ggttctctgc agagaggcct aagggatctt tctccacctt ggagatccag 240
cgcacagagc aggggggactc ggccatgtat ctctgtgcca gcagcttagc 290

<210> 183
<211> 288
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV7-9*02

<400> 183
gatactggag tctcccagaa cccagacac aacatcaca agaggggaca gaatgtaact 60
ttcaggtgtg atccaatttc tgaacacaac cgcctttatt ggtaccgaca gaccctgggg 120
cagggcccag agtttctgac ttacttccag aatgaagctc aactagaaaa atcaaggctg 180
ctcagtgatc ggttctctgc agagaggcct aagggatctt tctccacctt ggagatccag 240
cgcacagagc aggggggactc ggccatgtat ctctgtgcc a gcagctta 288

<210> 184
<211> 207
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV7-9*07

<400> 184
cacaaccgcc ttatttgga cgcacagacc ctggggcagg gccagagtt tctgacttac 60
ttccagaatg aagctcaact agaaaaatca aggctgctca gtgatcggtt ctctgcagag 120
aggcctaagg gatctttctc caccttggag atccagcgca cagaggaggg ggactcggcc 180
atgtatctct gtgccagcag cagcagt 207

<210> 185
<211> 288
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV7-9*04

<400> 185
atatctggag tctcccacaa cccagacac aagatcaca agaggggaca gaatgtaact 60
ttcaggtgtg atccaatttc tgaacacaac cgcctttatt ggtaccgaca gaaccctggg 120
cagggcccag agtttctgac ttacttccag aatgaagctc aactggaaaa atcagggctg 180
ctcagtgatc ggatctctgc agagaggcct aagggatctt tctccacctt ggagatccag 240
cgcacagagc aggggggactc ggccatgtat ctctgtgcc a gcagctct 288

<210> 186
<211> 279
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV8-1*01

<400> 186
gaggcaggga tcagccagat accaagatat cacagacaca cagggaaaaa gatcatcctg 60
aaatatgctc agattaggaa ccattattca gtgttctgtt atcaataaga ccaagaatag 120
gggctgaggc tgatccatta ttcaggtagt attggcagca tgaccaaagg cggtgccaa 180
gaagggtaca atgtctctgg aaacaagctc aagcattttc cctcaaccct ggagtctact 240

agcaccagcc agacctctgt acctctgtgg cagtgcac 279

<210> 187
<211> 271
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV8-2*01

<400> 187
gatgctggga tcaccagat gccaagatat cacattgtac agaagaaaga gatgatcctg 60
gaatgtgctc aggttaggaa cagtgttctg atatcgacag gaccaagac gggggctgaa 120
gcttatccac tattcaggca gtggtcacag caggacaaa gttgatgtca cagaggggta 180
ctgtgtttct tgaaacaagc ttgagcattt cccaatcct ggcattccacc agcaccagcc 240
agacctatct gtaccactgt ggcagcacat c 271

<210> 188
<211> 286
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV9*01

<400> 188
gattctggag tcacacaaac cccaaagcac ctgatcacag caactggaca gcgagtgcg 60
ctgagatgct cccctaggtc tggagacctc tctgtgtact ggtaccaaca gagcctggac 120
cagggcctcc agttcctcat tcagtattat aatggagaag agagagcaaa aggaaacatt 180
cttgaacgat tctccgcaca acagttccct gacttgcact ctgaactaaa cctgagctct 240
ctggagctgg gggactcagc tttgtatttc tgtgccagca gcgtag 286

<210> 189
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV9*03

<400> 189
gattctggag tcacacaaac cccaaagcac ctgatcacag caactggaca gcgagtgcg 60
ctgagatgct cccctaggtc tggagacctc tctgtgtact ggtaccaaca gagcctggac 120
cagggcctcc agttcctcat tcaatattat aatggagaag agagagcaaa aggaaacatt 180
cttgaacgat tctccgcaca acagttccct gacttgcact ctgaactaaa cctgagctct 240
ctggagctgg gggactcagc tttgtatttc tgtgccagca gc 282

<210> 190
<211> 286
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV9*02

<400> 190

gattctggag tcacacaaac cccaaagcac ctgatcacag caactggaca gcgagtgcg 60
ctgagatgct cccctaggtc tggagacctc tctgtgtact ggtaccaaca gagcctggac 120
cagggcctcc agttcctcat tcactattat aatggagaag agagagcaaa aggaaacatt 180
cttgaacgat tctccgcaca acagttccct gacttgcact ctgaactaaa cctgagctct 240
ctggagctgg gggactcagc tttgtatttc tgtgccagca gcgtag 286

<210> 191

<211> 287

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV10-1*01

<400> 191

gatgctgaaa tcaccagag cccaagacac aagatcacag agacaggaag gcaggtgacc 60
ttggcgtgtc accagacttg gaaccacaac aatatgttct ggtatcgaca agacctggga 120
catgggctga ggctgatcca ttactcatat ggtgttcaag acactaaca aggagaagtc 180
tcagatggct acagtgtctc tagatcaaac acagaggacc tccccctcac tctggagtct 240
gctgcctcct cccagacatc tgtatatattc tgcgccagca gtgagtc 287

<210> 192

<211> 282

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV10-1*02

<400> 192

gatgctgaaa tcaccagag cccaagacac aagatcacag agacaggaag gcaggtgacc 60
ttggcgtgtc accagacttg gaaccacaac aatatgttct ggtatcgaca agacctggga 120
catgggctga ggctgatcca ttactcatat ggtgttcacg acactaaca aggagaagtc 180
tcagatggct acagtgtctc tagatcaaac acagaggacc tccccctcac tctggagtct 240
gctgcctcct cccagacatc tgtatatattc tgcgccagca gt 282

<210> 193

<211> 287

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV10-2*01

<400> 193

gatgctggaa tcaccagag cccaagatac aagatcacag agacaggaag gcaggtgacc 60
ttgatgtgtc accagacttg gagccacagc tatatgttct ggtatcgaca agacctggga 120
catgggctga ggctgatcta ttactcagca gctgctgata ttacagataa aggagaagtc 180

cccgatggct atgttgcttc cagatccaag acagagaatt tccccctcac tctggagtca 240
gctacccgct cccagacatc tgtgtatttc tgcgccagca gtgagtc 287

<210> 194
<211> 217
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV10-2*02

<400> 194
aaggcagggtg accttgatgt gtcaccagac ttggagccac agctatatgt tctggtatcg 60
acaagacctg ggacatgggc tgaggctgat ctattactca gcagctgctg atattacaga 120
taaaggagaa gtccccgatg gctacgttgt ctccagatcc aagacagaga atttccccct 180
cactctggag tcagctaccc gctccagac atctgtg 217

<210> 195
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV10-3*03

<400> 195
gatgctggaa tcacccagag cccaagacac aaggtcacag agacaggaac accagtgact 60
ctgagatgtc accagactga gaaccaccgc tacatgtact ggtatcgaca agacccgggg 120
catgggctga ggctaattcca ttactcatat ggtgttaaag atactgacaa aggagaagtc 180
tcagatggct atagtgtctc tagatcaaag acagaggatt tcctcctcac tctggagtcc 240
gctaccagct cccagacatc tgtgtacttc tgt 273

<210> 196
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV10-3*04

<400> 196
gatgctggaa tcacccagag cccaagacac aaggtcacag agacaggaac accagtgact 60
ctgagatgtc accagactga gaaccaccgc tacatgtact ggtatcgaca agacccgggg 120
catgggctga ggctgatcca ttactcatat ggtgttaaag atactgacaa aggagaagtc 180
tcagatggct atagtgtctc tagatcaaag acagaggatt tcctcctcac tctggagtcc 240
gctaccagct cccagacatc tgtgtacttc tgt 273

<210> 197
<211> 287
<212> DNA
<213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV10-3*01

<400> 197
 gatgctggaa tcacccagag cccaagacac aaggtcacag agacaggaac accagtgact 60
 ctgagatgtc accagactga gaaccaccgc tatatgtact ggtatcgaca agacccgggg 120
 catgggctga ggctgatcca ttactcatat ggtgttaaag atactgacaa aggagaagtc 180
 tcagatggct atagtgtctc tagatcaaag acagaggatt tcctcctcac tctggagtcc 240
 gctaccagct cccagacatc tgtgtacttc tgtgccatca gtgagtc 287

<210> 198
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV10-3*02

<400> 198
 gatgctggaa tcacccagag cccaagacac aaggtcacag agacaggaac accagtgact 60
 ctgagatgtc atcagactga gaaccaccgc tatatgtact ggtatcgaca agacccgggg 120
 catgggctga ggctgatcca ttactcatat ggtgttaaag atactgacaa aggagaagtc 180
 tcagatggct atagtgtctc tagatcaaag acagaggatt tcctcctcac tctggagtcc 240
 gctaccagct cccagacatc tgtgtacttc tgtgccatca gtgagtc 287

<210> 199
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV11-1*01

<400> 199
 gaagctgaag ttgcccagtc cccagatat aagattacag agaaaagcca ggctgtggct 60
 ttttggtgtg atcctatttc tggccatgct accctttact ggtaccggca gatcctggga 120
 cagggcccgg agcttctggt tcaatttcag gatgagagtg tagtagatga ttcacagttg 180
 cctaaggatc gattttctgc agagaggctc aaaggagtag actccactct caagatccag 240
 cctgcagagc ttggggactc ggccatgtat ctctgtgcc a gcagcttagc 290

<210> 200
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV11-3*01

<400> 200
 gaagctggag tggttcagtc tcccagatat aagattatag agaaaaaaca gcctgtggct 60
 ttttggtgca atcctatttc tggccacaat accctttact ggtacctgca gaacttggga 120
 cagggcccgg agcttctgat tcgatatgag aatgaggaag cagtagacga ttcacagttg 180

cctaaggatc gatttttctgc agagaggctc aaaggagtag actccactct caagatccag 240
 cctgcagagc ttgggggactc ggccgtgtat ctctgtgccca gcagcttaga 290

<210> 201
 <211> 285
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV11-3*02

<400> 201
 gaagctggag tggttcagtc tcccagatat aagattatag agaaaaagca gcctgtggct 60
 ttttggtgca atcctatttc tggccacaat accctttact ggtaccggca gaacttggga 120
 cagggccccg agcttctgat tcgatatgag aatgaggaag cagtagacga ttcacagttag 180
 cctaaggatc gatttttctgc agagaggctc aaaggagtag actccactct caagatccag 240
 cctgcagagc ttgggggactc ggccgtgtat ctctgtgccca gcagc 285

<210> 202
 <211> 269
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV11-3*03

<400> 202
 ggtctcccag atataagatt atagagaaga aacagcctgt ggcttttttg tgcaatccaa 60
 tttctggcca caataccctt tactggtacc tgcagaactt gggacagggc ccggagcttc 120
 tgattcgata tgagaatgag gaagcagtag acgattcaca gttgcctaag gatcgatttt 180
 ctgcagagag gctcaaagga gtagactcca ctctcaagat ccagccagca gagcttgggg 240
 actcggccat gtatctctgt gccagcagc 269

<210> 203
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV11-2*01

<400> 203
 gaagctggag ttgcccagtc tcccagatat aagattatag agaaaaggca gagtgtggct 60
 ttttggtgca atcctatatac tggccatgct accctttact ggtaccagca gatcctggga 120
 cagggcccaa agcttctgat tcagtttcag aataacggtg tagtggaatga ttcacagttag 180
 cctaaggatc gatttttctgc agagaggctc aaaggagtag actccactct caagatccag 240
 cctgcaaagc ttgaggactc ggccgtgtat ctctgtgccca gcagcttaga 290

<210> 204
 <211> 285
 <212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV11-2*03

<400> 204

gaagctggag ttgccagtc tcccagatat aagattatag agaaaaggca gagtgtggct	60
ttttggtgca atcctatatc tggccatgct accctttact ggtaccagca gtcctggga	120
cagggcccaa agcttctgat tcagtttcag aataacggtg tagtggatga ttcacagttg	180
cctaaggatc gattttctgc agagaggctc aaaggagtag actccactct caagatccaa	240
cctgcaaagc ttgaggactc ggccgtgtat ctctgtgcca gcagc	285

<210> 205

<211> 285

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV11-2*02

<400> 205

gaagctggag ttgccagtc tcccagatat aagattatag agaaaaggca gagtgtggct	60
ttttggtgca atcctatatc tggccatgct accctttact ggtaccagca gtcctggga	120
cagggcccaa agcttctgat tcagtttcag aataacggtg tagtggatga ttcacagttg	180
cctaaggatc gattttctgc agagaggctc aaaggagtag actccactct caagatccag	240
cctgcaaagc ttgagaactc ggccgtgtat ctctgtgcca gcagt	285

<210> 206

<211> 290

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV12-1*01

<400> 206

gatgctggtg ttatccagtc acccaggcac aaagtgacag agatgggaca atcagtaact	60
ctgagatgcg aaccaatttc aggccacaat gatcttctct ggtacagaca gaccttctg	120
cagggactgg aattgctgaa ttacttctgc agctggaccc tcgtagatga ctcaggagtg	180
tccaaggatt gattctcagc acagatgcct gatgtatcat tctccactct gaggatccag	240
cccatggaac ccagggactt gggcctatat ttctgtgcca gcagctttgc	290

<210> 207

<211> 290

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV12-2*01

<400> 207

gatgctggca ttatccagtc acccaagcat gaggtgacag aaatgggaca aacagtgact	60
ctgagatgtg agccaatttt tggccacaat ttccttttct ggtacagaga taccttcgtg	120

cagggactgg aattgctgag ttactttccg agctgatcta ttatagataa tgcaggatg	180
cccacagagc gattctcagc tgagaggcct gatggatcat tctctactct gaagatccag	240
cctgcagagc agggggactc ggccgtgtat gtctgtgcaa gtcgcttagc	290

<210> 208
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV12-4*01

<400> 208	
gatgctggag ttatccagtc accccggcac gaggtgacag agatgggaca agaagtgact	60
ctgagatgta aaccaatttc aggacacgac taccttttct ggtacagaca gaccatgatg	120
cggggactgg agttgctcat ttactttaac aacaacgttc cgatagatga ttcagggatg	180
cccaggatc gattctcagc taagatgcct aatgcatcat tctccactct gaagatccag	240
ccctcagaac ccagggactc agctgtgtac ttctgtgcca gcagtttagc	290

<210> 209
 <211> 288
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV12-4*02

<400> 209	
gatgctggag ttatccagtc accccggcac gaggtgacag agatgggaca agaagtgact	60
ctgagatgta aaccaatttc aggacatgac taccttttct ggtacagaca gaccatgatg	120
cggggactgg agttgctcat ttactttaac aacaacgttc cgatagatga ttcagggatg	180
cccaggatc gattctcagc taagatgcct aatgcatcat tctccactct gaggatccag	240
ccctcagaac ccagggactc agctgtgtac ttctgtgcca gcagttta	288

<210> 210
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV12-3*01

<400> 210	
gatgctggag ttatccagtc accccgccat gaggtgacag agatgggaca agaagtgact	60
ctgagatgta aaccaatttc aggccacaac tcccttttct ggtacagaca gaccatgatg	120
cggggactgg agttgctcat ttactttaac aacaacgttc cgatagatga ttcagggatg	180
cccaggatc gattctcagc taagatgcct aatgcatcat tctccactct gaagatccag	240
ccctcagaac ccagggactc agctgtgtac ttctgtgcca gcagtttagc	290

<210> 211

<211> 290
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV12-5*01

<400> 211
gatgctagag tcacccagac accaaggcac aaggtgacag agatgggaca agaagtaaca 60
atgagatgtc agccaatttt aggccacaat actgttttct ggtacagaca gaccatgatg 120
caaggactgg agttgctggc ttacttccgc aaccgggctc ctctagatga ttcggggatg 180
ccgaaggatc gattctcagc agagatgcct gatgcaactt tagccactct gaagatccag 240
ccctcagaac ccagggactc agctgtgtat ttttgtgcta gtggtttggt 290

<210> 212
<211> 287
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV13*01

<400> 212
gctgctggag tcatccagtc cccaagacat ctgatcaaag aaaagaggga aacagccact 60
ctgaaatgct atcctatccc tagacacgac actgtctact ggtaccagca ggggccaggt 120
caggaccccc agttcctcat ttcgttttat gaaaagatgc agagcgataa aggaagcatc 180
cctgatcgat tctcagctca acagttcagt gactatcatt ctgaactgaa catgagctcc 240
ttggagctgg gggactcagc cctgtacttc tgtgccagca gcttagg 287

<210> 213
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV13*02

<400> 213
gctgctggag tcatccagtc cccaagacat ctgatcagag aaaagaggga aacagccact 60
ctgaaatgct atcctatccc tagacacgac actgtctact ggtaccagca gggcccaggt 120
caggaccccc agttcctcat ttcgttttat gaaaagatgc agagcgataa aggaagcatc 180
cctgatcgat tctcagctca acagttcagt gactatcatt ctgaactgaa catgagctcc 240
ttggagctgg gggactcagc cctgtacttc tgtgccagca gc 282

<210> 214
<211> 290
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV14*01

<400> 214
gaagctggag ttactcagtt cccagccac agcgtaatag agaagggcca gactgtgact 60

ctgagatgtg acccaatttc tggacatgat aatctttatt ggtatcgacg tgttatggga	120
aaagaaataa aatttctggtt acattttgtg aaagagtcta aacaggatga gtccggtatg	180
cccaacaatc gattcttagc tgaaaggact ggagggacgt attctactct gaagggtcag	240
cctgcagaac tggaggattc tggagtttat ttctgtgcca gcagccaaga	290

<210> 215
 <211> 285
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV14*02

<400> 215	
gaagctggag ttactcagtt cccagccac agcgtaatag agaaggcca gactgtgact	60
ctgagatgtg acccaatttc tggacatgat aatctttatt ggtatcgacg tgttatggga	120
aaagaaataa aatttctggtt acattttgtg aaagagtcta aacaggatga atccggtatg	180
cccaacaatc gattcttagc tgaaaggact ggagggacgt attctactct gaagggtcag	240
cctgcagaac tggaggattc tggagtttat ttctgtgcca gcagc	285

<210> 216
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV15*01

<400> 216	
gatgccatgg tcatccagaa cccaagatac caggttaccc agtttgaaa gccagtgacc	60
ctgagttggt ctcagacttt gaaccataac gtcattgtact ggtaccagca gaagtcaagt	120
caggcccaa agctgctgtt cactactat gacaaagatt ttaacaatga agcagacacc	180
cctgataact tccaatccag gaggccgaac acttctttct gctttcttga catccgctca	240
ccaggcctgg gggacacagc catgtacctg tgtgccacca gcagaga	287

<210> 217
 <211> 282
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV15*03

<400> 217	
gatgccatgg tcatccagaa cccaagatac cgggttaccc agtttgaaa gccagtgacc	60
ctgagttggt ctcagacttt gaaccataac gtcattgtact ggtaccagca gaagtcaagt	120
caggcccaa agctgctgtt cactactat acaaagatt ttaacaatga agcagacacc	180
cctgataact tccaatccag gaggccgaac acttctttct gctttctaga catccgctca	240
ccaggcctgg gggacgcagc catgtaccag tgtgccacca gc	282

<210> 218
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV15*02

<400> 218
gatgccatgg tcatccagaa cccaagatac caggttaccc agtttgaaa gccagtgacc 60
ctgagttggt ctcagacttt gaaccataac gtcatgtact ggtaccagca gaagtcaagt 120
caggcccca agctgctggt ccactactat gacaaagatt ttaacaatga agcagacacc 180
cctgataact tccaatccag gaggccgaac acttctttct gctttcttga catccgctca 240
ccaggcctgg gggacgcagc catgtacctg tgtgccacca gc 282

<210> 219
<211> 290
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV16*01

<400> 219
ggtgaagaag tcgcccagac tccaaaacat cttgtcagag ggaaggaca gaaagcaaaa 60
ttatattgtg cccaataaa aggacacagt tatgtttttt ggtaccaaca ggtcctgaaa 120
aacgagttca agttcttgat ttccttcag aatgaaaatg tctttgatga aacaggatg 180
ccaaggaaa gatcttcagc taagtgcctc ccaaattcac cctgtagcct tgagatccag 240
gctacgaagc ttgaggattc agcagtgtat ttttgtgcc gcagccaatc 290

<210> 220
<211> 290
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV16*02

<400> 220
ggtgaagaag tcgcccagac tccaaaacat cttgtcagag ggaaggaca gaaagcaaaa 60
ttatattgtg cccaataaa aggacacagt taggtttttt ggtaccaaca ggtcctgaaa 120
aacgagttca agttcttgat ttccttcag aatgaaaatg tctttgatga aacaggatg 180
ccaaggaaa gatcttcagc taagtgcctc ccaaattcac cctgtagcct tgagatccag 240
gctacgaagc ttgaggattc agcagtgtat ttttgtgcc gcagccaatc 290

<210> 221
<211> 285
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV16*03

<400> 221
 ggtgaagaag tcgcccagac tccaaaacat cttgtcagag ggaaggaca gaaagcaaaa 60
 ttatatgtg cccaataaa aggacacagt tatgtttttt ggtaccaaca ggtcctgaaa 120
 aacgagttca agttcttggg ttccttccag aatgaaaatg tctttgatga aacaggtatg 180
 cccaaggaag gattttcagc taagtgcctc ccaaattcac cctgtagcct tgagatccag 240
 gctacgaagc ttgaggattc agcagtgtat ttttgtgcca gcagc 285

<210> 222
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV17*01

<400> 222
 gagcctggag tcagccagac ccccagacac aaggtcacca acatgggaca ggaggtgatt 60
 ctgaggtgag atccatcttc tggtcacatg tttgttact ggtaccgaca gaatctgagg 120
 caagaaatga agttgctgat ttccttccag taccaaaaca ttgcagttga ttcagggatg 180
 cccaaggaac gattcacagc tgaagacct aacggaacgt cttccacgct gaagatccat 240
 cccgcagagc cgagggactc agccgtgtat ctctacagta gcggtgg 287

<210> 223
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV18*01

<400> 223
 aatgccggcg tcatgcagaa cccaagacac ctggtcagga ggaggggaca ggaggcaaga 60
 ctgagatgca gcccaatgaa aggacacagt catgtttact ggtatcggca gctcccagag 120
 gaaggtctga aattcatggt ttatctccag aaagaaaata tcatagatga gtcaggaatg 180
 ccaaaggaac gattttctgc tgaatttccc aaagagggcc ccagcatcct gaggatccag 240
 caggtagtgc gaggagattc ggcagcttat ttctgtgcca gtcaccacc 290

<210> 224
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV19*01

<400> 224
 gatggtggaa tctactcagtc ccaaagtac ctgttcagaa aggaaggaca gaatgtgacc 60
 ctgagttgtg aacagaattt gaaccacgat gccatgtact ggtaccgaca ggaccaggg 120
 caagggctga gattgatcta ctactcacag atagtaaata actttcagaa aggagatata 180
 gctgaagggg acagcgtctc tcgggagaag aaggaatcct ttcctctcac tgtgacatcg 240

gccccaaaaga acccgacagc tttctatctc tgtgccagta gtataga 287

<210> 225
<211> 287
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV19*02

<400> 225
gatggtggaa tcactcagtc cccaaagtac ctgttcagaa aggaaggaca gaatgtgacc 60
ctgagttgtg aacagaattt gaaccacgat gccatgtact ggtaccgaca ggtcccaggg 120
caagggctga gattgatcta ctactcacac atagtaaagtg actttcagaa aggagatata 180
gctgaagggg acagcgtctc tcgggagaag aaggaatcct ttcctctcac tgtgacatcg 240
gccccaaaaga acccgacagc tttctatctc tgtgccagta gtataga 287

<210> 226
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV19*03

<400> 226
gatggtggaa tcactcagtc cccaaagtac ctgttcagaa aggaaggaca gaatgtgacc 60
ctgagttgtg aacagaattt gaaccacgat gccatgtact ggtaccgaca ggacccaggg 120
caagggctga gattgatcta ctactcacac atagtaaagtg actttcagaa aggagatata 180
gctgaagggg acagcgtctc tcgggagaag aaggaatcct ttcctctcac tgtgacatcg 240
gccccaaaaga acccgacagc tttctatctc tgtgccagta gc 282

<210> 227
<211> 291
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV20-1*05

<400> 227
ggtgctgtcg tctctcaaca tccgagcagg gttatctgta agagtggaac ctctgtgaag 60
atcgagtgcc gttccctgga ctttcaggcc acaactatgt tttggtatcg tcagttcccg 120
aaaaagagtc tcatgctgat ggcaacttcc aatgagggct ccaaggccac atacgagcaa 180
ggcgtcgaga aggacaagtt tctcatcaac catgcaagcc tgaccttgtc cactctgaca 240
gtgaccagtg cccatcctga agacagcagc ttctacatct gcagtgctag a 291

<210> 228
<211> 291
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV20-1*07

<400> 228

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ggtgctgtcg tctctcaaca tccgagcagg gttatctgta agagtggaac ctctgtgaag      60
atcgagtgcc gttccctgga ctttcaggcc acaactatgt tttggtatcg tcagttcccg      120
aaaaagagtc tcatgcagat cgcaacttcc aatgagggct ccaaggccac atacgagcaa      180
ggcgtcgaga aggacaagtt tctcatcaac catgcaagcc tgaccttgtc cactctgaca      240
gtgaccagtg cccatcctga agacagcagc ttctacatct gcagtgctag a                291
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<210> 229

<211> 291

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV20-1*04

<400> 229

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ggtgctgtcg tctctcaaca tccgagcagg gttatctgta agagtggaac ctctgtgaag      60
atcgagtgcc gttccctgga ctttcaggcc acaactatgt tttggtatcg tcagttcccg      120
aaaaagagtc tcatgctgat ggcaacttcc aatgagggct ccaaggccac atacgagcaa      180
ggcgtcgaga aggacaagtt tctcatcaac catgcaagcc tgaccttgtc cactctgaca      240
gtgaccagtg cccatcctga agacagcagc ttctacatct gcagtgctag t                291
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<210> 230

<211> 288

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV20-1*06

<400> 230

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ggtgctgtcg tctctcaaca tccgagttagg gttatctgta agagtggaac ctctgtgaag      60
atcgagtgcc gttccctgga ctttcaggcc acaactatgt tttggtatcg tcagttcccg      120
aaaaagagtc tcatgctgat ggcaacttcc aatgagggct ccaaggccac atacgagcaa      180
ggcgtcgaga aggacaagtt tctcatcaac catgcaagcc tgaccttgtc cactctgaca      240
gtgaccagtg cccatcctga agacagcagc ttctacatct gcagtgtct                    288
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<210> 231

<211> 288

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: TRBV20-1*02

<400> 231

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ggtgctgtcg tctctcaaca tccgagcagg gttatctgta agagtggaac ctctgtgaag      60
atcgagtgcc gttccctgga ctttcaggcc acaactatgt tttggtatcg tcagttcccg      120
aaacagagtc tcatgctgat ggcaacttcc aatgagggct ccaaggccac atacgagcaa      180
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ggcgtcgaga aggacaagtt tctcatcaac catgcaagcc tgaccttgct cactctgaca 240
gtgaccagtg cccatcctga agacagcagc ttctacatct gcagtgtgct 288

<210> 232
<211> 293
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV20-1*01

<400> 232
ggtgctgtcg tctctcaaca tccgagctgg gttatctgta agagtgaac ctctgtgaag 60
atcgagtgcc gttccctgga ctttcaggcc acaactatgt tttggtatcg tcagttcccg 120
aaacagagtc tcatgctgat ggcaacttcc aatgagggct ccaaggccac atacgagcaa 180
ggcgtcgaga aggacaagtt tctcatcaac catgcaagcc tgaccttgct cactctgaca 240
gtgaccagtg cccatcctga agacagcagc ttctacatct gcagtgttag aga 293

<210> 233
<211> 288
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV20-1*03

<400> 233
ggtgctgtcg tctctcaaca tccgagctgg gttatctgta agagtgaac ctctgtgaag 60
atcgagtgcc gttccctgga ctttcaggcc acaactatgt tttggtatcg tcagttcccg 120
aaacagagtc tcatgctgat ggcaacttcc aatgagggct gcaaggccac atacgagcaa 180
ggcgtcgaga aggacaagtt tctcatcaac catgcaagcc tgaccttgct cactctgaca 240
gtgaccagtg cccatcctga agacagcagc ttctacatct gcagtgtgct 288

<210> 234
<211> 290
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV21-1*01

<400> 234
gacaccaagg tcaccagag acctagactt ctggtcaaag caagtgaaca gaaagcaaag 60
atggattgtg ttctataaaa agcacatagt tatgtttact ggtatcgtaa gaagctggaa 120
gaagagctca agtttttggg ttactttcag aatgaagaac ttattcagaa agcagaaata 180
atcaatgagc gatttttagc ccaatgtccc aaaaactcat cctgtacctt ggagatccag 240
tccacggagt caggggacac agcactgtat ttctgtgccg gcagcaaagc 290

<210> 235
<211> 288
<212> DNA
<213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV22-1*01

<400> 235
 gatgctgaca tctatcagat gccattccag ctactgggg ctggatggga tgtgactctg 60
 gagtggaac ggaatttgag acacaatgac atgtactgct actggtactg gcaggacca 120
 aagcaaaatc tgagactgat ctattactca aggggtgaaa aggatattca gagaggagat 180
 ctaactgaag gctacgtgtc tgccaagagg agaaggggct atttcttctc aggggtgaagt 240
 tggcccacac cagccaaaca gctttgtact tctgtcctgg gagcgcac 288

<210> 236
 <211> 290
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV23-1*01

<400> 236
 catgccaaag tcacacagac tccaggacat ttggtcaaag gaaaaggaca gaaaacaaag 60
 atggattgta cccccgaaaa aggacatact tttgtttatt ggtatcaaca gaatcagaat 120
 aaagagttaa tgcttttgat ttcctttcag aatgaacaag ttcttcaaga aacggagatg 180
 cacaagaagc gattctcatc tcaatgcccc aagaacgcac cctgcagcct ggcaatcctg 240
 tcctcagaac cgggagacac ggcaactgtat ctctgcgcca gcagtcaatc 290

<210> 237
 <211> 288
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV24-1*01

<400> 237
 gatgctgatg ttaccagac cccaaggaat aggatcaca agacaggaaa gaggattatg 60
 ctggaatggt ctgagactaa gggatcatgat agaatgtact ggtatcgaca agaccagga 120
 ctgggcctac ggttgatcta ttactccttt gatgtcaaag atataaaca aggagagatc 180
 tctgatggat acagtgtctc tcgacaggca caggctaaat tctccctgtc cctagagtct 240
 gccatcccca accagacagc tctttacttc tgtgccacca gtgatttg 288

<210> 238
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV25-1*01

<400> 238
 gaagctgaca tctaccagac cccaagatac cttgttatag ggacaggaaa gaagatcact 60
 ctggaatggt ctcaaaccat gggccatgac aaaatgtact ggtatcaaca agatccagga 120

atggaactac acctcatcca ctattcctat ggagttaatt ccacagagaa gggagatctt	180
tcctctgagt caacagtctc cagaataagg acggagcatt ttcccctgac cctggagtct	240
gccaggccct cacatacctc tcagtacctc tgtgccagca gtgaata	287

<210> 239
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV26*01

<400> 239	
gatgctgtag ttacacaatt cccaagacac agaatcattg ggacaggaaa ggaattcatt	60
ctacagtgtt cccagaatat gaatcatgtt acaatgtact ggtatcgaca ggaccagga	120
cttggactga agctgggtcta ttattcacct ggcactggga gcaactgaaa aggagatatt	180
tctgaggggt atcatgtttc ttgaaatact atagcatctt ttcccctgac cctgaagtct	240
gccagcacca accagacatc tgtgtatctc tatgccagca gttcatc	287

<210> 240
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV27*01

<400> 240	
gaagcccaag tgaccagaa cccaagatac ctcatacag tgactggaaa gaagttaaca	60
gtgacttggt ctcagaatat gaaccatgag tatatgtcct ggtatcgaca agaccaggg	120
ctgggcttaa ggcagatcta ctattcaatg aatgttgagg tgactgataa gggagatgtt	180
cctgaaggggt acaaagtctc tcgaaaagag aagaggaatt tcccctgat cctggagtcg	240
cccagcccca accagacctc tctgtacttc tgtgccagca gtttatc	287

<210> 241
 <211> 287
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV28*01

<400> 241	
gatgtgaaag taaccagag ctcgagatat ctagtcaaaa ggacgggaga gaaagttttt	60
ctggaatgtg tccaggatat ggaccatgaa aatatgttct ggtatcgaca agaccaggt	120
ctggggctac ggctgatcta tttctcatat gatgttaaaa tgaaagaaaa aggagatatt	180
cctgaggggt acagtgtctc tagagagaag aaggagcgct tctccctgat tctggagtcc	240
gccagcacca accagacatc tatgtacctc tgtgccagca gtttatg	287

<210> 242
 <211> 290

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV29-1*01

<400> 242
agtgctgtca tctctcaaaa gccaaagcagg gatatctgtc aacgtggaac ctccctgacg 60
atccagtgtc aagtcgatag ccaagtcacc atgatgttct ggtaccgtca gcaacctgga 120
cagagcctga cactgatcgc aactgcaa atcagggtctg aggccacata tgagagtgga 180
tttgtcattg acaagtttcc catcagccgc ccaaacctaa cattctcaac tctgactgtg 240
agcaacatga gccctgaaga cagcagcata tatctctgca gcgttgaaga 290

<210> 243
<211> 288
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV29-1*02

<400> 243
agtgctgtca tctctcaaaa gccaaagcagg gatatctgtc aacgtggaac ctccctgacg 60
atccagtgtc aagtcgatag ccaagtcacc atgatgttct ggtaccgtca gcaacctgga 120
cagagcctga cactgatcgc aactgcaa atcagggtctg aggccacata tgagagtgga 180
tttgtcattg acaagtttcc catcagccgc ccaaacctaa cattctcaag tctgactgtg 240
agcaacatga gccctgaaga cagcagcata tatctctgca gcgttgaa 288

<210> 244
<211> 231
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV29-1*03

<400> 244
acgatccagt gtcaagtcga tagccaagtc accatgatat tctggtaccg tcagcaacct 60
ggacagagcc tgacactgat cgcaactgca aatcagggtct ctgaggccac atatgagagt 120
ggatttgtca ttgacaagtt tcccatcagc cgcccaaacc taacattctc aactctgact 180
gtgagcaaca tgagccctga agacagcagc atatatctct gcagcgcggg c 231

<210> 245
<211> 284
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TRBV30*02

<400> 245
tctcagacta ttcatcaatg gccagcgacc ctggtgcagc ctgtgggcag cccgctctct 60
ctggagtgtc ctgtggaggg aacatcaaac ccaaacctat actggtaccg acaggctgtc 120

ggcaggggcc tccagctgct cttctactcc gttggtattg gccagatcag ctctgaggtg 180
 cccagaatc tctcagcctc cagaccccag gaccggcagt tcctcctgag ttctaagaag 240
 ctctctctca gtgactctgg cttctatctc tgtgcctgga gtgt 284

<210> 246
 <211> 282
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV30*05

<400> 246
 tctcagacta ttcataatg gccagcgacc ctggtgcagc ctgtgggcag cccgctctcc 60
 ctggagtgca ctgtggaggg aacatcaaac cccaacctat actggtaccg acaggctgca 120
 ggacggggcc tccagctgct cttctactcc gttggtattg gccagatcag ctctgaggtg 180
 cccagaatc tctcagcctc cagaccccag gaccggcagt tcctcctgag ttctaagaag 240
 ctctctctca gtgactctgg cttctatctc tgtgcctggg ga 282

<210> 247
 <211> 284
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV30*01

<400> 247
 tctcagacta ttcataatg gccagcgacc ctggtgcagc ctgtgggcag cccgctctct 60
 ctggagtgca ctgtggaggg aacatcaaac cccaacctat actggtaccg acaggctgca 120
 ggcagggggcc tccagctgct cttctactcc gttggtattg gccagatcag ctctgaggtg 180
 cccagaatc tctcagcctc cagaccccag gaccggcagt tcctcctgag ttctaagaag 240
 ctctctctca gtgactctgg cttctatctc tgtgcctgga gtgt 284

<210> 248
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TRBV30*04

<400> 248
 actattcatc aatggccagc gaccctggtg cagcctgtgg gcagcccgt ctctctggag 60
 tgcactgtgg agggaaacatc aaaccccaac ctatactggt accgacaggc tgcaggcagg 120
 ggcctccagc tgctcttcta ctccattggt attgaccaga tcagctctga ggtgccccag 180
 aatctctcag cctccagacc ccaggaccgg cagttcattc tgagttctaa gaagctcctc 240
 ctcaagtact ctggcttcta tctctgtgcc tggagt 276

<210> 249
 <211> 448

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TCRBJ1S1

<400> 249
ttgaaaaagg aacctaggac cctgtggatg gactctgtca ttctccatgg tcctaaaaag 60
caaaagtcaa agtggttcttc tgtgtaatac ccataaagca caggaggaga tttcttagct 120
cactgtcctc catcctagcc agggccctct cccctctcta tgccttcaat gtgattttca 180
ccttgacccc tgtcactgtg tgaacactga agctttcttt ggacaaggca ccagactcac 240
agttgtaggt aagacatttt tcaggttctt ttgcagatcc gtcacaggga aaagtgggtc 300
cacagtgtcc ctttttagagt ggctatattc ttatgtgcta actatggcta caccttcggt 360
tcggggacca ggtaaccgt tgtaggtaa gctgggggtc tctaggaggg gtgcgatgag 420
ggaggactct gtcctgggaa atgtcaaa 448

<210> 250
<211> 448
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TCRBJ1S2

<400> 250
gccaggggccc tctcccctct ctatgccttc aatgtgattt tcacctgac ccctgtcact 60
gtgtgaacac tgaagctttc tttggacaag gcaccagact cacagttgta ggtaagacat 120
ttttcagggt cttttgcaga tccgtcacag ggaaaagtgg gtccacagtg tcccttttag 180
agtggctata ttcttatgtg ctaactatgg ctacaccttc ggttcgggga ccagggttaac 240
cgttgtaggt aaggctgggg gtctctagga ggggtgcat gagggaggac tctgtcctgg 300
gaaatgtcaa agagaacaga gatcccagct cccggagcca gactgaggga gacgtcatgt 360
catgtcccgg gattgagttc aggggaggct ccctgtgagg gcgaatccac ccaggcttcc 420
cagaggctct gagcagtcac agctgagc 448

<210> 251
<211> 450
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TCRBJ1S3

<400> 251
gattttatag gaggccactc tgtgtctctt tttgtcacct gcctgagtct tgggcaagct 60
ctggaaggga acacagagta ctggaagcag agctgctgtc cctgtgaggg aagagttccc 120
atgaactccc aacctctgcc tgaatcccag ctgtgctcag cagagactgg ggggttttga 180
agtggccctg ggaggctgtg ctctggaaac accatatatt ttggagaggg aagttggctc 240
actgtttag gtgagtaagt caaggctgga cagctgggaa cttgcaaaaa ggggctggaa 300

tccagacgga gcctttgtct ctagtgctta ggtgaaagtg tttttttgtc aggaaggcct	360
atgaggcaga tgaggagggg atagcctccc tctcctctcg actattttgt agactgcctg	420
tgccaagtta ggttccccta ctgagagatg	450

<210> 252
 <211> 451
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TCRBJ1S4

<400> 252	
cagaagaggg aacttggggg atcacacggg gcctaattgg tctgctgacc accgcatttt	60
gggttgtagc attgtctacc cctctaccca ccagggttaa aatttacta aggaacagga	120
gaggacctgg caggtggact tggggaggca ggagtggaag gcagcaggtc gcggttttcc	180
ttccagtctt taatgtttgt caactaatga aaaactgttt tttggcagtg gaaccagct	240
ctctgtcttg ggtatgtaaa agacttcttt cgggatagtg ttcataagg tcggagtcc	300
aggaggaccc cttgcgggag ggcagaaact gagaacacag ccaagaaaag ctcataaaat	360
gtgggtcagt ggagtgtgtg gtggggcccc aagagttctg tgtgtaagca gcttctggaa	420
ggaaggggccc acaccagctc ctctgggggtt t	451

<210> 253
 <211> 450
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TCRBJ1S5

<400> 253	
gatagtgtat cataaggctg gagttccagg aggaccctt gcgggagggc agaaactgag	60
aacacagcca agaaaagctc ataaaatgtg ggtcagtgga gtgtgtggtg gggccccaag	120
agttctgtgt gtaagcagct tctggaagga agggcccaca ccagctcctc tggggtttgc	180
cacactcatg atgcactgtg tagcaatcag cccagcatt ttggtgatgg gactcgactc	240
tccatcctag gtaagttgca gaatcagggt ggtatggcca ttgtcccttg aaggcagagt	300
tctctgcttc tcctcccggg gctggtgagg cagattgagt aaaatctctt accccatggg	360
gtaagagctg tgcctgtgcc tgcgttcctt ttggtgtgtc ttggttgact cctctatttc	420
tcttctctaa gtcttcagtc cataatctgc	450

<210> 254
 <211> 453
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TCRBJ1S6

<400> 254	
atggctctgc ctctcctaag cctcttcctc ttgcgcctta tgctgcacag tatgcttagg	60

cctttttcct aacagaatcc ctttgggtcca gagccatgaa tccaggcaga gaaaggcagc	120
catcctgctg tcaggagct aagacttgcc ctctgactgg agatcgccgg gtgggtttta	180
tctaagcctc tgcagctgtg ctctataat tcacccctcc actttgggaa cgggaccagg	240
ctcactgtga caggtatggg ggctccactc ttgactcggg ggtgcctggg tttgactgca	300
atgatcagtt gctgggaagg gaattgagt taagaacgga ggtcagggtc accccttctt	360
acctggagca ctgtgccctc tcctccctc cctggagctc ttccagcttg ttgctctgct	420
gtgttgctg cagttcctca gctgtagagc tcc	453

<210> 255
 <211> 449
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TCRBJ2S1

<400> 255	
aatccactgt gttgtccccc agccaagtgg attctcctct gcaaattggt ggtggcctca	60
tgcaagatcc agttaccgtg tccagctaac tcgagacagg aaaagatagg ctgaggaaag	120
agaggaaggg tgtgccctct gtctgtgcta agggaggtgg ggaaggagaa ggaattctgg	180
gcagcccctt cccactgtgc tcctacaatg agcagttctt cgggccaggg acacggctca	240
ccgtgctagg taagaagggg gctccagggt ggagagaggg tgagcagccc agcctgcacg	300
accccagaac cctgttctta ggggagtggg cactgggcaa tccaggggcc tcctcgaggg	360
aagcgggggt tgcgccaggg tccccagggc tgtgcgaaca ccggggagct gttttttgga	420
gaaggctcta ggctgaccgt actgggtaa	449

<210> 256
 <211> 451
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TCRBJ2S2

<400> 256	
ctgtgctcct acaatgagca gttcttcggg ccaggacac ggctcaccgt gctaggtaag	60
aagggggctc caggtgggag agaggggtgag cagcccagcc tgcacgaccc cagaaccctg	120
ttcttagggg agtggacact gggcaatcca gggccctcct cgagggaagc ggggtttgcg	180
ccagggtccc cagggtgtg cgaacaccgg ggagctgttt tttggagaag gctctaggct	240
gaccgtactg ggtaaggagg cggttggggc tccggagagc tccgagaggg cgggatgggc	300
agaggtaagc agctgcccc a ctctgagagg ggctgtgtg agaggcgctg ctgggcgtct	360
gggcggagga ctcttggtt tgggtgctgg gagagcgatg gggctctcag cggtggaag	420
gacccgagct gagtctggga cagcagagcg g	451

<210> 257

<211> 449
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TCRBJ2S3

<400> 257
gggcgggatg ggcagaggta agcagctgcc ccactctgag aggggctgtg ctgagaggcg 60
ctgctgggcg tctgggcgga ggactcctgg ttctgggtgc tgggagagcg atggggctct 120
cagcggtggg aaggaccgga gctgagtctg ggacagcaga gcgggcagca ccggtttttg 180
tcctgggcct ccaggctgtg agcacagata cgagtagttt tggcccaggc acccggctga 240
cagtgtcctg taagcggggg ctcccgtga agccccggaa ctggggaggg ggcgccccgg 300
gacgccgggg gcgtcgcagg gccagtttct gtgccgcgtc tcggggctgt gagcaaaaa 360
cattcagtag ttccggcgcc ggacccggct ctgagtgtg ggtaagctgg ggccgccggg 420
ggaccgggga cgagactgcg ctccgggttt 449

<210> 258
<211> 450
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TCRBJ2S4

<400> 258
gacagcagag cgggcagcac cggtttttgt cctgggcctc caggctgtga gcacagatac 60
gcagtatttt ggcccaggca cccggctgac agtgctcggg aagcgggggc tcccgtgaa 120
gccccggaac tggggagggg gcgccccggg acgccggggg cgtcgcaggg ccagtttctg 180
tgccgcgtct cggggctgtg agccaaaaac attcagtact tcggcgccgg gaccgggctc 240
tcagtgtctg gtaagctggg gccgccgggg gaccggggac gagactgcgc tcgggttttt 300
gtgcggggct cgggggccgt gaccaagaga ccagtagtct cgggccaggc acgcggctcc 360
tggtgtcctg tgagcgcggg ctgctggggc gcgggcgcgg gcggcttggg tctggttttt 420
gcggggagtc cccgggctgt gctctggggc 450

<210> 259
<211> 448
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: TCRBJ2S5

<400> 259
ccccggaact ggggaggggg cgccccggga cgccgggggc gtcgcagggc cagtttctgt 60
gccgcgtctc ggggctgtga gccaaaaaca tttagtactt cggcgccggg acccggctct 120
cagtgtctgg taagctgggg ccgccggggg accggggacg agactgcgct cgggtttttg 180
tgcggggctc gggggccgtg accaagagac ccagtacttc gggccaggca cgcggtcctc 240
ggtgtcggg gagcgcgggc tgctggggcg cgggcgcggg cggcttgggt ctggtttttg 300

cggggagtgcc ccgggctgtg ctctggggcc aacgtcctga ctttcggggc cggcagcagg 360
 ctgaccgtgc tgggtgagtt ttcgcgggac caccggggcg gcgggattca ggtggaaggc 420
 ggcggctgct tcgcggcacc cgggtccgg 448

<210> 260
 <211> 453
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TCRBJ2S6

<400> 260
 cagtgtctggg taagctgggg ccgccggggg accggggacg agactgcgct cgggtttttg 60
 tgcggggctc gggggccgtg accaagagac ccagtacttc gggccaggca cgcggctcct 120
 ggtgtctcggg gagcgcgggc tgctggggcg cgggcgcggg cggcttgggt ctggtttttg 180
 cggggagtgcc ccgggctgtg ctctggggcc aacgtcctga ctttcggggc cggcagcagg 240
 ctgaccgtgc tgggtgagtt ttcgcgggac caccggggcg gcgggattca ggtggaaggc 300
 ggcggctgct tcgcggcacc cgggtccggc ctgtgtctggg agacctgggc tgggtcccca 360
 ggggtgggcag gagctcgggg agccttagag gtttgcacgc ggggtgtcac ctccgtgctc 420
 ctacgagcag tacttcgggc cgggcaccag gct 453

<210> 261
 <211> 447
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: TCRBJ2S7

<400> 261
 tgactttcgg ggccggcagc aggtgaccg tgctgggtga gttttcgcgg gaccacccgg 60
 gcggcgggat tcaggtggaa ggcggcggtc gtttcgcggc acccgggtccg gccctgtgct 120
 gggagacctg ggctgggtcc ccagggtggg caggagctcg gggagcctta gaggtttgca 180
 tgcgggggtg cacctccgtg ctctacgag cagtacttcg ggccgggcac caggctcacg 240
 gtcacaggtg agattcgggc gtctccccac cttccagccc ctcggtcccc ggagtcggag 300
 ggtggaccgg agctggagga gctgggtgtc cggggtcagc tctgcaaggc cacctccccg 360
 ctctggggga aagactgggg aagagggagg ggggtggggag gtgctcagag tccggaaagc 420
 tgagcagagg gcgaggccac ttttaat 447

<210> 262
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV1-46*02

<400> 262

caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtt	60
tcctgcaagg catctggata caccttcaac agctactata tgcactgggt gcgacaggcc	120
cctggacaag ggcttgagtg gatgggaata atcaacccta gtggtggtag cacaagctac	180
gcacagaagt tccagggcag agtcaccatg accagggaca cgtccacgag cacagtctac	240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagaga	296

<210> 263
 <211> 260
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV1/OR15-5*01

<400> 263	
agaagcctgg ggcctcagtg aaggtctcct gcaaggcttc tggatacacc ttcaccagct	60
actgtatgca ctgggtgcac caggtccatg cacaagggct tgagtggatg ggattggtgt	120
gccctagtga tggcagcaca agctatgcac agaagttcca ggccagagtc accataacca	180
gggacacatc catgagcaca gcctacatgg agctaagcag tctgagatct gaggacacgg	240
ccatgtatta ctgtgtgaga	260

<210> 264
 <211> 294
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV1/OR15-5*03

<400> 264	
caggtacagc tgggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc	60
tcctgcaagg cttctggata caccttcacc aactactgta tgcactgggt gcgccaggct	120
catgcacaag ggcttgagtg gatgggattg gtgtgcccta gtgatggcag cacaagctat	180
gcacaaaagt tccagggcag agtcaccata accagggaca catccatgag cacagcctac	240
atggagctaa gcagtctgag atctgaggac acggccatgt attactgtgt gaga	294

<210> 265
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV1/OR15-9*01

<400> 265	
caggtacagc tgatgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaggatc	60
tcctgcaagg cttctggata caccttcacc agctactgta tgcactgggt gtgccaggcc	120
catgcacaag ggcttgagtg gatgggattg gtgtgcccta gtgatggcag cacaagctat	180
gcacagaagt tccagggcag agtcaccata accagggaca catccatggg cacagcctac	240
atggagctaa gcagcctgag atctgaggac acggccatgt attactgtgt gagaga	296

<210> 266
<211> 260
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-c*01

<400> 266
ggaagtctgg ggcctcagtg aaagtctcct gtagtttttc tgggtttacc atcaccagct 60
acggtataca ttgggtgcaa cagtcccctg gacaagggct tgagtggatg ggatggatca 120
accctggcaa tggtagccca agctatgcca agaagtttca gggcagattc accatgacca 180
gggacatgtc cacaaccaca gcctacacag acctgagcag cctgacatct gaggacatgg 240
ctgtgtatta ctatgcaaga 260

<210> 267
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-NL1*01

<220>
<221> misc_feature
<222> (136)..(136)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (253)..(253)
<223> n is a, c, g, or t

<400> 267
caggttcagc tggtgcagcc tggggctccag gtgaagaagc ctgggtcctc agtgaaggctc 60
tcctgctagg cttccagata caccttcacc aaatacttta cacgggtgggt gtgacaaagc 120
cctggacaag ggcathnagt gatgggatga atcaaccctt acaacgataa cacacactac 180
gcacagacgt tctggggcag agtcaccatt accagtgaca ggtccatgag cacagcctac 240
atggagctga gcngcctgag atccgaagac atggctcgtgt attactgtgt gagaga 296

<210> 268
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-58*01

<400> 268
caaatgcagc tgggtgcagtc tgggcctgag gtgaagaagc ctgggacctc agtgaaggctc 60
tcctgcaagg cttctggatt cacctttact agctctgctg tgcagtgggt gcgacaggct 120
cgtggacaac gccttgagtg gataggatgg atcgtcgttg gcagtggtaa cacaactac 180
gcacagaagt tccaggaaag agtcaccatt accagggaca tgtccacaag cacagcctac 240

atggagctga gcagcctgag atccgaggac acggccgtgt attactgtgc ggcaga 296

<210> 269
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-58*02

<400> 269
caaatgcagc tgggtgcagtc tgggcctgag gtgaagaagc ctgggacctc agtgaaggct 60
tcctgcaagg cttctggatt cacctttact agctctgcta tgcagtgggt gcgacaggct 120
cgtggacaac gccttgagtg gataggatgg atcgtcgttg gcagtggtaa cacaactac 180
gcacagaagt tccaggaaag agtcaccatt accagggaca tgtccacaag cacagcctac 240
atggagctga gcagcctgag atccgaggac acggccgtgt attactgtgc ggcaga 296

<210> 270
<211> 275
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-69*03

<400> 270
cagggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggct 60
tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggaggg atcatcccta tctttggtac agcaaactac 180
gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac 240
atggagctga gcagcctgag atctgatgac acggc 275

<210> 271
<211> 233
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-69*07

<400> 271
agaagcctgg gtcctcgggtg aagggtctcct gcaaggcttc tggaggcacc ttcagcagct 60
atgctatcag ctgggtgcga caggcccctg gacaagggtc tgagtggatg ggaaggatca 120
tccctatctt tggtagcga aactacgcac agaagttcca gggcagagtc acgattaccg 180
cggacgaatc cacgagcaca gcctacatgg agctgagcag cctgagatct gag 233

<210> 272
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-69*12

<400> 272
caggtccagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60
tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggaggg atcatcccta tctttggtac agcaaactac 180
gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagaga 296

<210> 273
<211> 294
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-69*05

<400> 273
caggtccagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60
tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggaggg atcatcccta tctttggtac agcaaactac 180
gcacagaagt tccagggcag agtcacgatt accacggacg aatccacgag cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gaga 294

<210> 274
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-69*13

<400> 274
caggtccagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc agtgaaggtc 60
tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggaggg atcatcccta tctttggtac agcaaactac 180
gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagaga 296

<210> 275
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-69*01

<400> 275
caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60
tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggaggg atcatcccta tctttggtac agcaaactac 180
gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagaga 296

<210> 276
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-69*06

<400> 276
caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60
tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggaggg atcatcccta tctttggtac agcaaactac 180
gcacagaagt tccagggcag agtcacgatt accgcggaca aatccacgag cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagaga 296

<210> 277
<211> 294
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-69*02

<400> 277
caggtccagc tgggtgcaatc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60
tcctgcaagg cttctggagg caccttcagc agctatacta tcagctgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggaagg atcatcccta tccttggtat agcaaactac 180
gcacagaagt tccagggcag agtcacgatt accgcggaca aatccacgag cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gaga 294

<210> 278
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-69*08

<400> 278
caggtccagc tgggtgcaatc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60
tcctgcaagg cttctggagg caccttcagc agctatacta tcagctgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggaagg atcatcccta tccttggtac agcaaactac 180
gcacagaagt tccagggcag agtcacgatt accgcggaca aatccacgag cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagaga 296

<210> 279
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV1-69*04

<400> 279
 caggtccagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60
 tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
 cctggacaag ggcttgagtg gatgggaagg atcatcccta tccttggtat agcaaactac 180
 gcacagaagt tccagggcag agtcacgatt accgcggaca aatccacgag cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagaga 296

<210> 280
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV1-69*11

<400> 280
 caggtccagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60
 tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
 cctggacaag ggcttgagtg gatgggaagg atcatcccta tccttggtac agcaaactac 180
 gcacagaagt tccagggcag agtcacgatt accgcggacg aatccacgag cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagaga 296

<210> 281
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV1-69*09

<400> 281
 caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60
 tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
 cctggacaag ggcttgagtg gatgggaagg atcatcccta tccttggtat agcaaactac 180
 gcacagaagt tccagggcag agtcacgatt accgcggaca aatccacgag cacagcctac 240
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagaga 296

<210> 282
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV1-69*10

<400> 282
 caggtccagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc agtgaaggtc 60
 tcctgcaagg cttctggagg caccttcagc agctatgcta tcagctgggt gcgacaggcc 120
 cctggacaag ggcttgagtg gatgggaggg atcatcccta tccttggtat agcaaactac 180

gcacagaagt tccagggcag agtcacgatt accgcggaca aatccacgag cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagaga 296

<210> 283
<211> 294
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-f*01

<400> 283
gaggtccagc tgggtacagtc tggggctgag gtgaagaagc ctggggctac agtgaaaatc 60
tcctgcaagg tttctggata caccctcacc gactactaca tgcactgggt gcaacaggcc 120
cctggaaaag ggcttgagtg gatgggactt gttgatcctg aagatgggtga aacaatatac 180
gcagagaagt tccagggcag agtcaccata accgcggaca cgtctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaca 294

<210> 284
<211> 233
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-f*02

<400> 284
agaagcctgg ggctacagtg aaaatctcct gcaaggtttc tggatacacc ttcaccgact 60
actacatgca ctgggtgcaa caggccccctg gaaaagggct tgagtggatg ggacttggtg 120
atcctgaaga tggtgaaaca atatatgcag agaagttcca gggcagagtc accataaccg 180
cggacacgtc tacagacaca gcctacatgg agctgagcag cctgagatct gag 233

<210> 285
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV1-24*01

<400> 285
caggtccagc tgggtacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaagg tttccggata caccctcact gaattatcca tgcactgggt gcgacaggct 120
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgggtga aacaatctac 180
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacaga 296

<210> 286
<211> 294
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV7-4-1*01

<400> 286

caggtgcagc	tggtgcaatc	tgggtctgag	ttgaagaagc	ctggggcctc	agtgaagggt	60
tcctgcaagg	cttctggata	caccttcact	agctatgcta	tgaattgggt	gcgacaggcc	120
cctggacaag	ggcttgagtg	gatgggatgg	atcaacacca	acactgggaa	cccaacgtat	180
gcccagggct	tcacaggacg	gtttgtcttc	tccttggaca	cctctgtcag	cacggcatat	240
ctgcagatct	gcagcctaaa	ggctgaggac	actgccgtgt	attactgtgc	gaga	294

<210> 287

<211> 274

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV7-4-1*03

<400> 287

caggtgcagc	tggtgcaatc	tgggtctgag	ttgaagaagc	ctggggcctc	agtgaagggt	60
tcctgcaagg	cttctggata	caccttcact	agctatgcta	tgaattgggt	gcgacaggcc	120
cctggacaag	ggcttgagtg	gatgggatgg	atcaacacca	acactgggaa	cccaacgtat	180
gcccagggct	tcacaggacg	gtttgtcttc	tccttggaca	cctctgtcag	cacggcatat	240
ctgcagatca	gcagcctaaa	ggctgaggac	actg			274

<210> 288

<211> 296

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV7-4-1*02

<400> 288

caggtgcagc	tggtgcaatc	tgggtctgag	ttgaagaagc	ctggggcctc	agtgaagggt	60
tcctgcaagg	cttctggata	caccttcact	agctatgcta	tgaattgggt	gcgacaggcc	120
cctggacaag	ggcttgagtg	gatgggatgg	atcaacacca	acactgggaa	cccaacgtat	180
gcccagggct	tcacaggacg	gtttgtcttc	tccttggaca	cctctgtcag	cacggcatat	240
ctgcagatca	gcagcctaaa	ggctgaggac	actgccgtgt	attactgtgc	gagaga	296

<210> 289

<211> 296

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV7-81*01

<400> 289

caggtgcagc	tggtgcagtc	tggccatgag	gtgaagcagc	ctggggcctc	agtgaagggtc	60
tcctgcaagg	cttctgggta	cagtttcacc	acctatggta	tgaattgggt	gccacaggcc	120
cctggacaag	ggcttgagtg	gatgggatgg	ttcaacacct	acactgggaa	cccaacatat	180

gcccagggct tcacaggacg gtttgtcttc tccatggaca cctctgccag cacagcatac	240
ctgcagatca gcagcctaaa ggctgaggac atggccatgt attactgtgc gagata	296

<210> 290
 <211> 289
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV7-40*03

<400> 290	
ctgcagctgg tgcagctctgg gcctgagggtg aagaagcctg gggcctcagt gaaggtctcc	60
tataagtctt ctggttacac cttcaccatc tatggtatga attgggtatg atagaccctt	120
ggacagggct ttgagtggat gtgatggatc atcacctaca ctgggaaccc aacgtatacc	180
cacggcttca caggatgggt tgtcttctcc atggacacgt ctgtcagcac ggcgtgtctt	240
cagatcagca gcctaaaggc tgaggacacg gccgagtatt actgtgcga	289

<210> 291
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV5-51*01

<400> 291	
gagggtgcagc tgggtgcagtc tggagcagag gtgaaaaagc ccggggagtc tctgaagatc	60
tcctgtaagg gttctggata cagctttacc agctactgga tcggctgggt gcgccagatg	120
cccgggaaag gcctggagtg gatggggatc atctatcctg gtgactctga taccagatac	180
agcccgtcct tccaaggcca ggtcaccatc tcagccgaca agtccatcag caccgcctac	240
ctgcagtgga gcagcctgaa ggcctcggac accgccatgt attactgtgc gagaca	296

<210> 292
 <211> 245
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV5-51*05

<400> 292	
aaaagcccgg ggagtctctg aagatctcct gtaagggttc tggatacagc tttaccagct	60
actggatcgg ctgggtgcgc cagatgccca ggaaaggcct ggagtggatg gggatcatct	120
atcctggtga ctctgatacc agatacagcc cgtccttcca aggccaggtc accatctcag	180
ccgacaagtc catcagcacc gcctacctgc agtggagcag cctgaaggcc tcggacaccg	240
ccatg	245

<210> 293
 <211> 296
 <212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV5-51*02

<400> 293

gaggtgcagc tgggtgcagtc tggagcagag gtgaaaaagc cgggggagtc tctgaagatc	60
tcctgtaagg gttctggata cagctttacc agctactgga ccggctgggt gcgccagatg	120
cccgggaaag gcttggagtg gatggggatc atctatcctg gtgactctga taccagatac	180
agcccgctct tccaaggcca ggtcaccatc tcagccgaca agtccatcag caccgcctac	240
ctgcagtgga gcagcctgaa ggcctcggac accgccatgt attactgtgc gagaca	296

<210> 294

<211> 294

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV5-51*03

<400> 294

gaggtgcagc tgggtgcagtc tggagcagag gtgaaaaagc cgggggagtc tctgaagatc	60
tcctgtaagg gttctggata cagctttacc agctactgga tcggctgggt gcgccagatg	120
cccgggaaag gcctggagtg gatggggatc atctatcctg gtgactctga taccagatac	180
agcccgctct tccaaggcca ggtcaccatc tcagccgaca agtccatcag caccgcctac	240
ctgcagtgga gcagcctgaa ggcctcggac accgccatgt attactgtgc gaga	294

<210> 295

<211> 294

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV5-51*04

<400> 295

gaggtgcagc tgggtgcagtc tggagcagag gtgaaaaagc cgggggagtc tctgaagatc	60
tcctgtaagg gttctggata cagctttacc agctactgga tcggctgggt gcgccagatg	120
cccgggaaag gcctggagtg gatggggatc atctatcctg gtgactctga taccagatac	180
agcccgctct tccaaggcca ggtcaccatc tcagccgaca agcccatcag caccgcctac	240
ctgcagtgga gcagcctgaa ggcctcggac accgccatgt attactgtgc gaga	294

<210> 296

<211> 294

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV5-a*01

<400> 296

gaagtgcagc tgggtgcagtc tggagcagag gtgaaaaagc cgggggagtc tctgaggatc	60
tcctgtaagg gttctggata cagctttacc agctactgga tcagctgggt gcgccagatg	120

cccgggaaaag gcctggagtg gatggggagg attgataccta gtgactctta taccaactac	180
agcccgctcct tccaaggcca cgtcaccatc tcagctgaca agtccatcag cactgcctac	240
ctgcagtggg gcagcctgaa ggcctcggac accgccatgt attactgtgc gaga	294

<210> 297
 <211> 294
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV5-a*03

<400> 297	
gaagtgcagc tgggtgcagtc cggagcagag gtgaaaaagc ccggggagtc tctgaggatc	60
tcctgtaagg gttctggata cagctttacc agctactgga tcagctgggt gcgccagatg	120
cccgggaaaag gcctggagtg gatggggagg attgataccta gtgactctta taccaactac	180
agcccgctcct tccaaggcca cgtcaccatc tcagctgaca agtccatcag cactgcctac	240
ctgcagtggg gcagcctgaa ggcctcggac accgccatgt attactgtgc gaga	294

<210> 298
 <211> 294
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV5-a*04

<400> 298	
gaagtgcagc tgggtgcagtc tggagcagag gtgaaaaagc ccggggagtc tctgaggatc	60
tcctgtaagg gttctggata cagctttacc agctactgga tcagctgggt gcgccagatg	120
cccgggaaaag gcctggagtg gatggggagg attgataccta gtgactctta taccaactac	180
agcccgctcct tccaaggcca ggtcaccatc tcagctgaca agtccatcag cactgcctac	240
ctgcagtggg gcagcctgaa ggcctcggac accgccatgt attactgtgc gaga	294

<210> 299
 <211> 295
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV5-a*02

<400> 299	
gaagtgcagc tgggtgcagtc tggagcagag gtgaaaaagc ccggggagtc tctgaggatc	60
tcctgtaagg gttctggata cagctttacc agctactgga tcagctgggt gcgccagatg	120
cccgggaaaag gcttggagtg gatggggagg attgataccta gtgactctta taccaactac	180
agcccgctcct tccaaggcca cgtcaccatc tcagctgaca agtccatcag cactgcctac	240
ctgcagtggg gcagcctgaa ggcctcggaca ccgccatgta ttactgtgcg agaca	295

<210> 300

<211> 294
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV5-78*01

<400> 300
gaggtgcagc tggtgcagtc tgcagcagag gtgaaaagac ccggggagtc tctgaggatc 60
tcctgtaaga cttctggata cagctttacc agctactgga tccactgggt gcgccagatg 120
cccgggaaag aactggagtg gatggggagc atctatcctg ggaactctga taccagatac 180
agcccatcct tccaaggcca cgtcaccatc tcagccgaca gctccagcag caccgcctac 240
ctgcagtgga gcagcctgaa ggcctcggac gccgccatgt attattgtgt gaga 294

<210> 301
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-11*01

<400> 301
caggtgcagc tggtggagtc tgggggaggc ttggtcaagc ctggagggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt gactactaca tgagctggat ccgccaggct 120
ccaggaagg ggctggagtg ggtttcatatc attagtagta gtggtagtac catatactac 180
gcagactctg tgaagggccg attcaccatc tccagggaca acgccaagaa ctactgtat 240
ctgcaaata acagcctgag agccgaggac acggccgtgt attactgtgc gagaga 296

<210> 302
<211> 294
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-11*03

<400> 302
caggtgcagc tggtggagtc tgggggaggc ttggtcaagc ctggagggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt gactactaca tgagctggat ccgccaggct 120
ccaggaagg ggctggagtg ggtttcatatc attagtagta gtagtagtta cacaaactac 180
gcagactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctactgtat 240
ctgcaaata acagcctgag agccgaggac acggccgtgt attactgtgc gaga 294

<210> 303
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-21*01

<400> 303
gaggtgcagc tggtggagtc tgggggaggc ctggtcaagc ctggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccttcagt agctatagca tgaactgggt ccgccaggct	120
ccaggggaagg ggctggagtg ggtctcatcc attagtagta gtagtagtta catatactac	180
gcagactcag tgaagggccg attcaccatc tccagagaca acgccaagaa ctactgtat	240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagaga	296

<210> 304
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-21*02

<400> 304	
gaggtgcaac tggtggagtc tgggggaggc ctggtcaagc ctggggggtc cctgagactc	60
tcctgtgcag cctctggatt caccttcagt agctatagca tgaactgggt ccgccaggct	120
ccaggggaagg ggctggagtg ggtctcatcc attagtagta gtagtagtta catatactac	180
gcagactcag tgaagggccg attcaccatc tccagagaca acgccaagaa ctactgtat	240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagaga	296

<210> 305
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-48*01

<400> 305	
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggggggtc cctgagactc	60
tcctgtgcag cctctggatt caccttcagt agctatagca tgaactgggt ccgccaggct	120
ccaggggaagg ggctggagtg ggtttcatac attagtagta gtagtagtac catatactac	180
gcagactctg tgaagggccg attcaccatc tccagagaca atgccaagaa ctactgtat	240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagaga	296

<210> 306
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-48*02

<400> 306	
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggggggtc cctgagactc	60
tcctgtgcag cctctggatt caccttcagt agctatagca tgaactgggt ccgccaggct	120
ccaggggaagg ggctggagtg ggtttcatac attagtagta gtagtagtac catatactac	180
gcagactctg tgaagggccg attcaccatc tccagagaca atgccaagaa ctactgtat	240
ctgcaaatga acagcctgag agacgaggac acggctgtgt attactgtgc gagaga	296

<210> 307
<211> 293
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-h*01

<400> 307
gaggtgcagc tgggtggagtc tgggggaggc ttggtaaagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt gactactaca tgaactgggt ccgccaggct 120
ccaggggaagg ggctggagtg ggtctcatcc attagtagta gtagtaccat atactacgca 180
gactctgtga agggccgatt caccatctcc agagacaacg ccaagaactc actgtatctg 240
caaatgaaca gcctgagagc cgaggacacg gctgtgtatt actgtgagc aga 293

<210> 308
<211> 293
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-h*02

<400> 308
gaggtgcagc tgggtggagtc tgggggaggc ttggtaaagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt gactactaca tgaactgggt ccgccaggct 120
ccaggggaagg ggctggagtg ggtctcatcc attagtagta gtagtaccat atactacgca 180
gactctgtga agggccgatt caccatctcc agagacaacg ccaagaactc actgtatctg 240
caaatgaaca gcctgagagc cgaggacacg gctgtttatt actgtgagc aga 293

<210> 309
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-48*03

<400> 309
gaggtgcagc tgggtggagtc tgggggaggc ttggtacagc ctggaggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agttatgaaa tgaactgggt ccgccaggct 120
ccaggggaagg ggctggagtg ggtttcatac attagtagta gtggtagtac catatactac 180
gcagactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctactgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgttt attactgtgc gagaga 296

<210> 310
<211> 292
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3/OR16-8*01

<400> 310
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctgggggggtc cctgagactg 60
tcctgtccag cctctggatt caccttcagt aaccactaca tgagctgggt ccgccaggct 120
ccaggggaagg gactggagtg ggtttcatac attagtgggt atagtgggta cacaaactac 180
gcagactctg tgaagggccg attcaccatc tccagggaca acgccaataa ctcaccgtat 240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgt ga 292

<210> 311
<211> 292
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3/OR16-9*01

<400> 311
gaggtgcagc tggtggagtc tggaggaggc ttggtacagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt aaccactaca cgagctgggt ccgccaggct 120
ccaggggaagg gactggagtg ggtttcatac agtagtggta atagtgggta cacaaactac 180
gcagactctg tgaagggccg attcaccatc tccagggaca acgccaagaa ctcactgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgt ga 292

<210> 312
<211> 293
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-13*01

<400> 312
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agctacgaca tgcactgggt ccgccaagct 120
acaggaaaag gtctggagtg ggtctcagct attggtactg ctggtgacac atactatcca 180
ggctccgtga agggccgatt caccatctcc agagaaaatg ccaagaactc cttgtatctt 240
caaatgaaca gcctgagagc cggggacacg gctgtgtatt actgtgcaag aga 293

<210> 313
<211> 291
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-13*03

<400> 313
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctgggggggtc cctgagactc 60
tcctgtgcag cctgtggatt caccttcagt agctacgaca tgcactgggt ccgccaagct 120
acaggaaaag gtctggagtg ggtctcagct attggtactg ctggtgacac atactatcca 180
ggctccgtga agggccaatt caccatctcc agagaaaatg ccaagaactc cttgtatctt 240

caaatgaaca gcctgagagc cggggacacg gctgtgtatt actgtgcaag a 291

<210> 314
<211> 293
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-13*02

<400> 314
gaggtgcatc tgggtggagtc tgggggaggc ttggtacagc ctgggggggc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt aactacgaca tgcactgggt ccgccaagct 120
acaggaaaag gtctggagtg ggtctcagcc aatggtagct ctggtgacac atactatcca 180
ggctccgtga aggggagcatt caccatctcc agagaaaatg ccaagaactc cttgtatctt 240
caaatgaaca gcctgagagc cggggacacg gctgtgtatt actgtgcaag aga 293

<210> 315
<211> 123
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-47*02

<400> 315
atactatgca gactccgtga tgggccgatt caccatctcc agagacaacg ccaagaagtc 60
cttgtatctt caaatgaaca gcctgatagc tgaggacatg gctgtgtatt attgtgcaag 120
aga 123

<210> 316
<211> 282
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-47*03

<400> 316
gaggatcagc tgggtggagtc tgggggaggc ttggtacagc ctgggggggc cctgagaccc 60
tcctgtgcag cctctggatt cgccttcagt agctatgttc tgcactgggt tcgccgggct 120
ccagggaagg gtccggagtg ggtatcagct attggtagct gtggtgatac atactatgca 180
gactccgtga tgggccgatt caccatctcc agagacaacg ccaagaagtc cttgtatctc 240
aaatgaacag cctgatagct gaggacatgg ctgtgtatta tg 282

<210> 317
<211> 291
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-47*01

<400> 317
gaggatcagc tgggtggagtc tgggggaggc ttggtacagc ctgggggggc cctgagaccc 60

tcctgtgcag cctctggatt cgccttcagt agctatgctc tgcactgggt tcgccgggct	120
ccagggaaagg gtctggagtg ggtatcagct attggtactg gtggtgatac atactatgca	180
gactccgtga tgggccgatt caccatctcc agagacaacg ccaagaagtc cttgtatctt	240
catatgaaca gcctgatagc tgaggacatg gctgtgtatt attgtgcaag a	291

<210> 318
 <211> 291
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3/OR16-10*01

<400> 318	
gaggttcagc tggtgcagtc tgggggaggc ttggtacatc ctggggggtc cctgagactc	60
tcctgtgcag gctctggatt caccttcagt agctatgcta tgcactgggt tcgccaggct	120
ccaggaaaag gtctggagtg ggtatcagct attggtactg gtggtggcac atactatgca	180
gactccgtga agggccgatt caccatctcc agagacaatg ccaagaactc cttgtatctt	240
caaatgaaca gcctgagagc cgaggacatg gctgtgtatt actgtgcaag a	291

<210> 319
 <211> 291
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3/OR16-10*02

<400> 319	
gaggttcagc tggtgcagtc tgggggaggc ttggtacagc ctggggggtc cctgagactc	60
tcctgtgcag gctctggatt caccttcagt agctatgcta tgcactgggt tcgccaggct	120
ccaggaaaag gtctggagtg ggtatcagct attggtactg gtggtggcac atactatgca	180
gactccgtga agggccgatt caccatctcc agagacaatg ccaagaactc cttgtatctt	240
caaatgaaca gcctgagagc cgaggacatg gctgtgtatt actgtgcaag a	291

<210> 320
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-62*01

<400> 320	
gaggtgcagc tggtggagtc tggggaaggc ttggtccagc ctggggggtc cctgagactc	60
tcctgtgcag cctctggatt caccttcagt agctctgcta tgcactgggt ccgccaggct	120
ccaagaaagg gttttagtg ggtctcagtt attagtacaa gtggtgatac cgtactctac	180
acagactctg tgaagggccg attcaccatc tccagagaca atgccagaa ttactgtct	240
ctgcaaatga acagcctgag agccgagggc acagtttgtt actactgtgt gaaaga	296

<210> 321
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-64*01

<400> 321
gaggtgcagc tggtggagtc tgggggaggc ttggtccagc ctggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct 120
ccaggggaagg gactggaata tgtttcagct attagtagta atgggggtag cacatattat 180
gcaaactctg tgaagggcag attcaccatc tccagagaca attccaagaa cacgctgtat 240
cttcaaattg gcagcctgag agctgaggac atggctgtgt attactgtgc gagaga 296

<210> 322
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-64*02

<400> 322
gaggtgcagc tggtggagtc tggggaaggc ttggtccagc ctggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct 120
ccaggggaagg gactggaata tgtttcagct attagtagta atgggggtag cacatattat 180
gcagactctg tgaagggcag attcaccatc tccagagaca attccaagaa cacgctgtat 240
cttcaaattg gcagcctgag agctgaggac atggctgtgt attactgtgc gagaga 296

<210> 323
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-64*03

<400> 323
gaggtgcagc tggtggagtc tgggggaggc ttggtccagc ctggggggtc cctgagactc 60
tcctgttcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct 120
ccaggggaagg gactggaata tgtttcagct attagtagta atgggggtag cacatactac 180
gcagactcag tgaagggcag attcaccatc tccagagaca attccaagaa cacgctgtat 240
gtccaaatga gcagtctgag agctgaggac acggctgtgt attactgtgt gaaaga 296

<210> 324
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-64*05

<400> 324
gaggtgcagc tgggtggagtc tgggggaggc ttggtccagc ctgggggggtc cctgagactc 60
tcctgttcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct 120
ccaggggaagg gactggaata tgtttcagct attagtagta atgggggtag cacatactac 180
gcagactcag tgaagggcag attcaccatc tccagagaca attccaagaa cacgctgtat 240
gttcaaatga gcagtctgag agctgaggac acggctgtgt attactgtgt gaaaga 296

<210> 325
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-64*04

<400> 325
caggtgcagc tgggtggagtc tgggggaggc ttggtccagc ctgggggggtc cctgagactc 60
tcctgttcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct 120
ccaggggaagg gactggaata tgtttcagct attagtagta atgggggtag cacatactac 180
gcagactcag tgaagggcag attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga 296

<210> 326
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-16*01

<400> 326
gaggtacaac tgggtggagtc tgggggaggc ttggtacagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt aacagtgaca tgaactgggc ccgcaaggct 120
ccaggaaagg ggctggagtg ggtatcgggt gttagttaga atggcagtag gacgcactat 180
gtggactccg tgaagcgccg attcatcatc tccagagaca attccaggaa ctccctgtat 240
ctgcaaaaga acagacggag agccgaggac atggctgtgt attactgtgt gagaaa 296

<210> 327
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-16*02

<400> 327
gaggtgcagc tgggtggagtc tgggggaggc ttggtacagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt aacagtgaca tgaactgggc ccgcaaggct 120
ccaggaaagg ggctggagtg ggtatcgggt gttagttaga atggcagtag gacgcactat 180
gtggactccg tgaagcgccg attcatcatc tccagagaca attccaggaa ctccctgtat 240

ctgcaaaaga acagacggag agccgaggac atggctgtgt attactgtgt gagaaa 296

<210> 328
<211> 294
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3/OR16-15*02

<400> 328
gaggtgcagc tgggtggagtc tgggggaggc ttggtccagc ctgggggggtc cctgagacac 60
tcctgtgcag cctctggatt caccttcagt aacagtgaca tgaactgggt cctctaggct 120
ccaggaaagg ggctggagtg ggtctcgggt attagttgga atggcggtaa gacgcactat 180
gtggactccg tgaagggcca atttaccatc tccagagaca attccagcaa gtccctgtat 240
ctgcaaaaga acagacagag agccaaagac atggccgtgt attactgtgt gaga 294

<210> 329
<211> 294
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3/OR16-16*01

<400> 329
gaggtgcagc tgggtggagtc tgggggaggc ttggtccagc ctgggggggtc cctgagacac 60
tcctgtgcag cctctggatt caccttcagt aacagtgaca tgaactgggt cctctaggct 120
ccaggaaagg ggctggagtg ggtctcggat attagttgga atggcggtaa gacgcactat 180
gtggactccg tgaagggcca atttaccatc tccagagaca attccagcaa gtccctgtat 240
ctgcaaaaga acagacagag agccaaggac atggccgtgt attactgtgt gaga 294

<210> 330
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3/OR16-15*01

<400> 330
gaagtgcagc tgggtggagtc tgggggaggc ttggtccagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctgtatt caccttcagt aacagtgaca taaactgggt cctctaggct 120
ccaggaaagg ggctggagtg ggtctcgggt attagttgga atggcggtaa gacgcactat 180
gtggactccg tgaagggcca attttccatc tccagagaca attccagcaa gtccctgtat 240
ctgcaaaaga acagacagag agccaaggac atggccgtgt attactgtgt gagaaa 296

<210> 331
<211> 296
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-19*01

<400> 331

acagtgcagc	tggtggagtc	tgggggaggc	ttggtagagc	ctgggggggc	cctgagactc	60
tcctgtgcag	cctctggatt	caccttcagt	aacagtgaca	tgaactgggt	ccgccaggct	120
ccaggaaagg	ggctggagtg	ggtatcgggt	gtagttgga	atggcagtag	gacgcactat	180
gcagactctg	tgaagggccg	attcatcatc	tccagagaca	attccaggaa	cttcctgtat	240
cagcaaatga	acagcctgag	gcccaggagc	atggctgtgt	attactgtgt	gagaaa	296

<210> 332

<211> 296

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-35*01

<400> 332

gaggtgcagc	tggtggagtc	tgggggaggc	ttggtacagc	ctgggggggc	cctgagactc	60
tcctgtgcag	cctctggatt	caccttcagt	aacagtgaca	tgaactgggt	ccatcaggct	120
ccaggaaagg	ggctggagtg	ggtatcgggt	gtagttgga	atggcagtag	gacgcactat	180
gcagactctg	tgaagggccg	attcatcatc	tccagagaca	attccaggaa	caccctgtat	240
ctgcaaacga	atagcctgag	ggccgaggac	acggctgtgt	attactgtgt	gagaaa	296

<210> 333

<211> 298

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-43*01

<400> 333

gaagtgcagc	tggtggagtc	tgggggagtc	gtggtacagc	ctgggggggc	cctgagactc	60
tcctgtgcag	cctctggatt	cacctttgat	gattatacca	tgcactgggt	ccgtcaagct	120
ccggggaagg	gtctggagtg	ggtctctctt	attagttggg	atggtggtag	cacatactat	180
gcagactctg	tgaagggccg	attcaccatc	tccagagaca	acagcaaaaa	ctccctgtat	240
ctgcaaatga	acagtctgag	aactgaggac	accgccttgt	attactgtgc	aaaagata	298

<210> 334

<211> 294

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-43*02

<400> 334

gaagtgcagc	tggtggagtc	tgggggaggc	gtggtacagc	ctgggggggc	cctgagactc	60
tcctgtgcag	cctctggatt	cacctttgat	gattatgcca	tgcactgggt	ccgtcaagct	120
ccagggaagg	gtctggagtg	ggtctctctt	attagttggg	atggtggtag	cacatactat	180

gcagactctg tgaagggccg attcaccatc tccagagaca acagcaaaaa ctccctgtat 240
 ctgcaaatga acagtctgag aactgaggac accgccttgt attactgtgc aaaa 294

<210> 335
 <211> 298
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-9*01

<400> 335
 gaagtgcagc tgggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
 tcctgtgcag cctctggatt cacctttgat gattatgcc a tgcactgggt ccggcaagct 120
 ccaggggaagg gcctggagtg ggtctcaggt attagtggga atagtggtag cataggctat 180
 gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
 ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgc aaaagata 298

<210> 336
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-20*01

<400> 336
 gaggtgcagc tgggtggagtc tgggggaggt gtggtacggc ctggggggtc cctgagactc 60
 tcctgtgcag cctctggatt cacctttgat gattatggca tgagctgggt ccgccaagct 120
 ccaggggaagg ggctggagtg ggtctctggt attaattgga atggtggtag cacaggttat 180
 gcagactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
 ctgcaaatga acagtctgag agccgaggac acggccttgt atcactgtgc gagaga 296

<210> 337
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-74*01

<400> 337
 gaggtgcagc tgggtggagtc cgggggaggc ttagttcagc ctggggggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttcagt agctactgga tgcactgggt ccgccaagct 120
 ccaggggaagg ggctgggtgt ggtctcacgt attaatagt atgggagtag cacaagctac 180
 gcggactccg tgaagggccg attcaccatc tccagagaca acgccaagaa cacgctgtat 240
 ctgcaaatga acagtctgag agccgaggac acggctgtgt attactgtgc aagaga 296

<210> 338
 <211> 294
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-74*02

<400> 338
 gaggtgcagc tgggtggagtc tgggggaggc ttagttcagc ctgggggggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttcagt agctactgga tgcactgggt ccgccaagct 120
 ccaggggaagg ggctgggtgtg ggtctcacgt attaatagtg atgggagtag cacaagctac 180
 gcggactccg tgaagggccg attcaccatc tccagagaca acgccaagaa cacgctgtat 240
 ctgcaaatga acagtctgag agccgaggac acggctgtgt attactgtgc aaga 294

<210> 339
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-74*03

<400> 339
 gaggtgcagc tgggtggagtc cgggggaggc ttagttcagc ctgggggggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttcagt agctactgga tgcactgggt ccgccaagct 120
 ccaggggaagg ggctgggtgtg ggtctcacgt attaatagtg atgggagtag cacaacgtac 180
 gcggactccg tgaagggccg attcaccatc tccagagaca acgccaagaa cacgctgtat 240
 ctgcaaatga acagtctgag agccgaggac acggctgtgt attactgtgc aagaga 296

<210> 340
 <211> 294
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3/OR16-13*01

<400> 340
 gaggtgcagc tgggtggagtc tgggggaggc ttagtacagc ctggagggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttcagt agctactgga tgcactgggt ccgccaagct 120
 ccaggggaagg ggctgggtgtg ggtctcacgt attaatagtg atgggagtag cacaagctac 180
 gcagactcca tgaagggcca attcaccatc tccagagaca atgctaagaa cacgctgtat 240
 ctgcaaatga acagtctgag agctgaggac atggctgtgt attactgtac taga 294

<210> 341
 <211> 294
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3/OR16-14*01

<400> 341
 gaggtgcagc tggaggagtc tgggggaggc ttagtacagc ctggagggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttcagt agctactgga tgcactgggt ccgccaatct 120

ccagggaagg ggctggtgtg agtctcacgt attaatagtg atgggagtag cacaagctac	180
gcagactcct tgaagggcca attcaccatc tccagagaca atgctaagaa cacgctgtat	240
ctgcaaatga acagtctgag agctgaggac atggctgtgt attactgtac taga	294

<210> 342
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-30*01

<400> 342	
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tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct	120
ccaggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac	180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga	296

<210> 343
 <211> 294
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-30*08

<400> 343	
caggtgcagc tggtggactc tgggggaggc gtggtccagc ctgggaggtc cctgagactc	60
tcctgtgcag cctctgcatt caccttcagt agctatgcta tgcactgggt ccgccaggct	120
ccaggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac	180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gaga	294

<210> 344
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-30*17

<400> 344	
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tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct	120
ccgggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac	180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga	296

<210> 345
 <211> 296

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: IGHV3-30*11

 <400> 345
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 tcctgtgcag cgtctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct 120
 ccaggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac 180
 gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
 ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga 296

 <210> 346
 <211> 296
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: IGHV3-30*10

 <400> 346
 caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct 120
 ccaggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac 180
 acagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
 ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga 296

 <210> 347
 <211> 296
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: IGHV3-30*16

 <400> 347
 caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggcc 120
 ccaggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac 180
 gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
 ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga 296

 <210> 348
 <211> 296
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: IGHV3-30*15

 <400> 348
 caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60

tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct	120
ccaggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac	180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga gcagcctgag agctgaggac acggctgtgt attactgtgc gagaga	296

<210> 349
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-30*07

<400> 349	
caggtgcagc tggtagagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc	60
tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct	120
ccaggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac	180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagaga	296

<210> 350
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-30*04

<400> 350	
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tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct	120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactac	180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
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<210> 351
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-30*09

<400> 351	
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tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct	120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactac	180
gcagactccg tgaagggccg attcgccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga	296

<210> 352
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-30*14

<400> 352
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tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactac 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
cttcaaataga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga 296

<210> 353
<211> 294
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-30-3*01

<400> 353
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tcctgtgcag cctctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagcaa taaatactac 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaataga acagcctgag agctgaggac acggctgtgt attactgtgc gaga 294

<210> 354
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-30-3*02

<400> 354
caggtgcagc tgggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cgtctggatt caccttcagt agctatgcta tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagcaa taaatactac 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaataga acagcctgag agctgaggac acggctgtgt attactgtgc gaaaga 296

<210> 355
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-30*03

<400> 355

caggtgcagc tgggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc	60
tcctgtgcag cctctggatt caccttcagt agctatggca tgcactgggt ccgccaggct	120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactat	180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga	296

<210> 356
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-30*18

<400> 356	
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tcctgtgcag cctctggatt caccttcagt agctatggca tgcactgggt ccgccaggct	120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactat	180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gaaaga	296

<210> 357
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-30*06

<400> 357	
caggtgcagc tgggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc	60
tcctgtgcag cgtctggatt caccttcagt agctatggca tgcactgggt ccgccaggct	120
ccaggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac	180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga	296

<210> 358
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-30*12

<400> 358	
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ccaggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac	180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat	240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagaga	296

<210> 359
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-30*19

<400> 359
caggtgcagc tggaggagtc tgggggagggc gtgggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cgtctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactac 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaataga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga 296

<210> 360
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-33*05

<400> 360
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tcctgtgcag cgtctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaataga acagcctgag agccgaggac acggctgtgt attactgtgc gagaga 296

<210> 361
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-30*05

<400> 361
caggtgcagc tggaggagtc tgggggagggc gtgggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaataga acagcctgag agctgagggc acggctgtgt attactgtgc gagaga 296

<210> 362
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-30*13

<400> 362
caggtgcagc tggtagagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctagagtg ggtggcagtt atatcatatg atggaagtaa taaatactac 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa caggctgtat 240
ctgcaaataga acagcctgag agctgaggac acggctgtgt attactgtgc gagaga 296

<210> 363
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-33*01

<400> 363
caggtgcagc tggtagagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cgtctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctagagtg ggtggcagtt atatggtatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaataga acagcctgag agccgaggac acggctgtgt attactgtgc gagaga 296

<210> 364
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-33*04

<400> 364
caggtgcagc tggtagagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cgtctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctagagtg ggtggcagtt atatggtatg acggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaataga acagcctgag agccgaggac acggctgtgt attactgtgc gagaga 296

<210> 365
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-33*02

<400> 365
caggtacagc tggtagagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cgtctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctagagtg ggtggcagtt atatggtatg atggaagtaa taaatactat 180
gcagactccg cgaagggccg attcaccatc tccagagaca attccacgaa cacgctgttt 240

ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagaga 296

<210> 366
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-33*03

<400> 366
caggtgcagc tgggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cgtctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca actccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gaaaga 296

<210> 367
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-30*02

<400> 367
caggtgcagc tgggtggagtc tgggggaggc gtggtccagc ctggggggtc cctgagactc 60
tcctgtgcag cgtctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcattt atacggtatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gaaaga 296

<210> 368
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-52*01

<400> 368
gaggtgcagc tgggtggagtc tgggtgaggc ttggtacagc ctggaggggc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agctcctgga tgcactgggt ctgccaggct 120
ccggagaagg ggctggagtg ggtggccgac ataaagtgtg acggaagtga gaaatactat 180
gtagactctg tgaagggccg attgaccatc tccagagaca atgccaagaa ctccctctat 240
ctgcaagtga acagcctgag agctgaggac atgaccgtgt attactgtgt gagagg 296

<210> 369
<211> 294
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-52*02

<400> 369

gaggtgcagc	tggtggagtc	tgggtgaggc	ttggtacagc	ctggaggggc	cctgagactc	60
tcctgtgcag	cctctggatt	caccttcagt	agctcctgga	tgactgggt	ctgccaggct	120
ccggagaagg	ggcaggagtg	ggtggccgac	ataaagtgtg	acggaagtga	gaaatactat	180
gtagactctg	tgaagggccg	attgaccatc	tccagagaca	atgccaagaa	ctccctctat	240
ctgcaagtga	acagcctgag	agctgaggac	atgaccgtgt	attactgtgt	gaga	294

<210> 370

<211> 294

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-52*03

<400> 370

gaggtgcagc	tggtcgagtc	tgggtgaggc	ttggtacagc	ctggaggggc	cctgagactc	60
tcctgtgcag	cctctggatt	caccttcagt	agctcctgga	tgactgggt	ctgccaggct	120
ccggagaagg	ggctggagtg	ggtggccgac	ataaagtgtg	acggaagtga	gaaatactat	180
gtagactctg	tgaagggccg	attgaccatc	tccagagaca	atgccaagaa	ctccctctat	240
ctgcaagtga	acagcctgag	agctgaggac	atgaccgtgt	attactgtgt	gaga	294

<210> 371

<211> 296

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-7*01

<400> 371

gaggtgcagc	tggtggagtc	tgggggaggc	ttggtccagc	ctgggggggc	cctgagactc	60
tcctgtgcag	cctctggatt	cacctttagt	agctattgga	tgagctgggt	ccgccaggct	120
ccagggaaag	ggctggagtg	ggtggccaac	ataaagcaag	atggaagtga	gaaatactat	180
gtggactctg	tgaagggccg	attcaccatc	tccagagaca	acgccaagaa	ctcactgtat	240
ctgcaaata	acagcctgag	agccgaggac	acggctgtgt	attactgtgc	gagaga	296

<210> 372

<211> 294

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-7*02

<400> 372

gaggtgcagc	tggtggagtc	tgggggaggc	ttggtccagc	ctgggggggc	cctgagactc	60
tcctgtgcag	cctctggatt	cacctttagt	agctattgga	tgagctgggt	ccgccaggct	120
ccagggaaag	ggctggagtg	ggtggccaac	ataaagcaag	atggaagtga	gaaatactat	180

gtggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctactgtat 240
 ctgcaaata acagcctgag agccgaggac acggctgtgt attactgtgc gaga 294

<210> 373
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-23*01

<400> 373
 gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggggggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttttagc agctatgccca tgagctgggt ccgccaggct 120
 ccaggggaagg ggctggagtg ggtctcagct attagtggta gtggtggtag cacatactac 180
 gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240
 ctgcaaata acagcctgag agccgaggac acggccgtat attactgtgc gaaaga 296

<210> 374
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-23*04

<400> 374
 gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggggggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttttagc agctatgccca tgagctgggt ccgccaggct 120
 ccaggggaagg ggctggagtg ggtctcagct attagtggta gtggtggtag cacatactac 180
 gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cacgctgtat 240
 ctgcaaata acagcctgag agccgaggac acggccgtat attactgtgc gaaaga 296

<210> 375
 <211> 296
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-23*02

<400> 375
 gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggggggtc cctgagactc 60
 tcctgtgcag cctctggatt caccttttagc agctatgccca tgagctgggt ccgccaggct 120
 ccaggggaagg ggctggagtg ggtctcagct attagtggta gtggtggtag cacatactac 180
 ggagactccg tgaagggccg gttcaccatc tcaagagaca attccaagaa cacgctgtat 240
 ctgcaaata acagcctgag agccgaggac acggccgtat attactgtgc gaaaga 296

<210> 376
 <211> 294
 <212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-23*03

<400> 376

gagggtgcagc	tggtggagtc	tgggggaggc	ttggtacagc	ctgggggggtc	cctgagactc	60
tcctgtgcag	cctctggatt	cacctttagc	agctatgcca	tgagctgggt	ccgccaggct	120
ccaggggaagg	ggctggagtg	ggtctcagtt	atttatagcg	gtggtagtag	cacatactat	180
gcagactccg	tgaagggccg	gttcaccatc	tccagagata	attccaagaa	cacgctgtat	240
ctgcaaatga	acagcctgag	agccgaggac	acggccgtat	attactgtgc	gaaa	294

<210> 377

<211> 294

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-23*05

<400> 377

gagggtgcagc	tggtggagtc	tgggggaggc	ttggtacagc	ctgggggggtc	cctgagactc	60
tcctgtgcag	cctctggatt	cacctttagc	agctatgcca	tgagctgggt	ccgccaggct	120
ccaggggaagg	ggctggagtg	ggtctcagct	atttatagca	gtggtagtag	cacatactat	180
gcagactccg	tgaagggccg	gttcaccatc	tccagagaca	attccaagaa	cacgctgtat	240
ctgcaaatga	acagcctgag	agccgaggac	acggccgtat	attactgtgc	gaaa	294

<210> 378

<211> 293

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-53*01

<400> 378

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tcctgtgcag	cctctgggtt	caccgtcagt	agcaactaca	tgagctgggt	ccgccaggct	120
ccaggggaagg	ggctggagtg	ggtctcagtt	atttatagcg	gtggtagcac	atactacgca	180
gactccgtga	agggccgatt	caccatctcc	agagacaatt	ccaagaacac	gctgtatctt	240
caaatgaaca	gcctgagagc	cgaggacacg	gccgtgtatt	actgtgcgag	aga	293

<210> 379

<211> 291

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-53*02

<400> 379

gagggtgcagc	tggtggagac	tggaggaggc	ttgatccagc	ctgggggggtc	cctgagactc	60
tcctgtgcag	cctctgggtt	caccgtcagt	agcaactaca	tgagctgggt	ccgccaggct	120

ccaggggaagg ggctggagtg ggtctcagtt atttatagcg gtggtagcac atactacgca	180
gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctt	240
caaatgaaca gcctgagagc cgaggacacg gccgtgtatt actgtgag a	291

<210> 380
 <211> 293
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-66*03

<400> 380	
gaggtgcagc tggtggagtc tggaggaggc ttgatccagc ctgggggggc cctgagactc	60
tcctgtgcag cctctgggtt caccgtcagt agcaactaca tgagctgggt ccgccaggct	120
ccaggggaagg ggctggagtg ggtctcagtt atttatagct gtggtagcac atactacgca	180
gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctt	240
caaatgaaca gcctgagagc tgaggacacg gctgtgtatt actgtgag aga	293

<210> 381
 <211> 293
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-53*03

<400> 381	
gaggtgcagc tggtggagtc tggaggaggc ttgatccagc ctgggggggc cctgagactc	60
tcctgtgcag cctctgggtt caccgtcagt agcaactaca tgagctgggt ccgccagcct	120
ccaggggaagg ggctggagtg ggtctcagtt atttatagcg gtggtagcac atactacgca	180
gactctgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctt	240
caaatgaaca gcctgagagc cgaggacacg gccgtgtatt actgtgctag gga	293

<210> 382
 <211> 293
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-66*01

<400> 382	
gaggtgcagc tggtggagtc tgggggaggc ttggtccagc ctgggggggc cctgagactc	60
tcctgtgcag cctctggatt caccgtcagt agcaactaca tgagctgggt ccgccaggct	120
ccaggggaagg ggctggagtg ggtctcagtt atttatagcg gtggtagcac atactacgca	180
gactccgtga agggcagatt caccatctcc agagacaatt ccaagaacac gctgtatctt	240
caaatgaaca gcctgagagc cgaggacacg gctgtgtatt actgtgag aga	293

<210> 383

<211> 293
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-66*04

<400> 383
gagggtgcagc tgggtggagtc tgggggaggc ttggtccagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccgtcagt agcaactaca tgagctgggt ccgccaggct 120
ccaggaagg ggctggagtg ggtctcagtt atttatagcg gtggtagcac atactacgca 180
gactccgtga agggcagatt caccatctcc agagacaatt ccaagaacac gctgtatctt 240
caaatgaaca gcctgagagc cgaggacacg gctgtgtatt actgtgcgag aca 293

<210> 384
<211> 291
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-66*02

<400> 384
gagggtgcagc tgggtggagtc tgggggaggc ttggtccagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccgtcagt agcaactaca tgagctgggt ccgccaggct 120
ccaggaagg ggctggagtg ggtctcagtt atttatagcg gtggtagcac atactacgca 180
gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac gctgtatctt 240
caaatgaaca gcctgagagc tgaggacacg gctgtgtatt actgtgcgag a 291

<210> 385
<211> 292
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-38*01

<400> 385
gagggtgcagc tgggtggagtc tgggggaggc ttggtacagc ctaggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccgtcagt agcaatgaga tgagctggat ccgccaggct 120
ccaggaagg ggctggagtg ggtctcatcc attagtgggtg gtagcacata ctacgcagac 180
tccaggaagg gcagattcac catctccaga gacaattcca agaacacgct gtatcttcaa 240
atgaacaacc tgagagctga gggcacggcc gcgtattact gtgccagata ta 292

<210> 386
<211> 292
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-38*02

<400> 386
gagggtgcagc tgggtggagtc tgggggaggc ttggtacagc ctaggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccgtcagt agcaatgaga tgagctggat ccgccaggct	120
ccaggaagg ggctggagt ggtctcatcc attagtgggt gtagcacata ctacgcagac	180
tccaggaagg gcagattcac catctccaga gacaattcca agaacacgct gtatcttcaa	240
atgaacaacc tgagagctga gggcacggcc gtgtattact gtgccagata ta	292

<210> 387
 <211> 288
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-d*01

<400> 387	
gaggtgcagc tggtggagtc tcggggagtc ttggtacagc ctgggggggc cctgagactc	60
tcctgtgcag cctctggatt caccgtcagt agcaatgaga tgagctgggt ccgccaggct	120
ccaggaagg gtctggagt ggtctcatcc attagtgggt gtagcacata ctacgcagac	180
tccaggaagg gcagattcac catctccaga gacaattcca agaacacgct gcatcttcaa	240
atgaacagcc tgagagctga ggacacggct gtgtattact gtaagaaa	288

<210> 388
 <211> 294
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3/OR16-12*01

<400> 388	
gaggtgcagc tggtagagtc tgggagagggc ttggcccagc ctggggggta cctaaaactc	60
tccggtgcag cctctggatt caccgtcggg agctggtaca tgagctggat ccaccaggct	120
ccaggaagg gtctggagt ggtctcatal attagtagta gtggtttag cacaactac	180
gcagactctg tgaagggcag attcaccatc tccacagaca actcaaagaa cacgctctac	240
ctgcaaata acagcctgag agtggaggac acggccgtgt attactgtgc aaga	294

<210> 389
 <211> 302
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-15*01

<400> 389	
gaggtgcagc tggtggagtc tgggggagggc ttggtaaagc ctgggggggc ccttagactc	60
tcctgtgcag cctctggatt cactttcagt aacgcctgga tgagctgggt ccgccaggct	120
ccaggaagg ggctggagt ggttgccgt attaaaagca aaactgatgg tgggacaaca	180
gactacgctg caccctgaa aggcagattc accatctcaa gagatgattc aaaaaacacg	240
ctgtatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtaccaca	300

ga 302

<210> 390
<211> 302
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-15*02

<400> 390
gaggtgcagc tgggtggagtc tgggggagcc ttggtaaagc ctgggggggtc ccttagactc 60
tcctgtgcag cctctggatt cactttcagt aacgcctgga tgagctgggt ccgccaggct 120
ccaggggaagg ggctggagtg ggttggccgt attaaaagca aaactgatgg tgggacaaca 180
gactacgctg caccctgtaa aggcagattc accatctcaa gagatgattc aaaaaacacg 240
ctgtatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtaccaca 300
ga 302

<210> 391
<211> 302
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-15*04

<400> 391
gaggtgcagc tgggtggagtc tgggggagggc ttggtaaagc ctgggggggtc ccttagactc 60
tcctgtgcag cctctggatt cactttcagt aacgcctgga tgagctgggt ccgccaggct 120
ccaggggaagg ggctggagtg ggttggccgt attgaaagca aaactgatgg tgggacaaca 180
gactacgctg caccctgtaa aggcagattc accatctcaa gagatgattc aaaaaacacg 240
ctgtatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtaccaca 300
ga 302

<210> 392
<211> 302
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-15*05

<400> 392
gaggtgcagc tgggtggagtc tgggggagggc ttggtaaagc ctgggggggtc ccttagactc 60
tcctgtgcag cctctggatt cactttcagt aacgcctgga tgagctgggt ccgccaggct 120
ccaggggaagg ggctggagtg ggttggccgt attaaaagca aaactgatgg tgggacaaca 180
gactacgctg caccctgtaa aggcagattc accatctcaa gagatgattc aaaaaacacg 240
ctgtatctgc aaatgaacag tctgaaaacc gaggacacag ccgtgtatta ctgtaccaca 300
ga 302

<210> 393
 <211> 302
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-15*06

<400> 393
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 tcctgtgcag cctctggatt cactttcagt aacgcctgga tgagctgggt ccgccaggct 120
 ccaggaagg ggctggagtg ggtcggccgt attaaaagca aaactgatgg tgggacaaca 180
 aactacgtg caccctgtaa aggcagattc accatctcaa gagatgattc aaaaaacacg 240
 ctgtatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtaccaca 300
 ga 302

<210> 394
 <211> 302
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-15*07

<400> 394
 gaggtgcagc tggaggagtc tgggggaggc ttggtaaagc ctgggggggtc ccttagactc 60
 tcctgtgcag cctctggttt cactttcagt aacgcctgga tgaactgggt ccgccaggct 120
 ccaggaagg ggctggagtg ggtcggccgt attaaaagca aaactgatgg tgggacaaca 180
 gactacgtg caccctgtaa aggcagattc accatctcaa gagatgattc aaaaaacacg 240
 ctgtatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtaccaca 300
 ga 302

<210> 395
 <211> 302
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-15*03

<400> 395
 gaggtgcagc tggaggagtc tgccggagcc ttggtacagc ctgggggggtc ccttagactc 60
 tcctgtgcag cctctggatt cacttgcagt aacgcctgga tgagctgggt ccgccaggct 120
 ccaggaagg ggctggagtg ggctggccgt attaaaagca aagctaattg tgggacaaca 180
 gactacgtg cacctgtgaa aggcagattc accatctcaa gagttgattc aaaaaacacg 240
 ctgtatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtaccaca 300
 ga 302

<210> 396
 <211> 302
 <212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-15*08

<400> 396

gagggtgcagc tgggtggagtc tgcgggaggc ttggtacagc ctgggggggtc ccttagactc 60
tcctgtgcag cctctggatt cacttgcagt aacgcctgga tgagctgggt ccgccaggct 120
ccaggaagg ggctggagtg ggttggctgt attaaaagca aagctaattg tgggacaaca 180
gactacgtg cacctgtgaa aggcagattc accatctcaa gagatgattc aaaaaacacg 240
ctgtatctgc aaatgatcag cctgaaaacc gaggacacgg ccgtgtatta ctgtaccaca 300
gg 302

<210> 397

<211> 302

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-72*01

<400> 397

gagggtgcagc tgggtggagtc tgggggaggc ttggtccagc ctggaggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt gaccactaca tggactgggt ccgccaggct 120
ccaggaagg ggctggagtg ggttggccgt actagaaaca aagctaacag ttacaccaca 180
gaatacgccg cgtctgtgaa aggcagattc accatctcaa gagatgattc aaagaactca 240
ctgtatctgc aaatgaacag cctgaaaacc gaggacacgg ccgtgtatta ctgtgctaga 300
ga 302

<210> 398

<211> 165

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-72*02

<400> 398

accttcagtg accactacat ggactgggtc cgccaggctc caggaagggt gctggagtgg 60
gttggccgta ctagaaacaa agctaacagc tacaccacag aatacgccgc gtctgtgaaa 120
ggcagattca ccatctcaag agatgattca aagaactcac tgtat 165

<210> 399

<211> 300

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3/OR15-7*01

<400> 399

gagggtgcagc tgggtggagtc tgggggaggc ttggtccagc ctggggggttc tctgagactc 60
tcatgtgcag cctctggatt caccttcagt gaccactaca tgagctgggt ccgccaggct 120

caagggaaag ggctagagtt ggtaggttta ataagaaaca aagctaacag ttacacgaca	180
gaatatgctg cgtctgtgaa aggcagactt accatctcaa gagaggattc aaagaacacg	240
atgtatctgc aaatgagcaa cctgaaaacc gaggacttgg ccgtgtatta ctgtgctaga	300

<210> 400
 <211> 300
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3/OR15-7*03

<400> 400	
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tcatgtgcag cctctggatt caccttcagt gaccactaca tgagctgggt ccgccaggct	120
caagggaaag ggctagagtt ggtaggttta ataagaaaca aagctaacag ttacacgaca	180
gaatatgctg cgtctgtgaa aggcagactt accatctcaa gagaggattc aaagaacacg	240
ctgtatctgc aaatgagcag cctgaaaacc gaggacttgg ccgtgtatta ctgtgctaga	300

<210> 401
 <211> 300
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3/OR15-7*02

<400> 401	
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tcatgtgctg cctctggatt caccttcagt gaccactaca tgagctgggt ccgccaggct	120
caagggaaag ggctagagtt ggtaggttta ataagaaaca aagctaacag ttacacgaca	180
gaatatgctg cgtctgtgaa aggcagactt accatctcaa gagaggattc aaagaacacg	240
ctgtatctgc aaatgagcag cctgaaaacc gaggacttgg ccgtgtatta ctgtgctaga	300

<210> 402
 <211> 302
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic DNA: IGHV3-73*01

<400> 402	
gaggtgcagc tggtggagtc tgggggaggc ttggtccagc ctgggggttc cctgaaactc	60
tcctgtgcag cctctgggtt caccttcagt ggctctgcta tgactgggt ccgccaggct	120
tccgggaaag ggctggagtg ggttgccgt attagaagca aagctaacag ttacgcgaca	180
gcatatgctg cgtcggtgaa aggcaggttc accatctcca gagatgattc aaagaacacg	240
gcgtatctgc aaatgaacag cctgaaaacc gaggacacgg ccgtgtatta ctgtactaga	300
ca	302

<210> 403
<211> 302
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-73*02

<400> 403
gaggtgcagc tgggtggagtc cgggggaggc ttggtccagc ctgggggggtc cctgaaactc 60
tcctgtgcag cctctgggtt caccttcagt ggctctgcta tgcactgggt ccgccaggct 120
tccgggaaag ggctggagtg ggttgccgt attagaagca aagctaacag ttacgcgaca 180
gcatatgctg cgtcggtgaa aggcaggttc accatctcca gagatgattc aaagaacacg 240
gcgtatctgc aaatgaacag cctgaaaacc gaggacacgg ccgtgtatta ctgtactaga 300
ca 302

<210> 404
<211> 302
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-22*01

<400> 404
gaggtgcatc tgggtggagtc tgggggagcc ttggtacagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt tactactaca tgagcgggggt ccgccaggct 120
cccgggaagg ggctggaatg ggtaggtttc attagaaaca aagctaattg tgggacaaca 180
gaatagacca cgtctgtgaa aggcagattc acaatctcaa gagatgattc caaaagcatc 240
acctatctgc aaatgaagag cctgaaaacc gaggacacgg ccgtgtatta ctgttccaga 300
ga 302

<210> 405
<211> 302
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-22*02

<400> 405
gaggtgcagc tgggtggagtc tgggggaggc ttggtacagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt tactactaca tgagcgggggt ccgccaggct 120
cccgggaagg ggctggaatg ggtaggtttc attagaaaca aagctaattg tgggacaaca 180
gaatagacca cgtctgtgaa aggcagattc acaatctcaa gagatgattc caaaagcatc 240
acctatctgc aaatgaagag cctgaaaacc gaggacacgg ccgtgtatta ctgttccaga 300
ga 302

<210> 406
<211> 302

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-71*01

<400> 406
gaggtgcagc tgggtggagtc cgggggaggc ttggtccagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt gactactaca tgagctgggt ccgccaggct 120
cccggaagg ggctggagtg ggtaggtttc attagaaaca aagctaattg tgggacaaca 180
gaatagacca cgtctgtgaa aggcagattc acaatctcaa gagatgattc caaaagcatc 240
acctatctgc aaatgaacag cctgagagcc gaggacacgg ccgtgtatta ctgtgcgaga 300
ga 302

<210> 407
<211> 302
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-49*03

<400> 407
gaggtgcagc tgggtggagtc tgggggaggc ttggtacagc cagggcggtc cctgagactc 60
tcctgtacag cttctggatt cacctttggt gattatgcta tgagctgggt ccgccaggct 120
ccaggaagg ggctggagtg ggtaggtttc attagaagca aagcttatgg tgggacaaca 180
gaatacgccg cgtctgtgaa aggcagattc accatctcaa gagatgattc caaaagcatc 240
gcctatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtactaga 300
ga 302

<210> 408
<211> 302
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-49*05

<400> 408
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tcctgtacag cttctggatt cacctttggt gattatgcta tgagctgggt ccgccaggct 120
ccaggaagg ggctggagtg ggtaggtttc attagaagca aagcttatgg tgggacaaca 180
gaatacgccg cgtctgtgaa aggcagattc accatctcaa gagatgattc caaaagcatc 240
gcctatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtactaga 300
ga 302

<210> 409
<211> 302
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic DNA: |IGHV3-49*01

<400> 409

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tcctgtacag	cttctggatt	cacctttggt	gattatgcta	tgagctgggt	ccgccaggct	120
ccaggggaagg	ggctggagtg	ggtaggtttc	attagaagca	aagcttatgg	tgggacaaca	180
gaatacaccg	cgtctgtgaa	aggcagattc	accatctcaa	gagatggttc	caaaagcatc	240
gcctatctgc	aaatgaacag	cctgaaaacc	gaggacacag	ccgtgtatta	ctgtactaga	300
ga						302

<210> 410

<211> 302

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-49*04

<400> 410

gaggtgcagc	tggtggagtc	tgggggaggc	ttggtacagc	cagggcggtc	cctgagactc	60
tcctgtacag	cttctggatt	cacctttggt	gattatgcta	tgagctgggt	ccgccaggct	120
ccaggggaagg	ggctggagtg	ggtaggtttc	attagaagca	aagcttatgg	tgggacaaca	180
gaatacgccg	cgtctgtgaa	aggcagattc	accatctcaa	gagatgattc	caaaagcatc	240
gcctatctgc	aaatgaacag	cctgaaaacc	gaggacacag	ccgtgtatta	ctgtactaga	300
ga						302

<210> 411

<211> 302

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-49*02

<400> 411

gaggtgcagc	tggtggagtc	tgggggaggc	ttggtacagc	cagggccggtc	cctgagactc	60
tcctgtacag	cttctggatt	cacctttggg	tattatccta	tgagctgggt	ccgccaggct	120
ccaggggaagg	ggctggagtg	ggtaggtttc	attagaagca	aagcttatgg	tgggacaaca	180
gaatacgccg	cgtctgtgaa	aggcagattc	accatctcaa	gagatgattc	caaaagcatc	240
gcctatctgc	aaatgaacag	cctgaaaacc	gaggacacag	ccgtgtatta	ctgtactaga	300
ga						302

<210> 412

<211> 296

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-25*01

<400> 412
gagatgcagc tgggtggagtc tggggggaggc ttgcaaaagc ctgctgtggtc cccgagactc 60
tcctgtgcag cctctcaatt caccttcagt agctactaca tgaactgtgt ccgccaggct 120
ccaggggaatg ggctggagtt ggtttgacaa gttaatccta atgggggtag cacatacctc 180
atagactccg gtaaggaccg attcaatacc tccagagata acgccaagaa cacacttcat 240
ctgcaaatga acagcctgaa aaccgaggac acggccctct attagtgtac cagaga 296

<210> 413
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-25*02

<400> 413
gagatgcagc tgggtggagtc tggggggaggc ttggcaaagc ctgctgtggtc cccgagactc 60
tcctgtgcag cctctcaatt caccttcagt agctactaca tgaactgtgt ccgccaggct 120
ccaggggaatg ggctggagtt ggtttgacaa gttaatccta atgggggtag cacatacctc 180
atagactccg gtaaggaccg attcaatacc tccagagata acgccaagaa cacacttcat 240
ctgcaaatga acagcctgaa aaccgaggac acggccctct attagtgtac cagaga 296

<210> 414
<211> 294
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-25*03

<400> 414
gagatgcagc tgggtggagtc tggggggaggc ttggcaaagc ctgctgtggtc cccgagactc 60
tcctgtgcag cctctcaatt caccttcagt agctactaca tgaactgtgt ccgccaggct 120
ccaggggaatg ggctggagtt ggttggacaa gttaatccta atgggggtag cacatacctc 180
atagactccg gtaaggaccg attcaatacc tccagagata acgccaagaa cacacttcat 240
ctgcaaatga acagcctgaa aaccgaggac acggccctgt attagtgtac caga 294

<210> 415
<211> 298
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-63*01

<400> 415
gaggtggagc tgatagagtc catagagggc ctgagacaac ttgggaagtt cctgagactc 60
tcctgtgtag cctctggatt caccttcagt agctactgaa tgagctgggt caatgagact 120
ctaggggaagg ggctggaggg agtaatagat gtaaaatatg atggaagtca gatataccat 180
gcagactctg tgaagggcag attcaccatc tccaaagaca atgctaagaa ctcaccgtat 240

ctccaaacga acagtctgag agctgaggac atgaccatgc atggctgtac ataaggtt 298

<210> 416
<211> 294
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-63*02

<400> 416
gagggtggagc tgatagagtc catagagggc ctgagacaac ttgggaagtt cctgagactc 60
tcctgtgtag cctctggatt caccttcagt agctactgaa tgagctgggt caatgagact 120
ctaggaagg ggctggagg agtaatagat gtaaaatatg atggaagtca gatataccat 180
gcagactctg tgaagggcag attcaccatc tccaaagaca atgctaagaa ctcaccgtat 240
ctgcaaacga acagtctgag agctgaggac atgaccatgc atggctgtac ataa 294

<210> 417
<211> 298
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-32*01

<400> 417
gagggtggagc tgatagagtc catagaggac ctgagacaac ctgggaagtt cctgagactc 60
tcctgtgtag cctctagatt cgccttcagt agcttctgaa tgagccgagt tcaccagtct 120
ccaggcaagg ggctggagtg agtaatagat ataaaagatg atggaagtca gatacaccat 180
gcagactctg tgaagggcag attctccatc tccaaagaca atgctaagaa ctctctgtat 240
ctgcaaatga acactcagag agctgaggac gtggccgtgt atggctatac ataaggtc 298

<210> 418
<211> 296
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic DNA: IGHV3-54*01

<400> 418
gagggtacagc tgggtggagtc tgaagaaaac caaagacaac ttgggggatc cctgagactc 60
tcctgtgcag actctggatt aaccttcagt agctactgaa tgagctcaga ttcccaagct 120
ccagggaagg ggctggagtg agtagtagat atatagtagg atagaagtca gctatgttat 180
gcacaatctg tgaagagcag attcaccatc tccaaagaaa atgccaagaa ctcactctgt 240
ttgcaaatga acagtctgag agcagagggc acggccgtgt attactgtat gtgagy 296

<210> 419
<211> 296
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic DNA: IGHV3-54*04

<400> 419
gaggtacagc tgggtggagtc tgaagaaaac caaagacaac ttgggggatc cctgagactc 60
tcctgtgcag actctggatt aaccttcagt agctactgaa tgagctcaga ttcccaggct 120
ccaggaaggg ggctggagtg agtagtagat atatagtagg atagaagtca gctatgttat 180
gcacaatctg tgaagagcag attcaccatc tccaaagaaa atgccaagaa ctcactctgt 240
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ctccaaagaa aatgccaaga actcactccg ttgcaaatg aacagtctga gagcagaggg 180
cacggccgtg tattactgta tgtgagg 207

<210> 421
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<212> DNA
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<220>
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<400> 421
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<210> 422
<211> 31
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<210> 423
<211> 31
<212> DNA
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<220>
<223> Synthetic DNA: >IGHJ4_2

<400> 423
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<210> 424

<211> 32
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 <210> 425
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 <400> 425
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 <210> 426
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 <220>
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 <400> 428
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 <210> 429
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 <400> 429
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<210> 430
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<210> 431
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 <400> 431
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 <220>
 <223> Synthetic DNA: >IGH9_3.63p

 <400> 451
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 <400> 452
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 <210> 453

<211> 48
 <212> DNA
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 <220>
 <223> Synthetic DNA: >IGHJ4*03/1-48

 <400> 453
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 <210> 454
 <211> 48
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: >IGHJ4*02/1-48

 <400> 454
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 <210> 455
 <211> 50
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: >IGHJ3*01/1-50

 <400> 455
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 <210> 456
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 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: >IGHJ3*02/1-50

 <400> 456
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 <210> 457
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 <212> DNA
 <213> Artificial Sequence

 <220>
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 <400> 457
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 <210> 458
 <211> 63
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: >IGHJ6*02/1-62

<400> 458
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 cag 63

<210> 459
 <211> 63
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<220>
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<400> 459
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<210> 460
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<220>
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<400> 460
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<210> 461
 <211> 53
 <212> DNA
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<220>
 <223> Synthetic DNA: >IGHJ2*01/1-53

<400> 461
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<210> 462
 <211> 51
 <212> DNA
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<220>
 <223> Synthetic DNA: >IGHJ5*01/1-51

<400> 462
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<210> 463
 <211> 51
 <212> DNA
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 <223> Synthetic DNA: >IGHJ5*02/1-51

<400> 463
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<210> 464
 <211> 52
 <212> DNA
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 <220>
 <223> Synthetic DNA: >IGHJ1*01/1-52

 <400> 464
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 <210> 465
 <211> 61
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: >IGHJ2P*01/1-61

 <400> 465
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 <210> 466
 <211> 54
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic DNA: >IGHJ1P*01/1-54

 <400> 466
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 <210> 467
 <211> 52
 <212> DNA
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 <220>
 <223> Synthetic DNA: >IGHJ3P*01/1-52

 <400> 467
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 <210> 468
 <211> 58
 <212> DNA
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 <220>
 <223> Synthetic DNA: TRBJ1-2

 <400> 468
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 <210> 469
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 <212> DNA
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<223> Synthetic DNA: TRBV2*02

<400> 469
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cagaaagtcg agtttctggt ttccttttat aataatgaaa tctcagagaa gtctgaaata 180
ttcgaatgatc aattctcagt tgaaaggcct gatggatcaa atttcactct gaagatccgg 240
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<210> 470
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<400> 470
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<210> 471
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<223> Synthetic DNA: Jseq 1-2

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<210> 472
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<210> 473
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aagacagaga gctgggttcc actgccaaaa aac 33

<210> 474
<211> 33
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<223> Synthetic DNA: Jseq 1-5

<400> 474
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<210> 475
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 <223> Synthetic DNA: Jseq 1-6

<400> 475
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<210> 476
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<220>
 <223> Synthetic DNA: Jseq 2-1

<400> 476
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<210> 477
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<220>
 <223> Synthetic DNA: Jseq 2-2

<400> 477
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<210> 478
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<220>
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<400> 478
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<210> 479
 <211> 33
 <212> DNA
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<220>
 <223> Synthetic DNA: Jseq 2-4

<400> 479
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<210> 480
 <211> 33
 <212> DNA
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<220>
 <223> Synthetic DNA: Jseq 2-5
 <400> 480
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<210> 481
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 <213> Artificial Sequence
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 <223> Synthetic DNA: Jseq 2-6
 <400> 481
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<210> 482
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 <223> Synthetic DNA: Jseq 2-7
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<210> 483
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 <222> (1)..(1)
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<210> 484
 <211> 58
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic DNA: TRBJ1-5
 <400> 484
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