

SEQUENCE LISTING

<110> Regeneron Pharmaceuticals, Inc.
MURPHY, Andrew J.
MACDONALD, Lynn
GUO, Chunguang
MCWHIRTER, John
VORONINA, Vera

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<211> 2484

<212> DNA

<213> Artificial Sequence

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<223> >p53419 (12-D2-8-23 donor)

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<212> DNA

<213> Artificial Sequence

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<223> >p51818 (12-D2-15-23 donor)

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 <223> 1 P51816(D2-2)

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<210> 74
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<400> 74	
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<210> 75
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<220>

<223> 10 P53419(D2-8)

<400> 75
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<210> 76
<211> 40
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<220>
<223> 16 P53419(D2-8)

<400> 76
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<210> 77
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<212> DNA
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<220>
<223> 8 P51818(D2-15)

<400> 77
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<210> 78
<211> 40
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<220>
<223> 18 P51818(D2-15)

<400> 78
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<210> 79
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<220>
<223> 5' hIgHD HU2(h268)

<400> 79
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 <223> 3' hIgHD HU2 AgeI(h269)

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<210> 81
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 <223> 5' hIgHD HD2 XhoI(h271)

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<210> 82
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 <220>
 <223> 3' hIgHD HD2(h272)

 <400> 82
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<210> 83
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 <220>
 <223> 5' hIgHD HU2 detect(h270)

 <400> 83
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<210> 84
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<223> 3' ub pro-200

<400> 84
ccagtgccct agagtcaccc a 21

<210> 85
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<400> 85
ctcccactca tgatctatag a 21

<210> 86
<211> 20
<212> DNA
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<223> 3' hIgHD HD2 detect(h273)

<400> 86
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<210> 87
<211> 23
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<400> 87
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<400> 88
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<210> 89
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 <223> 3' D2-2 Cas9 DNA target

 <400> 89
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<210> 90
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 <223> 3' D2-2 gRNA

 <400> 90
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<210> 91
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 <223> 5' up detect D2-2(h274)

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<210> 92
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<223> D2-2seqF2

<400> 93
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<210> 94
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<223> 3' down detect D2-2(h275)

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<223> D2-2seqR1

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<210> 104
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 <223> 5' up detect D2-8(h276)

 <400> 104
 gccttaccca agtctttcc 19

<210> 105
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 <213> Artificial Sequence

<220>
 <223> 3' cm up detect

 <400> 105
 tccagctgaa cggctctgggtt a 21

<210> 106
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 <213> Artificial Sequence

<220>
 <223> D2-8seqF2

 <400> 106
 tccaataagt cggttcggc 19

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

 <220>
 <223> 3' down detect D2-8(h277)

 <400> 107
 gcagaagtaa ccaccactg 19

 <210> 108
 <211> 80
 <212> DNA
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 <220>
 <223> J0-2

 <400> 108
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 cctccctgga ggccgatggg 80

 <210> 109
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 <223> 5' up detect D2-8(h276)

 <400> 109
 gccttaccca agtctttcc 19

 <210> 110
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 <212> DNA
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 <220>
 <223> D2-8seqR1

 <400> 110
 gccctacttg tagttacgtg 20

 <210> 111
 <211> 19

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	gcaaaatccg acacgtaac	19
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	cgaaccgact tattggatgc	20
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<223>	5' D2-8 Cas9 DNA target	
<400>	113	
	ggtggcccca taacacacct agg	23
<210>	114	
<211>	42	
<212>	DNA	
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<223>	5' D2-8 crRNA	
<400>	114	
	gguggcccca uaacacaccu guuuuagagc uaugcuguuu ug	42
<210>	115	
<211>	23	
<212>	DNA	
<213>	Artificial Sequence	
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<223>	3' D2-8 Cas9 DNA target	

<400> 115
ggacaacagt agagggtac agg 23

<210> 116
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> 3' D2-8 crRNA

<400> 116
ggacaacagu agagggtuac guuuuagagc uaugcuguuu ug 42

<210> 117
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> 5' up detect D2-15(h278)

<400> 117
gcactccctc taaagacaag 20

<210> 118
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> 3' cm up detect

<400> 118
tccagctgaa cgtctggtt a 21

<210> 119
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> D2-15seqF2

<400> 119
gtaaaaatac cgccgctgg 19

<210> 120
<211> 19

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> 3' down detect D2-15(h279)

 <400> 120
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 <210> 121
 <211> 80
 <212> DNA
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 <220>
 <223> J0-3

 <400> 121
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 cacagcccca cctggaacag 80

 <210> 122
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> 5' up detect D2-15(h278)*

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 gcactccctc taaagacaag 20

 <210> 123
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> D2-15seqR1

 <400> 123
 ctgggagata ttggtgcatc 20

 <210> 124
 <211> 19
 <212> DNA
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<223> D2-15seqF1	
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<223> D2-15seqR2	
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tttttgtgca ccccttaatg g	21
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<211> 22	
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<210> 129
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<212> DNA
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<220>
<223> 23D3.312-2

<400> 129
cccacagtgt cacagagtcc at 22

<210> 130
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> 23D3.312-2

<400> 130
caagatggct ttccttctgc ctcc 24

<210> 131
<211> 19
<212> DNA
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<220>
<223> 23D3.312-2

<400> 131
tcccagctcc aggacagag 19

<210> 132
<211> 24
<212> DNA
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<220>
<223> 23D3.312-3

<400> 132
tgtcacagag tccatcaaaa acct 24

<210> 133
<211> 14
<212> DNA
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<220>

<223> 23D3.312-3

<400> 133
caccaccccc tctc 14

<210> 134
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> 23D3.312-3

<400> 134
cctgagaccc tggcaagct 19

<210> 135
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Jxn DH2-2

<400> 135
atggcgcttg cagcgattc 19

<210> 136
<211> 28
<212> DNA
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<220>
<223> Jxn DH2-2

<400> 136
ccaatactaa cgaggaaatg caaaccca 28

<210> 137
<211> 21
<212> DNA
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<220>
<223> Jxn DH2-2

<400> 137
accctcactg ttgtccttct g 21

<210> 138
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Jxn DH2-8

<400> 138
gcaaacgtcc atctgaagga gaa 23

<210> 139
<211> 27
<212> DNA
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<220>
<223> Jxn DH2-8

<400> 139
caaataaacg atggcaggct acacccg 27

<210> 140
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<220>
<223> Jxn DH2-8

<400> 140
gagttgccga accgacttat tg 22

<210> 141
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Jxn DH2-15

<400> 141
gcaatggtag gttcatgtcc atc 23

<210> 142
<211> 20
<212> DNA
<213> Artificial Sequence

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<223> Jxn DH2-15	
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<400> 143 ccctggctgt ctgggtttg	19
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<210> 147
 <211> 54
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> 1st round PCR primers IgM Constant

 <400> 147
 acactctttc cctacacgac gctcttccga tctgggaaga catttgggaa ggac 54

<210> 148
 <211> 57
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> 1st round PCR primers PE2-PIIA

 <400> 148
 gtgactggag ttcagacgtg tgctcttccg atctaagcag tggtatcaac gcagagt 57

<210> 149
 <211> 68
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> 2nd round PCR Primers

<220>
 <221> misc_feature
 <222> (30)..(35)
 <223> n is a, c, g, or t

 <400> 149
 aatgatacgg cgaccaccga gatctacacn nnnnacact ctttcctac acgacgtct 60
 tccgatct 68

<210> 150
 <211> 64
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> 2nd round PCR Primers

<220>

<221> misc_feature
<222> (25)..(30)
<223> n is a, c, g, or t

<400> 150
caagcagaag acggcatacg agatnnnnnn gtgactggag ttcagacgtg tgctcttccg 60
atct 64

<210> 151
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> 23-mer RSS from VH1-69

<400> 151
cacagtgtga aaaccacat cctgagagtg acacaaacc 39