

SEQUENCE LISTING

<110> REGENERON PHARMACEUTICALS, INC.

<120> NON-HUMAN ANIMALS HAVING AN ENGINEERED IMMUNOGLOBULIN LAMBDA LIGHT CHAIN AND USES THEREOF

<130> 2010794-1440

<150> 62/609,251

<151> 2017-12-21

<150> 62/609,241

<151> 2017-12-21

<150> 62/594,946

<151> 2017-12-05

<150> 62/594,944

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<160> 77

<170> PatentIn version 3.5

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<211> 317

<212> DNA

<213> Mus sp.

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agagcaacaa caagtacatg gctagcagct acctgaccct gacagcaaga gcatgggaaa 240

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cccgtgctga ctgttcc 317

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Gly Gln Pro Lys Ser Ser Pro Ser Val Thr Leu Phe Pro Pro Ser Ser
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Glu Glu Leu Glu Thr Asn Lys Ala Thr Leu Val Cys Thr Ile Thr Asp
 20 25 30

Phe Tyr Pro Gly Val Val Thr Val Asp Trp Lys Val Asp Gly Thr Pro
 35 40 45

Val Thr Gln Gly Met Glu Thr Thr Gln Pro Ser Lys Gln Ser Asn Asn
 50 55 60

Lys Tyr Met Ala Ser Ser Tyr Leu Thr Leu Thr Ala Arg Ala Trp Glu
 65 70 75 80

Arg His Ser Ser Tyr Ser Cys Gln Val Thr His Glu Gly His Thr Val
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Glu Lys Ser Leu Ser Arg Ala Asp Cys Ser
 100 105

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 cctggaaggc aaatggtaca cctatcacc agggtgtgga cacttcaaat cccaccaaag 180
 agggcaacaa gttcatggcc agcagcttcc tacatttgac atcggaccag tggagatctc 240
 acaacagttt tacctgtcaa gttacacatg aaggggacac tgtggagaag agtctgtctc 300
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Gly Gln Pro Lys Ser Thr Pro Thr Leu Thr Val Phe Pro Pro Ser Ser
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Glu Glu Leu Lys Glu Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asn
20 25 30

Phe Ser Pro Ser Gly Val Thr Val Ala Trp Lys Ala Asn Gly Thr Pro
35 40 45

Ile Thr Gln Gly Val Asp Thr Ser Asn Pro Thr Lys Glu Gly Asn Lys
50 55 60

Phe Met Ala Ser Ser Phe Leu His Leu Thr Ser Asp Gln Trp Arg Ser
65 70 75 80

His Asn Ser Phe Thr Cys Gln Val Thr His Glu Gly Asp Thr Val Glu
85 90 95

Lys Ser Leu Ser Pro Ala Glu Cys Leu
100 105

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cctggaaggc aaatggtaca cctatcacc agggtgtgga cacttcaaat cccaccaaag 180
aggacaacaa gtacatggcc agcagcttct tacatttgac atcggaccag tggagatctc 240
acaacagttt tacctgcaa gttacacatg aaggggacac tgtggagaag agtctgtctc 300
ctgcagaatg tctc 314

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Gly Gln Pro Lys Ser Thr Pro Thr Leu Thr Met Phe Pro Pro Ser Pro
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Glu Glu Leu Gln Glu Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asn
20 25 30

Phe Ser Pro Ser Gly Val Thr Val Ala Trp Lys Ala Asn Gly Thr Pro
35 40 45

Ile Thr Gln Gly Val Asp Thr Ser Asn Pro Thr Lys Glu Asp Asn Lys
50 55 60

Tyr Met Ala Ser Ser Phe Leu His Leu Thr Ser Asp Gln Trp Arg Ser
65 70 75 80

His Asn Ser Phe Thr Cys Gln Val Thr His Glu Gly Asp Thr Val Glu
85 90 95

Lys Ser Leu Ser Pro Ala Glu Cys Leu
100 105

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cctggaaggc aaatggtgca cctatctccc aggggtgtgga cactgcaa at cccaccaa ac 180
agggcaacaa atacatcgcc agcagcttct tacgtttgac agcagaacag tggagatctc 240
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Glu Glu Leu Gln Gly Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp
20 25 30

Phe Tyr Pro Ser Asp Val Glu Val Ala Trp Lys Ala Asn Gly Ala Pro
35 40 45

Ile Ser Gln Gly Val Asp Thr Ala Asn Pro Thr Lys Gln Gly Asn Lys
50 55 60

Tyr Ile Ala Ser Ser Phe Leu Arg Leu Thr Ala Glu Gln Trp Arg Ser
65 70 75 80

Arg Asn Ser Phe Thr Cys Gln Val Thr His Glu Gly Asn Thr Val Glu
85 90 95

Lys Ser Leu Ser Pro Ala Glu Cys Val
100 105

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tctggaaggc agatggtacc cctatcactc aggggtgtgga gactaccag cttttcaaac 180
agaacaacaa gtacatggct accagctacc tgcttttgac agcaaaagca tgggagactc 240
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Phe Tyr Pro Gly Val Met Thr Val Val Trp Lys Ala Asp Gly Thr Pro
35 40 45

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

Tyr Met Ala Thr Ser Tyr Leu Leu Leu Thr Ala Lys Ala Trp Glu Thr
65 70 75 80

His Ser Asn Tyr Ser Cys Gln Val Thr His Glu Glu Asn Thr Val Glu
85 90 95

Lys Ser Leu Ser Arg Ala Glu Cys Ser
100 105

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cctggaaggc aaatggtgca cctatctccc aggggtgtgga cactgcaa at cccaccaa ac 180
agggcaacaa atacatcgcc agcagcttct tacgtttgac agcagaacag tggagatctc 240
gcaacagttt tacctgcaa gttacacatg aagggaacac tgtggaaaag agtctgtctc 300
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<210> 12
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<213> Rattus sp.

<400> 12

Gly Gln Pro Lys Ser Thr Pro Thr Leu Thr Val Phe Pro Pro Ser Thr
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Glu Glu Leu Gln Gly Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp
20 25 30

Phe Tyr Pro Ser Asp Val Glu Val Ala Trp Lys Ala Asn Gly Ala Pro
35 40 45

Ile Ser Gln Gly Val Asp Thr Ala Asn Pro Thr Lys Gln Gly Asn Lys
50 55 60

Tyr Ile Ala Ser Ser Phe Leu Arg Leu Thr Ala Glu Gln Trp Arg Ser
65 70 75 80

Arg Asn Ser Phe Thr Cys Gln Val Thr His Glu Gly Asn Thr Val Glu
85 90 95

Lys Ser Leu Ser Pro Ala Glu Cys Val
100 105

<210> 13
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tctggaaggc agatggtacc cctatcactc aggggtgtgga gactaccag cttttcaaac 180
agaacaacaa gtacatggct accagctacc tgcttttgac agcaaaagca tgggagactc 240
atagcaatta cagctgccag gtcactcacg aagagaacac tgtggagaag agtttgtccc 300
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<400> 14

Asp Gln Pro Lys Ala Thr Pro Ser Val Thr Leu Phe Pro Pro Ser Ser
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Glu Glu Leu Lys Thr Asp Lys Ala Thr Leu Val Cys Met Val Thr Asp
20 25 30

Phe Tyr Pro Gly Val Met Thr Val Val Trp Lys Ala Asp Gly Thr Pro
35 40 45

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

Tyr Met Ala Thr Ser Tyr Leu Leu Leu Thr Ala Lys Ala Trp Glu Thr
65 70 75 80

His Ser Asn Tyr Ser Cys Gln Val Thr His Glu Glu Asn Thr Val Glu
85 90 95

Lys Ser Leu Ser Arg Ala Glu Cys Ser
100 105

<210> 15
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<213> Homo sapiens

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aaggcagatg gcagccccgt caaggcgga gtggagacga ccaaaccctc caaacagagc 180
aacaacaagt acgcggccag cagctacctg agcctgacgc ccgagcagtg gaagtccac 240
agaagctaca gctgccaggt cacgcatgaa gggagcaccg tggagaagac agtggcccct 300
acagaatgtt catag 315

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

<400> 16

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Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
20 25 30

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser Pro Val Lys
35 40 45

Ala Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser Asn Asn Lys Tyr
50 55 60

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
65 70 75 80

Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
85 90 95

Thr Val Ala Pro Thr Glu Cys Ser
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cttggaagc agatagcagc cccgtcaagg cgggagtgga gaccaccaca ccctccaaac 180
aaagcaacaa caagtacgcg gccagcagct atctgagcct gacgcctgag cagtggaagt 240
cccacagaag ctacagctgc caggtcacgc atgaaggag caccgtggag aagacagtgg 300
cccctacaga atgttca 317

<210> 18
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<213> Homo sapiens

<400> 18

Gln Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu
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Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe
 20 25 30

Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val
 35 40 45

Lys Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys
 50 55 60

Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser
 65 70 75 80

His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu
 85 90 95

Lys Thr Val Ala Pro Thr Glu Cys Ser
 100 105

<210> 19
 <211> 315
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 aaggcagata gcagccccgt caaggcgggg gtggagacca ccacaccctc caaacaagc 180
 aacaacaagt acgcggccag cagctacctg agcctgacgc ctgagcagtg gaagtccac 240
 aaaagctaca gctgccaggt cacgcatgaa gggagcaccg tggagaagac agttgccct 300
 acggaatgtt catag 315

<210> 20
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 20

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Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
20 25 30

Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
35 40 45

Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr
50 55 60

Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
65 70 75 80

Lys Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
85 90 95

Thr Val Ala Pro Thr Glu Cys Ser
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gcctggaagg cagatggcag ccccgtaac acgggagtgg agaccaccac accctccaaa 180
cagagcaaca acaagtacgc ggccagcagc tacctgagcc tgacgcctga gcagtggaag 240
tcccacagaa gctacagctg ccaggtcacg catgaaggga gcaccgtgga gaagacagtg 300
gcccctgcag aatgttcata g 321

<210> 22
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<213> Homo sapiens

<400> 22

Gln Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu
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Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe
20 25 30

Tyr Pro Gly Ala Val Lys Val Ala Trp Lys Ala Asp Gly Ser Pro Val
35 40 45

Asn Thr Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys
50 55 60

Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser
65 70 75 80

His Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu
85 90 95

Lys Thr Val Ala Pro Ala Glu Cys Ser
100 105

<210> 23
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<212> DNA
<213> Homo sapiens

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cctggaaggc agatggcagc cccgtcaagg tgggagtgga gaccacaaa ccctccaaac 180
aaagcaacaa caagtatgcg gccagcagct acctgagcct gacgcccag cagtggaagt 240
cccacagaag ctacagctgc cgggtcacgc atgaaggag caccgtggag aagacagtgg 300
cccctgcaga atgctct 317

<210> 24
<211> 105
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<400> 24

Gln Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu
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Glu Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Val Ser Asp Phe
20 25 30

Tyr Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser Pro Val
35 40 45

Lys Val Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser Asn Asn Lys
50 55 60

Tyr Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser
65 70 75 80

His Arg Ser Tyr Ser Cys Arg Val Thr His Glu Gly Ser Thr Val Glu
85 90 95

Lys Thr Val Ala Pro Ala Glu Cys Ser
100 105

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<210> 27
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<400> 27
 aaatggcgtc ctgaacagtt ggactga 27

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<210> 29
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 aggtgcctca gtcgtgtgct tc 22

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<400> 31
 ggagcccttc cttgttactt ca 22

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 aggacggtca gcttggtc 18

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	tacgcggcca gcagctat	18
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<210> 47
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<210> 50
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gaacacggcg gcatcag	17
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<210> 60
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<400> 60
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<210> 61
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<210> 62
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<400> 63
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<210> 64
 <211> 37
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<210> 65
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<210> 66
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 <400> 66
 caccagtgtg gccttgtag tctc 24

<210> 67
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<210> 68
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<400> 77
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 atct 64