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<110> REGENERON PHARMACEUTICALS, INC.
 <120> TRACELESS LINKERS AND PROTEIN-CONJUGATES THEREOF
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 <150> US 62/872,229
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 <150> US 62/937,721
 <151> 2019-11-19
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Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Ile Ser Ser Tyr
 20 25 30

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr

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Gly Phe Thr Ile Ser Ser Tyr Gly
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Ile Ser Tyr Asp Gly Gly Asn Lys
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Ala Arg Gly Arg Tyr Phe Asp Leu

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<400> 5

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

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

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

Ser Lys Ala Ser Ser Leu Lys Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Val Ser Ser Leu Gln Pro
 65 70 75 80

Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Ser Tyr Ser Tyr
 85 90 95

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

<210> 6
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Gln Ser Ile Ser Ser Trp
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<210> 7
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<220>
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<400> 7

Lys Ala Ser
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<210> 8
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<400> 8

Gln Gln Tyr Tyr Ser Tyr Ser Tyr Thr
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<210> 9
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<400> 9

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
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Ser Leu Arg Leu Ser Cys Gly Ala Ser Gly Phe Thr Phe Arg Asn Tyr
 20 25 30

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

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

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

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

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

Val Ser Ser
115

<210> 10
<211> 8
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<400> 10

Gly Phe Thr Phe Arg Asn Tyr Gly
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<400> 11

Ile Ser Phe Asp Gly Asn Asp Lys
1 5

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<400> 12

Ala Arg Gly Gly Asp Phe Asp Tyr
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<210> 13
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<223> Synthetic: H1H6958N2, LCVR

<400> 13

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

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

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

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

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

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

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

<210> 14
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Gln Asp Ile Arg Lys Asp

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<210> 15
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<210> 16
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<400> 16

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Leu Ala Ala Leu Leu Leu Ala Ala Arg Gly Ala Asp Ala Gln Leu Pro
 20 25 30

Pro Gly Lys Pro Glu Ile Phe Lys Cys Arg Ser Pro Asn Lys Glu Thr
 35 40 45

Phe Thr Cys Trp Trp Arg Pro Gly Thr Asp Gly Gly Leu Pro Thr Asn

50

55

60

Tyr Ser Leu Thr Tyr His Arg Glu Gly Glu Thr Leu Met His Glu Cys
 65 70 75 80

Pro Asp Tyr Ile Thr Gly Gly Pro Asn Ser Cys His Phe Gly Lys Gln
 85 90 95

Tyr Thr Ser Met Trp Arg Thr Tyr Ile Met Met Val Asn Ala Thr Asn
 100 105 110

Gln Met Gly Ser Ser Phe Ser Asp Glu Leu Tyr Val Asp Val Thr Tyr
 115 120 125

Ile Val Gln Pro Asp Pro Pro Leu Glu Leu Ala Val Glu Val Lys Gln
 130 135 140

Pro Glu Asp Arg Lys Pro Tyr Leu Trp Ile Lys Trp Ser Pro Pro Thr
 145 150 155 160

Leu Ile Asp Leu Lys Thr Gly Trp Phe Thr Leu Leu Tyr Glu Ile Arg
 165 170 175

Leu Lys Pro Glu Lys Ala Ala Glu Trp Glu Ile His Phe Ala Gly Gln
 180 185 190

Gln Thr Glu Phe Lys Ile Leu Ser Leu His Pro Gly Gln Lys Tyr Leu
 195 200 205

Val Gln Val Arg Cys Lys Pro Asp His Gly Tyr Trp Ser Ala Trp Ser
 210 215 220

Pro Ala Thr Phe Ile Gln Ile Pro Ser Asp Phe Thr Met Asn Asp Glu
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Gln Lys Leu Ile Ser Glu Glu Asp Leu Gly Gly Glu Gln Lys Leu Ile
 245 250 255

Ser Glu Glu Asp Leu His His His His His His
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<210> 18
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 <212> DNA
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 ccagggaagg gactggaatg gattggatat atctattaca gtgggagtat cgactacaat 180
 ccctccctca agagtcgagt caccatatca gtagacacgt ccaagaacca gttctccctg 240
 aagctgagtt ctatgaccgc tgcggacacg gccgtatact actgtgcgag agatcgggtg 300
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<210> 19
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 <212> PRT
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<220>
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<400> 19

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

Thr Leu Ser Leu Thr Cys Thr Val Thr Gly Gly Ser Ile Ser Arg Asn
 20 25 30

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

Gly Tyr Ile Tyr Tyr Ser Gly Ser Ile Asp Tyr Asn Pro Ser Leu Lys
 50 55 60

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

Lys Leu Ser Ser Met Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala

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90

95

Arg Asp Arg Trp Asn Trp Lys Tyr Gly Met Asp Val Trp Gly Gln Gly
 100 105 110

Thr Thr Val Ile Val Ser Ser
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<210> 20
 <211> 24
 <212> DNA
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<210> 21
 <211> 8
 <212> PRT
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<220>
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<400> 21

Gly Gly Ser Ile Ser Arg Asn Tyr
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<210> 22
 <211> 21
 <212> DNA
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 <223> Synthetic: H1H21234N, HCDR2

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<210> 23
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 <212> PRT
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<220>

<223> Synthetic: H1H21234N, HCDR2

<400> 23

Ile Tyr Tyr Ser Gly Ser Ile

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<210> 24

<211> 39

<212> DNA

<213> Artificial Sequence

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<223> Synthetic: H1H21234N, HCDR3

<400> 24

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<210> 25

<211> 13

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<223> Synthetic: H1H21234N, HCDR3

<400> 25

Ala Arg Asp Arg Trp Asn Trp Lys Tyr Gly Met Asp Val

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<210> 26

<211> 327

<212> DNA

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cctggccagg ctcccaggct cctcatctat ggtgcatcca gcagggccac tggcatccca 180

gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccatcag cagactggag 240

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caagggacca aaatggaaat caaacga

327

<210> 27
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<400> 27

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 1 5 10 15

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

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

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

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

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

Trp Thr Phe Gly Gln Gly Thr Lys Met Glu Ile Lys Arg
 100 105

<210> 28
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<220>
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<400> 28

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<210> 29

<211> 7
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<400> 29

Gln Thr Val Arg Asn Asn Tyr
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<210> 30
 <211> 9
 <212> DNA
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<220>
 <223> Synthetic: H1H21234N, LCDR2

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<210> 31
 <211> 3
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<220>
 <223> Synthetic: H1H21234N, LCDR2

<400> 31

Gly Ala Ser
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<210> 32
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<210> 33
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<223> Synthetic: H1H21234N, LCDR3

<400> 33

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