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SEQUENCE LISTING

<110> SANOFI BIOTECHNOLOGY

<120> METHODS FOR TREATING OR PREVENTING ASTHMA BY ADMINISTERING AN
IL-33 ANTAGONIST

<130> 705537: SA9-255PC

<140> PCT/US2020/030824

<141> 2020-04-30

<150> 62/898,900

<151> 2019-09-11

<150> 62/848,248

<151> 2019-05-15

<150> 62/841,481

<151> 2019-05-01

<160> 28

<170> PatentIn version 3.5

<210> 1

<211> 365

<212> DNA

<213> Artificial Sequence

<220>

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<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

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cctgtacagc ctctggattc acctttagca gatctgccat gaactgggtc cgccgggctc 120

cagggaaggg gctggagtgg gtctcaggaa ttagtggttag tggtgggtcga acatactacg 180

cagactccgt gaagggccgg ttcacccatct ccagagacaa ttccaagaat acgctatatc 240

tgcaaataaa cagcctgagc gccgaggaca cggccgcata ttactgtgcg aaagattcgt 300

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365

<210> 2

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

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<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 2

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1 5 10 15

Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Ser Arg Ser Ala
20 25 30

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

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

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

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

Lys Asp Ser Tyr Thr Thr Ser Trp Tyr Gly Gly Met Asp Val Trp Gly
100 105 110

His Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 3

<211> 23

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 3
gattcacctt tagcagatct gcc

23

<210> 4
<211> 7
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peptide"

<400> 4
Phe Thr Phe Ser Arg Ser Ala
1 5

<210> 5
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<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 5
ttagtggttag tggtggtcga aca

23

<210> 6
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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 6

Ser Gly Ser Gly Gly Arg Thr
1 5

<210> 7

<211> 44

<212> DNA

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 7

cgaaagattc gtatactacc agttggtacg gaggtatgga cgtc

44

<210> 8

<211> 14

<212> PRT

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 8

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<210> 9

<211> 323

<212> DNA

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 9

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gaaaagcccc taagctcctg atctatgctg cttccagttt acaaagtggg gtcccatcaa    180
gattcagcgg cagtggatct gggacagatt tcactctcac catcagcagc ctgcagcctg    240
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<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 10

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

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

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

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

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

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Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Ala Asn Ser Val Pro Ile Thr
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<210> 11
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<220>
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<400> 11
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17

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<400> 12
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<210> 13
 <211> 8
 <212> DNA
 <213> Artificial Sequence

<220>
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 <223> /note="Description of Artificial Sequence: Synthetic
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<400> 13
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8

<210> 14

<211> 2
 <212> PRT
 <213> Artificial Sequence

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 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 14
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<210> 15
 <211> 26
 <212> DNA
 <213> Artificial Sequence

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 <223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 15
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26

<210> 16
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 <212> PRT
 <213> Artificial Sequence

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<400> 16
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<210> 17
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 <212> DNA
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<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 17

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caggggaaggg gctggagtgg gtctcaggaa ttagtggttag tgggtggtcga acatactacg	180
cagactccgt gaagggccgg ttcaccatct ccagagacaa ttccaagaat acgctatatc	240
tgcaaatgaa cagcctgagc gccgaggaca cggccgcata ttactgtgcg aaagattcgt	300
atactaccag ttggtacgga ggtatggacg tctggggcca cgggaccacg gtcaccgtct	360
cctcagcctc caccaagggc ccatcggtct tccccctggc gccctgctcc aggagcacct	420
ccgagagcac agccgccctg ggctgcctgg tcaaggacta cttccccgaa ccggtgacgg	480
tgtcgtggaa ctcaggcgcc ctgaccagcg gcgtgcacac cttcccggct gtcctacagt	540
cctcaggact ctactccctc agcagcgtgg tgaccgtgcc ctccagcagc ttgggcacga	600
agacctacac ctgcaacgta gatcacaagc ccagcaacac caaggtggac aagagagttg	660
agtccaaata tgggtcccca tgcccaccct gcccagcacc tgagttcctg ggggggacct	720
cagtcttcct gttccccca aaaccaagg acactctcat gatctcccgg acccctgagg	780
tcacgtgcgt ggtggtggac gtgagccagg aagaccccga ggtccagttc aactggtacg	840
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cgtaccgtgt ggtcagcgtc ctcaccgtcc tgcaccagga ctggctgaac ggcaaggagt	960
acaagtgcaa ggtctccaac aaaggcctcc cgtcctccat cgagaaaacc atctccaaag	1020
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ccaagaacca ggtcagcctg acctgcctgg tcaaaggctt ctaccccagc gacatcgccg	1140
tggagtggga gagcaatggg cagccggaga acaactacaa gaccacgcct cccgtgctgg	1200
actccgacgg ctctttcttc ctctacagca ggctcaccgt ggacaagagc aggtggcagg	1260

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aggggaatgt cttctcatgc tccgtgatgc atgaggctct gcacaaccac tacacacaga 1320

agtcctcttc cctgtctctg ggtaaata 1349

<210> 18

<211> 448

<212> PRT

<213> Artificial Sequence

<220>

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<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 18

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

Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Ser Arg Ser Ala
20 25 30

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

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

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

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

Lys Asp Ser Tyr Thr Thr Ser Trp Tyr Gly Gly Met Asp Val Trp Gly
100 105 110

His Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser
115 120 125

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Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala
130 135 140

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
145 150 155 160

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
165 170 175

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
180 185 190

Pro Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His
195 200 205

Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly
210 215 220

Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser
225 230 235 240

Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
245 250 255

Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro
260 265 270

Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala
275 280 285

Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val
290 295 300

Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
305 310 315 320

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Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr
325 330 335

Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
340 345 350

Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys
355 360 365

Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
370 375 380

Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp
385 390 395 400

Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser
405 410 415

Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
420 425 430

Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
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<210> 19

<211> 644

<212> DNA

<213> Artificial Sequence

<220>

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<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 19

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tcacttgctg ggcgagtcag ggtattttca gctgggttagc ctggtatcag cagaaaccag 120

gaaaagcccc taagctcctg atctatgctg cttccagttt acaaagtggg gtcccatcaa 180

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gattcagcgg cagtggatct gggacagatt tcactctcac catcagcagc ctgcagcctg 240
aggattttgc aatttactat tgtcaacagg ctaacagtgt cccgatcacc ttcggccaag 300
ggacacgact ggagattaaa cgaactgtgg ctgcaccatc tgtcttcatc ttcccgccat 360
ctgatgagca gttgaaatct ggaactgcct ctgttggtgtg cctgctgaat aacttctatc 420
ccagagaggc caaagtacag tggaagggtg ataacgccct ccaatcgggt aactcccagg 480
agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc accctgacgc 540
tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc catcagggcc 600
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<211> 213

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<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

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

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

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

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

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

SQL.txt

Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Ala Asn Ser Val Pro Ile Thr
85 90 95

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg Thr Val Ala Ala Pro
100 105 110

Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr
115 120 125

Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys
130 135 140

Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu
145 150 155 160

Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser
165 170 175

Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala
180 185 190

Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe
195 200 205

Asn Arg Gly Glu Cys
210

<210> 21

<211> 8

<212> PRT

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 21

Gly Phe Thr Phe Arg Asp Tyr Ala
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<210> 22

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 22

Ile Ser Gly Ser Gly Gly Asn Thr
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<210> 23

<211> 16

<212> PRT

<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 23

Ala Lys Asp Arg Leu Ser Ile Thr Ile Arg Pro Arg Tyr Tyr Gly Leu
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<210> 24

<211> 11

<212> PRT

<213> Artificial Sequence

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<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 24

Gln Ser Leu Leu Tyr Ser Ile Gly Tyr Asn Tyr
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<210> 25
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<400> 25
 Leu Gly Ser
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<210> 26
 <211> 9
 <212> PRT
 <213> Artificial Sequence

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 <223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 26
 Met Gln Ala Leu Gln Thr Pro Tyr Thr
 1 5

<210> 27
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 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 27
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Glu Gln Pro Gly Gly
 1 5 10 15

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

SQL.txt

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

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

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

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

Ala Lys Asp Arg Leu Ser Ile Thr Ile Arg Pro Arg Tyr Tyr Gly Leu
100 105 110

Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser
115 120

<210> 28

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 28

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

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

Ile Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Ser Gly Gln Ser
35 40 45

SQL.txt

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Val Gly Phe Tyr Tyr Cys Met Gln Ala
85 90 95

Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110