

P5804R1-WO_SL
SEQUENCE LISTING

<110> GENENTECH, INC. ET AL.

<120> METHODS AND COMPOSITIONS FOR SECRETION OF HETEROLOGOUS
POLYPEPTIDES

<130> P5804R1-WO

<140>

<141>

<150> 62/108,476

<151> 2015-01-27

<150> 62/107,981

<151> 2015-01-26

<150> 61/953,629

<151> 2014-03-14

<160> 62

<170> PatentIn version 3.5

<210> 1

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 1

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Ser Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 2

<211> 23

<212> PRT

<213> Artificial Sequence

P5804R1-WO_SL

<220>

<221> source

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

<400> 2

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Ser Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 3

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 3

Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Leu Val Leu Ala Phe Ser
1 5 10 15

Ala Ser Ala

<210> 4

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 4

Met Lys Gln Ser Thr Ile Ala Leu Ala Leu Leu Pro Leu Leu Phe Thr
1 5 10 15

P5804R1-WO_SL

Pro Val Thr Lys Ala
20

<210> 5
<211> 21
<212> PRT
<213> Artificial Sequence

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

<400> 5
Met Lys Gln Ser Thr Ile Ala Leu Ala Leu Leu Pro Leu Leu Phe Thr
1 5 10 15

Pro Val Thr Lys Ala
20

<210> 6
<211> 26
<212> PRT
<213> Artificial Sequence

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

<400> 6
Met Lys Ile Lys Thr Gly Ala Arg Ile Leu Ala Leu Ser Ala Leu Thr
1 5 10 15

Thr Met Met Phe Ser Ala Ser Ala Leu Ala
20 25

<210> 7
<211> 26
<212> PRT
<213> Artificial Sequence

P5804R1-WO_SL

<220>

<221> source

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

<400> 7

Met Lys Ile Lys Thr Gly Ala Arg Ile Leu Ala Leu Ser Ala Leu Thr
1 5 10 15

Thr Met Met Phe Ser Ala Ser Ala Leu Ala
20 25

<210> 8

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 8

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Leu Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 9

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 9

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Leu Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 10
<211> 23
<212> PRT
<213> Artificial Sequence

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

<400> 10
Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Leu Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 11
<211> 23
<212> PRT
<213> Artificial Sequence

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

<400> 11
Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Ile Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 12
<211> 23
<212> PRT
<213> Artificial Sequence

<220>

P5804R1-WO_SL

<221> source

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

<400> 12

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Ser Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Ser Ala
20

<210> 13

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 13

Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Ile Val Leu Ala Phe Ser
1 5 10 15

Ala Ser Ala

<210> 14

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 14

Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Ser Val Leu Ala Phe Ser
1 5 10 15

Ala Ser Ala

<210> 15
 <211> 19
 <212> PRT
 <213> Artificial Sequence

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

<400> 15
 Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Leu Val Leu Ala Phe Ser
 1 5 10 15

Ala Tyr Ala

<210> 16
 <211> 78
 <212> DNA
 <213> Artificial Sequence

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

<400> 16
 gcgcgcatta tgaagaaaaa catcgctttt cttcttgcac ctatgttcgt tttttctatt 60
 gctacaaacg cttacgct 78

<210> 17
 <211> 75
 <212> DNA
 <213> Artificial Sequence

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

P5804R1-WO_SL

<400> 17
acgcgtatta tgaagaaaaa catcgctttt cttcttgcac ctatgttcgt tttttctatt 60
gctacaaacg cttac 75

<210> 18
<211> 66
<212> DNA
<213> Artificial Sequence

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

<400> 18
gcgcgcatta tgaaaaaaat ttggctcgcc ctggctgggt tagtttttagc gtttagcgca 60
tcggcg 66

<210> 19
<211> 72
<212> DNA
<213> Artificial Sequence

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

<400> 19
gcgcgcatta tgaaacaatc cacgattgcc ctggcactct taccgttact gtttaccct 60
gtgacaaaag cc 72

<210> 20
<211> 72
<212> DNA
<213> Artificial Sequence

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

P5804R1-WO_SL

<400> 20
acgcgtatta tgaacagtc tactatcgct ctggcactct taccgttact gtttaccct 60
gtgacaaaag cc 72

<210> 21
<211> 87
<212> DNA
<213> Artificial Sequence

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

<400> 21
gcgcgcatta tgaataataa gactggagca cgcctcctcg cattatccgc attaacgacg 60
atgatgtttt ccgcctcggc tctcgcc 87

<210> 22
<211> 87
<212> DNA
<213> Artificial Sequence

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

<400> 22
acgcgtatta tgaagatcaa gacaggcgcg cgcctcctcg cattatccgc attaacgacg 60
atgatgtttt ccgcctcggc tctcgcc 87

<210> 23
<211> 78
<212> DNA
<213> Artificial Sequence

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

<400> 23
 gcgcgcatta tgaagaaaaa catcgctttt cttcttgcat taatgttcgt tttttctatt 60
 gctacaaacg cttacgct 78

<210> 24
 <211> 78
 <212> DNA
 <213> Artificial Sequence

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

<400> 24
 gcgcgcatta tgaagaaaaa catcgctttt cttcttgcat tgatgttcgt tttttctatt 60
 gctacaaacg cttacgct 78

<210> 25
 <211> 78
 <212> DNA
 <213> Artificial Sequence

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

<400> 25
 gcgcgcatta tgaagaaaaa catcgctttt cttcttgcac tcatgttcgt tttttctatt 60
 gctacaaacg cttacgct 78

<210> 26
 <211> 78
 <212> DNA
 <213> Artificial Sequence

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

P5804R1-WO_SL

<400> 26
gcgcgcatta tgaagaaaaa catcgctttt cttcttgcaa ttatgttcgt tttttctatt 60
gctacaaacg cttacgct 78

<210> 27
<211> 78
<212> DNA
<213> Artificial Sequence

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

<400> 27
gcgcgcatta tgaagaaaaa catcgctttt cttcttgcat ctatgttcgt tttttctatt 60
gctacaaacg cttcggct 78

<210> 28
<211> 66
<212> DNA
<213> Artificial Sequence

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

<400> 28
gcgcgcatta tgaaaaaaat ttggctcgcc ctggctggta ttgttttagc gtttagcgca 60
tcggcg 66

<210> 29
<211> 66
<212> DNA
<213> Artificial Sequence

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

P5804R1-WO_SL

<400> 29
gcgcgcatta tgaaaaaaat ttggctcgcc ctggctgggt ctgttttagc gtttagcgca 60
tcggcg 66

<210> 30
<211> 66
<212> DNA
<213> Artificial Sequence

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

<400> 30
gcgcgcatta tgaaaaaaat ttggctcgcc ctggctgggt tagtttttagc gtttagcgca 60
tacgcg 66

<210> 31
<211> 23
<212> PRT
<213> Artificial Sequence

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

<400> 31
Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Ala Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 32
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 32

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Gln Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 33

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 33

Met Lys Lys Asn Ile Leu Phe Leu Leu Leu Leu Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 34

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 34

Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Ala Val Leu Ala Phe Ser
1 5 10 15

Ala Ser Ala

<210> 35
 <211> 19
 <212> PRT
 <213> Artificial Sequence

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

<400> 35
 Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Gln Val Leu Ala Phe Ser
 1 5 10 15

Ala Ser Ala

<210> 36
 <211> 78
 <212> DNA
 <213> Artificial Sequence

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

<400> 36
 gcgcgcatta tgaagaaaaa catcgctttt cttcttgcag caatgttcgt tttttctatt 60
 gctacaaacg cttacgct 78

<210> 37
 <211> 78
 <212> DNA
 <213> Artificial Sequence

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

<400> 37

P5804R1-WO_SL

gcgcgcatta tgaagaaaaa catcgctttt cttcttgac aaatgttcgt tttttctatt 60

gctacaaacg cttacgct 78

<210> 38

<211> 78

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 38

gcgcgcatta tgaagaaaaa catcctcttt cttcttctac taatgttcgt tttttctatt 60

gctacaaacg cttacgct 78

<210> 39

<211> 66

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 39

gcgcgcatta tgaaaaaaat ttggctcgcc ctggctgggtg ctgttttagc gttagcgca 60

tcggcg 66

<210> 40

<211> 66

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 40

P5804R1-WO_SL

gcgcgcatta tgaaaaaaat ttggctcgcc ctggctggtc aggttttagc gtttagcgca 60

tcggcg 66

<210> 41

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 41

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Tyr Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 42

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 42

Met Met Thr Lys Ile Lys Leu Leu Met Leu Ile Ile Phe Tyr Leu Ile
1 5 10 15

Ile Ser Ala Ser Ala His Ala
20

<210> 43

<211> 23

<212> PRT

<213> Artificial Sequence

P5804R1-WO_SL

<220>

<221> source

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

<400> 43

Met	Met	Thr	Lys	Ile	Lys	Leu	Leu	Met	Leu	Ile	Ile	Phe	Tyr	Leu	Ile
1				5				10						15	

Ile	Ser	Ala	Ser	Ala	His	Ala
					20	

<210> 44

<211> 78

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 44

gcgcgcatta	tgaagaaaaa	catcgctttt	cttcttgc	acatgttcgt	tttttctatt	60
------------	------------	------------	----------	------------	------------	----

gctacaaacg	cttacgct	78
------------	----------	----

<210> 45

<211> 78

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 45

tctagaatta	tgatgactaa	aatcaagctt	ctaagtctca	ttatatttta	tttaatcatt	60
------------	------------	------------	------------	------------	------------	----

tcggccagcg	cccatgct	78
------------	----------	----

<210> 46

<211> 78

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 46

tctagaatta tgatgacgaa aatcaagcta ctgatgctca ttatatttta tttaatcatt 60

tcggccagcg cccatgct

78

<210> 47

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 47

Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Leu Val Leu Ala Phe Ser
1 5 10 15

Ala Ser Ala

<210> 48

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 48

Asp Ile Cys Leu Pro Arg Trp Gly Cys Leu Trp
1 5 10

P5804R1-WO_SL

<210> 49
<211> 19
<212> PRT
<213> Artificial Sequence

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

<400> 49
Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Ile Val Leu Ala Phe Ser
1 5 10 15

Ala Ser Ala

<210> 50
<211> 19
<212> PRT
<213> Artificial Sequence

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

<400> 50
Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Ser Val Leu Ala Phe Ser
1 5 10 15

Ala Ser Ala

<210> 51
<211> 23
<212> PRT
<213> Artificial Sequence

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

P5804R1-WO_SL

<400> 51

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Ser Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 52

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 52

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Leu Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 53

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 53

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Ile Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 54

P5804R1-WO_SL

<211> 19
<212> PRT
<213> Artificial Sequence

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

<400> 54
Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Leu Val Leu Ala Phe Ser
1 5 10 15

Ala Ser Ala

<210> 55
<211> 19
<212> PRT
<213> Artificial Sequence

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

<400> 55
Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Ala Val Leu Ala Phe Ser
1 5 10 15

Ala Ser Ala

<210> 56
<211> 19
<212> PRT
<213> Artificial Sequence

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

<400> 56

P5804R1-WO_SL

Met Lys Lys Ile Trp Leu Ala Leu Ala Gly Gln Val Leu Ala Phe Ser
1 5 10 15

Ala Ser Ala

<210> 57
<211> 23
<212> PRT
<213> Artificial Sequence

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

<400> 57
Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Ser Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 58
<211> 23
<212> PRT
<213> Artificial Sequence

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

<400> 58
Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Ala Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 59
<211> 23

P5804R1-WO_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 59

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Gln Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 60

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 60

Met Lys Lys Asn Ile Ala Phe Leu Leu Ala Tyr Met Phe Val Phe Ser
1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 61

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 61

Met Lys Lys Asn Ile Leu Phe Leu Leu Leu Met Phe Val Phe Ser

P5804R1-WO_SL

1 5 10 15

Ile Ala Thr Asn Ala Tyr Ala
20

<210> 62

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 62

Met Met Thr Lys Ile Lys Leu Leu Met Leu Ile Ile Phe Tyr Leu Ile
1 5 10 15

Ile Ser Ala Ser Ala His Ala
20