

SEQUENCE LISTING

<110> Regeneron Pharmaceuticals, Inc.
 Kelly, Marcus
 Ma, Dangshe
 Olson, William
 Thurston, Gavin

<120> RADIOLABELED ANTI-PD-L1 ANTIBODIES FOR IMMUNO-PET IMAGING

<130> 10305W001

<140> TBD

<141> 2017-12-01

<160> 344

<170> PatentIn version 3.5

<210> 1

<211> 363

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 1

gaggtgcagc tggtggagtc tgggggaggc ttggtccagc ctgggggggtc cctgagactc	60
tcctgtgcag cctctggatt cacctttagt aggttttgga tgagctgggt ccgccaggct	120
ccagggaagg ggctggagtg ggtggccaac ataaaccaag atggaactga gaaatactat	180
gtggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctactgtat	240
ctgcaaatga acagcctgag agccggggac acggctgtgt attactgtgc gaatacgtat	300
tacgattttt ggagtggatca ctttgactac tggggccagg gaaccctggt caccgtctcc	360
tca	363

<210> 2

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 2

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

1	5	10	15
Ser	Leu	Arg	Leu
	20		
Ser	Cys	Ala	Ala
		25	
Ser	Gly	Phe	Thr
			30
Ser	Arg	Phe	
Trp	Met	Ser	Trp
	35		
Val	Arg	Gln	Ala
		40	
Pro	Gly	Lys	Gly
			45
Leu	Glu	Trp	Val
Ala	Asn	Ile	Asn
	50		
Gln	Asp	Gly	Thr
		55	
Glu	Lys	Tyr	Tyr
			60
Val	Asp	Ser	Val
Lys	Gly	Arg	Phe
65			
Thr	Ile	Ser	Arg
	70		
Asp	Asn	Ala	Lys
		75	
Asn	Ser	Leu	Tyr
			80
Leu	Gln	Met	Asn
			85
Ser	Leu	Arg	Ala
Gly	Asp	Thr	Ala
	90		
Val	Tyr	Tyr	Cys
			95
Ala	Asn	Thr	Tyr
			100
Tyr	Asp	Phe	Trp
			105
Ser	Gly	His	Phe
Asp	Tyr	Trp	Gly
			110
Gln	Gly	Thr	Leu
			115
Val	Thr	Val	Ser
			120

<210> 3
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 3
 ggattcacct ttagtaggtt ttgg

24

<210> 4
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 4

Gly Phe Thr Phe Ser Arg Phe Trp

1

5

<210> 5
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 5
ataaaccaag atggaactga gaaa

24

<210> 6
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 6

Ile Asn Gln Asp Gly Thr Glu Lys
1 5

<210> 7
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 7
gcgaatacgt attacgattt ttggagtggc cactttgact ac

42

<210> 8
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 8

Ala Asn Thr Tyr Tyr Asp Phe Trp Ser Gly His Phe Asp Tyr
1 5 10

<210> 9
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 9
gacatccaga tgacccagtc tccttcacc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgtc gggccagtc gagtattagt aattggttg cctggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctataag gcgtctagtt tagaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca ccatcagcag cctgcagcct 240
gatgattttg caacttatta ctgccaacag tatcatagtt attcgtacac ttttggccag 300
gggaccaagc tggagatcaa a 321

<210> 10
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 10

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 Asn Trp
20 25 30

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

Tyr Lys Ala Ser Ser Leu Glu 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

Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr His Ser Tyr Ser Tyr

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

<210> 11
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 11
cagagtatta gtaattgg

18

<210> 12
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 12

Gln Ser Ile Ser Asn Trp
1 5

<210> 13
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 13
aaggcgtct

9

<210> 14
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 14

Lys Ala Ser
1

<210> 15
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 15
caacagtatc atagttattc gtacact

27

<210> 16
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 16

Gln Gln Tyr His Ser Tyr Ser Tyr Thr
1 5

<210> 17
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 17
caggagcacc tgggtggagtc tggggggaggc gtgggtccagc ctgggaggtc cctgagactc 60
tcctgtgaag cgtctggatt caccttcagt aactttggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagct ttatgggtctg atggaagtaa taaatactat 180
gcagactccg tgaagggtcg agtcaccatc tccagagaca attccaagaa cacactgtat 240
ctgcaaatga acagcctgag agccgaggac acggctgtct attactgtgc gagagggaga 300
ggagcccccg gtattccgat ttttgggtac tggggccagg gaaccctggt caccgtctcc 360
tca 363

<210> 18
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 18

Gln Glu His Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15

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

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

Ala Ala Leu Trp Ser Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Val 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 Arg Gly Arg Gly Ala Pro Gly Ile Pro Ile Phe Gly Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 19
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 19

ggattcacct tcagtaactt tggc

<210> 20
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 20

Gly Phe Thr Phe Ser Asn Phe Gly
1 5

<210> 21
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 21

ttatggtctg atggaagtaa taaa

24

<210> 22
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 22

Leu Trp Ser Asp Gly Ser Asn Lys
1 5

<210> 23
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 23

gcgagagggga gaggagcccc cggtattccg atttttgggt ac

42

<210> 24

<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 24

Ala Arg Gly Arg Gly Ala Pro Gly Ile Pro Ile Phe Gly Tyr
1 5 10

<210> 25
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 25

gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgttgaga cagagtcacc 60
atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120
gggaaagccc ctaagcgcct gatctatact gcatccagtt tgcaaagtgg ggtcccatca 180
agattcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctacagcct 240
gaagattttg caacttatta ctgtctacaa cataatagtt accctctcac attcggcgga 300
gggaccaagg tggcgatcaa a 321

<210> 26
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 26

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 Gly Ile Arg Asn Asp
20 25 30

Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile

35

40

45

Tyr Thr Ala Ser Ser Leu Gln 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 Leu
 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Ala Ile Lys
 100 105

<210> 27
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 27
 cagggcatta gaaatgat

18

<210> 28
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 28

Gln Gly Ile Arg Asn Asp
 1 5

<210> 29
 <211> 9
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 29

actgcatcc

9

<210> 30
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 30

Thr Ala Ser
1

<210> 31
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 31
ctacaacata atagttaccc tctcaca

27

<210> 32
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 32

Leu Gln His Asn Ser Tyr Pro Leu Thr
1 5

<210> 33
<211> 390
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 33
gaggtgcagc tgggtggagtc tggggggaggc ttggttaaagc ctgggggggtc ccttagactc

60

tcctgtgcag cctctggatt cactttcagt aacgcctgga tgagctgggt cgcaggct	120
ccaggaagg ggctggagt gggtggccgt attaaaagga aaactgatgg tgggacaaca	180
gactacgctg caccgtgaa aggcagattc accatctcaa gagatgattc aaaaaatacg	240
ctgcatctgc aaatgaacag cctgaaaacc gaggacacag ccgtgtatta ctgtaccaca	300
gatgatattg tagttgtacc agctgttatg agggaatact acttcggtat ggacgtctgg	360
ggccaaggga ccacggtcac cgtctcctca	390

<210> 34
 <211> 130
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 34

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

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

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

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

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

Leu His Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr	
85 90 95	

Tyr Cys Thr Thr Asp Asp Ile Val Val Val Pro Ala Val Met Arg Glu	
100 105 110	

Tyr Tyr Phe Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val	
115 120 125	

Ser Ser
130

<210> 35
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 35
ggattcactt tcagtaacgc ctgg

24

<210> 36
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 36

Gly Phe Thr Phe Ser Asn Ala Trp
1 5

<210> 37
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 37
attaaaagga aaactgatgg tgggacaaca

30

<210> 38
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 38

Ile Lys Arg Lys Thr Asp Gly Gly Thr Thr

1 5 10

<210> 39
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 39
accacagatg atattgtagt tgtaccagct gttatgaggg aatactactt cggatatggac 60
gtc 63

<210> 40
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 40
Thr Thr Asp Asp Ile Val Val Val Pro Ala Val Met Arg Glu Tyr Tyr
1 5 10 15

Phe Gly Met Asp Val
20

<210> 41
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 41
gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc ggacaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120
gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataataatt acccgtagac ttttggccag 300

gggaccaagc tggagatcaa a

321

<210> 42
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 42

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 Thr Ser Gln Gly Ile Arg Asn 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 Gln 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 Asn Tyr Pro Tyr
85 90 95

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

<210> 43
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 43

cagggcatta gaaatgat

18

<210> 44

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

<220>
<223> synthetic

<400> 44

Gln Gly Ile Arg Asn Asp
1 5

<210> 45
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 45
gctgcatcc

9

<210> 46
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 46

Ala Ala Ser
1

<210> 47
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 47
ctacagcata ataattaccc gtacact

27

<210> 48
<211> 9
<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 48

Leu Gln His Asn Asn Tyr Pro Tyr Thr
1 5

<210> 49

<211> 363

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 49

caggtgcaat tgggtgcagtc tggggcggag gtgaagaagc ctggggcctc agtgcaggtc 60
tcctgcaagg cttctggata ctccttcacc ggctactata tacactgggt gcgacaggcc 120
cctggacaag gacttgagtg gatgggatgg atcaacccta acagtggcac caaaaagtat 180
gcacacaagt ttcagggcag ggtcaccatg accagggaca cgtccatcga cacagcctac 240
atgattttga gcagtctgat atccgacgac acggccgtgt attactgtgc gagagatgag 300
gactggaact ttgggagctg gttcgactcc tggggccagg gaaccctggt caccgtctcc 360
tca 363

<210> 50

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 50

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

Ser Val Gln Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

35

40

45

Gly Trp Ile Asn Pro Asn Ser Gly Thr Lys Lys Tyr Ala His Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Asp Thr Ala Tyr
 65 70 75 80

Met Ile Leu Ser Ser Leu Ile Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asp Glu Asp Trp Asn Phe Gly Ser Trp Phe Asp Ser Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 51
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 51
 ggatactcct tcaccggcta ctat

24

<210> 52
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 52

Gly Tyr Ser Phe Thr Gly Tyr Tyr
 1 5

<210> 53
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>

<223> synthetic

<400> 53

atcaacccta acagtggcac caaa

24

<210> 54

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 54

Ile Asn Pro Asn Ser Gly Thr Lys

1

5

<210> 55

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 55

gcgagagatg aggactggaa ctttgggagc tggttcgact cc

42

<210> 56

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 56

Ala Arg Asp Glu Asp Trp Asn Phe Gly Ser Trp Phe Asp Ser

1

5

10

<210> 57

<211> 336

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 57
gatattgtga tgaccagac tccactctcc tcacctgtca cccttgga gccggcctcc 60
atctcctgca ggtctagtca aaccctcgta cacggtgatg gaaacacgta cttgagttgg 120
attcagcaga ggccaggcca gcctccgaga ctctcattt ataaggtttc taatcagttc 180
tctggggtcc cagacagatt cagtggcagt ggggcaggga cagatttcac actgaaaatc 240
agcagggtgg aagctgagga tgtcgggctt tatttctgca tgcaagctac acattttccg 300
atcaccttcg gccaaaggac acgactggag attaaa 336

<210> 58
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 58

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

Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Thr Leu Val His Gly
20 25 30

Asp Gly Asn Thr Tyr Leu Ser Trp Ile Gln Gln Arg Pro Gly Gln Pro
35 40 45

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

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

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

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

<210> 59

<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 59
caaaccctcg tacacggtga tggaaacacg tac

33

<210> 60
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 60

Gln Thr Leu Val His Gly Asp Gly Asn Thr Tyr
1 5 10

<210> 61
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 61
aaggtttct

9

<210> 62
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 62

Lys Val Ser
1

<210> 63
<211> 27
<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 63

atgcaagcta cacattttcc gatcacc

27

<210> 64

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 64

Met Gln Ala Thr His Phe Pro Ile Thr

1

5

<210> 65

<211> 363

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 65

caggtaacacc tgggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60

tcctgcaagg cttctggata caccttcacc ggctactata tacattgggt gcgacaggcc 120

cctggacacg ggcttgagtg gatgggatgg ctcaacccta atactggtac cacaaagtat 180

atacagaact ttcagggcag ggtcaccatg accagggaca cgtccagcag cacagcctac 240

atggagctga ccaggctgag atctgacgac acggccgtgt attactgtgc gagagatgag 300

gactggaatt atgggagctg gttcgacacc tggggccagg gaaccctggt cacagtctcc 360

tca 363

<210> 66

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 66

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly His Gly Leu Glu Trp Met
35 40 45

Gly Trp Leu Asn Pro Asn Thr Gly Thr Thr Lys Tyr Ile Gln Asn Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ser Ser Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Glu Asp Trp Asn Tyr Gly Ser Trp Phe Asp Thr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 67

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 67

ggatacacct tcaccggcta ctat

24

<210> 68

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 68

Gly Tyr Thr Phe Thr Gly Tyr Tyr
1 5

<210> 69

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 69

ctcaacccta atactggtac caca

24

<210> 70

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 70

Leu Asn Pro Asn Thr Gly Thr Thr
1 5

<210> 71

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 71

gcgagagatg aggactggaa ttatgggagc tggttcgaca cc

42

<210> 72

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 72

Ala Arg Asp Glu Asp Trp Asn Tyr Gly Ser Trp Phe Asp Thr
1 5 10

<210> 73
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 73
gatattgtaa tgaccagac tccactctcc tcacctgtca cccttggaca gccggcctcc 60
atctcctgca ggtctagtcc aagcctcgta cacagtgatg gaaacaccta cttgagttgg 120
cttcagcaga ggccaggcca gcctccaaga ctcctaattt ataagatttc taaccgattc 180
tctgggggtcc cagacagatt cagtggcagt ggggcaggga cagatttcac gctgaaaatc 240
agcaggggtg aagctgagga tgtcgggggtt tattactgca tgcaagctac acattttccg 300
atcaccttcg gccaaaggac acgactggag attaga 336

<210> 74
<211> 112
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 74

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

Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Pro Ser Leu Val His Ser
20 25 30

Asp Gly Asn Thr Tyr Leu Ser Trp Leu Gln Gln Arg Pro Gly Gln Pro
35 40 45

Pro Arg Leu Leu Ile Tyr Lys Ile Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

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

65		70		75		80									
Ser	Arg	Val	Glu	Ala	Glu	Asp	Val	Gly	Val	Tyr	Tyr	Cys	Met	Gln	Ala
				85					90					95	

Thr	His	Phe	Pro	Ile	Thr	Phe	Gly	Gln	Gly	Thr	Arg	Leu	Glu	Ile	Arg
			100					105					110		

<210> 75
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 75
 ccaagcctcg tacacagtga tggaaacacc tac 33

<210> 76
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 76
 Pro Ser Leu Val His Ser Asp Gly Asn Thr Tyr
 1 5 10

<210> 77
 <211> 9
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 77
 aagatttct 9

<210> 78
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
<223> synthetic

<400> 78

Lys Ile Ser
1

<210> 79
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 79
atgcaagcta cacattttcc gatcacc

27

<210> 80
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 80

Met Gln Ala Thr His Phe Pro Ile Thr
1 5

<210> 81
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 81
gaggtgcagc tgggtggaatc tgggggaggt gtggtgcggc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt cacttttgat gattatggca tgacctgggt ccgccaagct 120
ccagggaggg gcctggaatg ggtctctggt attcattggc atggtaaacg cacaggttat 180
gcagactctg tgaagggccg attcaccata tccagagaca acgccaagaa atccctgtat 240
ctgcaaatga acagtctgaa aggcgaggac acggccttgt atcattgtgt gagggggggga 300

atgagtacag gggactgggtt cgaccctgg gccaggga cctgggtcat cgtctcctca

360

<210> 82

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 82

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

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

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

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

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

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

Val Arg Gly Gly Met Ser Thr Gly Asp Trp Phe Asp Pro Trp Gly Gln
100 105 110

Gly Thr Leu Val Ile Val Ser Ser
115 120

<210> 83

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 83

ggattcactt ttgatgatta tggc

24

<210> 84
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 84

Gly Phe Thr Phe Asp Asp Tyr Gly
1 5

<210> 85
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 85
attcattggc atggtaaacg caca

24

<210> 86
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 86

Ile His Trp His Gly Lys Arg Thr
1 5

<210> 87
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 87
gtgagggggg gaatgagtac aggggactgg ttcgacccc

39

<210> 88
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 88

Val Arg Gly Gly Met Ser Thr Gly Asp Trp Phe Asp Pro
1 5 10

<210> 89
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 89

gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctctaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattaac agttatttaa attggtatca gcagaaacca 120
gggaaagccc ctaaactcct gatctatgtt gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagaa ttcactctca ccatcagcaa tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta cccctccgat caccttcggc 300
caagggacac gactggagat taaa 324

<210> 90
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 90

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

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

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

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

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

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

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

<210> 91
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 91
cagagcatta acagttat

18

<210> 92
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 92

Gln Ser Ile Asn Ser Tyr
1 5

<210> 93
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 93
gttgcattcc

9

<210> 94
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 94

Val Ala Ser
1

<210> 95
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 95
caacagatt acagtacccc tccgatcacc

30

<210> 96
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 96

Gln Gln Ser Tyr Ser Thr Pro Pro Ile Thr
1 5 10

<210> 97
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 97

gaggtgcagc tggtggagtc tgggggaggt gtggtacggc cgggggggtc cctgagactc	60
tcctgtgcag cctctggatt cacctttgat gattatggca tgacctgggt cgcgaagtt	120
ccaggggaagg ggctggagtg ggtctctggt attcattgga gtggtagaag cacaggttat	180
gcagactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat	240
ctgcaaatga acagtctgag agccgaggac acggccttgt attactgtgc gaggggggga	300
atgagtacgg gggactgggt cgacccctgg ggccaggga ccctgggtcac cgtctcctca	360

<210> 98
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 98

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

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

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

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

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

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

Ala Arg Gly Gly Met Ser Thr Gly Asp Trp Phe Asp Pro Trp Gly Gln	
100 105 110	

Gly Thr Leu Val Thr Val Ser Ser	
115 120	

<210> 99
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 99
ggattcacct ttgatgatta tggc

24

<210> 100
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 100

Gly Phe Thr Phe Asp Asp Tyr Gly
1 5

<210> 101
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 101
attcattgga gtggtagaag caca

24

<210> 102
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 102

Ile His Trp Ser Gly Arg Ser Thr
1 5

<210> 103

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

<220>
<223> synthetic

<400> 103
gCGagggggg gaatgagtac gggggactgg ttcgacccc

39

<210> 104
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 104

Ala Arg Gly Gly Met Ser Thr Gly Asp Trp Phe Asp Pro
1 5 10

<210> 105
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 105
gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgtt gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta cccctccgat caccttcggc 300
caagggacac gactggagat taaa 324

<210> 106
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 106

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 Ser Ile Ser Ser Tyr
20 25 30

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

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

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

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

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

<210> 107

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 107

cagagcatta gcagctat

18

<210> 108

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 108

Gln Ser Ile Ser Ser Tyr

1

5

<210> 109
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 109
gttgcattcc

9

<210> 110
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 110

Val Ala Ser
1

<210> 111
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 111
caacagagtt acagtacccc tccgatcacc

30

<210> 112
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 112

Gln Gln Ser Tyr Ser Thr Pro Pro Ile Thr
1 5 10

<210> 113
<211> 345
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 113
gaggtgcagt tgggtggagtc tggaggaggc ttggtccagc ctgggggggtc cctaagactc 60
tcctgtgcag cctctggggtt caccgtcggc agtaactaca tgaactgggt ccgtcaggct 120
ccagggaagg gactggagtg ggtctcagtt atttatagtg gtggtagtag atactacgca 180
gattccgtga agggccgatt caccatctcc agactcactt ccaagaacac actgtatctt 240
caaatgagca gcctgagacc tgaggacacg gccgtgtatt attgtgtagg agggattagg 300
ggtctggacg tctggggcca agggaccacg gtcaccgtct cttca 345

<210> 114
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 114

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

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

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

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

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

Gln Met Ser Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala

85

90

95

Arg Gly Ile Arg Gly Leu Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 115
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 115
gggttcaccg tcggtagtaa ctac

24

<210> 116
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 116

Gly Phe Thr Val Gly Ser Asn Tyr
1 5

<210> 117
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 117
atttatagtg gtggtagtag a

21

<210> 118
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 118

Ile Tyr Ser Gly Gly Ser Thr
1 5

<210> 119
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 119
gcgagaggga ttaggggtct ggacgtc

27

<210> 120
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 120

Ala Arg Gly Ile Arg Gly Leu Asp Val
1 5

<210> 121
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 121
gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gaccattaac atctatttaa attggtatca gcagaaacca 120
gggagagccc ctaggctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaccag agttacagta cccctccgat caccttcggc 300

caagggacac gactggagat taaa

324

<210> 122
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 122

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 Thr Ile Asn Ile Tyr
20 25 30

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

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

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

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

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

<210> 123
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 123

cagaccatta acatctat

18

<210> 124

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

<220>
<223> synthetic

<400> 124

Gln Thr Ile Asn Ile Tyr
1 5

<210> 125
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 125
gctgcatcc

9

<210> 126
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 126

Ala Ala Ser
1

<210> 127
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 127
caccagagtt acagtacccc tccgatcacc

30

<210> 128
<211> 10
<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 128

His Gln Ser Tyr Ser Thr Pro Pro Ile Thr
1 5 10

<210> 129

<211> 345

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 129

gaggaacggt tgggtggagtc tggaggagac ttggtccagc ctgggggggtc cctgagactc 60
tcctgtgcag cctctggcat caccgtcggc actaattata tgaactgggt ccgccaggct 120
ccagggaagg gactggagtg ggtctcagtt atttctagcg gtggttaatac acactacgca 180
gactccgtga agggccgatt cattatgtcc agacaaactt ccaaaaacac gctgtatctt 240
cagatgaata gcctggaaac tgaggacacg gccgtatatt attgtgagag ggggatcaga 300
ggtttggacg tctggggcca agggaccatg gtcaccgtct cctca 345

<210> 130

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 130

Glu Glu Arg Leu Val Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

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

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

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

Arg Gly Ile Arg Gly Leu Asp Val Trp Gly Gln Gly Thr Met Val Thr
100 105 110

Val Ser Ser
115

<210> 131
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 131
ggcatcaccg tcggtactaa ttat

24

<210> 132
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 132

Gly Ile Thr Val Gly Thr Asn Tyr
1 5

<210> 133
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 133
atttctagcg gtggtatac a 21

<210> 134
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 134

Ile Ser Ser Gly Gly Asn Thr
1 5

<210> 135
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 135
gcgaggggga tcagaggttt ggacgtc 27

<210> 136
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 136

Ala Arg Gly Ile Arg Gly Leu Asp Val
1 5

<210> 137
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 137

gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcatgagc agctatttaa attggtatca gcagaaacca 120
gggagagccc ctaagctcct gatctttgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta cccctccgat caccttcggc 300
caagggacac gactggagat taaa 324

<210> 138
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 138

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 Ser Met Ser Ser Tyr
20 25 30

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

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

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

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

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

<210> 139
<211> 18
<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 139

cagagcatga gcagctat

18

<210> 140

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 140

Gln Ser Met Ser Ser Tyr

1 5

<210> 141

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 141

gctgcatcc

9

<210> 142

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 142

Ala Ala Ser

1

<210> 143

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 143

caacagagtt acagtacccc tccgatcacc

30

<210> 144

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 144

Gln Gln Ser Tyr Ser Thr Pro Pro Ile Thr

1

5

10

<210> 145

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 145

caggtccagc tgggtgcagtc tggggctgag gtgaagatgc ctgggtcctc ggtgagggtc

60

tcctgcaagg cttctggagg catcttcagc agttctacta tcagttgggt gcgacaggcc

120

cctggacaag ggcttgaatg gatgggagag atcatccctg tctttggtac agtaaactac

180

gcacagaagt tccaggacag agtcatatct accgcggacg aatctacgac tacagcctac

240

atggagctga gcagcctgaa atctggggac acggccgtat atttctgtgc gcgaaattgg

300

ggattaggct ctttttatat ctggggccaa gggacaatgg tcaccgtctc ttca

354

<210> 146

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 146

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Met Pro Gly Ser

1	5	10	15
Ser Val Arg Val Ser Cys Lys Ala Ser Gly Gly Ile Phe Ser Ser Ser	20	25	30
Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met	35	40	45
Gly Glu Ile Ile Pro Val Phe Gly Thr Val Asn Tyr Ala Gln Lys Phe	50	55	60
Gln Asp Arg Val Ile Phe Thr Ala Asp Glu Ser Thr Thr Thr Ala Tyr	65	70	75
Met Glu Leu Ser Ser Leu Lys Ser Gly Asp Thr Ala Val Tyr Phe Cys	85	90	95
Ala Arg Asn Trp Gly Leu Gly Ser Phe Tyr Ile Trp Gly Gln Gly Thr	100	105	110
Met Val Thr Val Ser Ser	115		

<210> 147
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 147
 ggaggcatct tcagcagttc tact

24

<210> 148
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 148

Gly Gly Ile Phe Ser Ser Ser Thr

1

5

<210> 149
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 149
atcatccctg tctttggtac agta

24

<210> 150
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 150

Ile Ile Pro Val Phe Gly Thr Val
1 5

<210> 151
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 151
gcgcgaaatt ggggattagg ctctttttat atc

33

<210> 152
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 152

Ala Arg Asn Trp Gly Leu Gly Ser Phe Tyr Ile
1 5 10

<210> 153
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 153
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagttttaac ttcaactact tagcctggta ccagcagaaa 120
cctggccagg ctcccagact cctcatctat ggtgcatcca gcagggccac tggcatccca 180
gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccatcaa caggctggag 240
cctgaagatt ttggagtgtt ttattgtcag cagtatgaaa gcgcaccttg gacgttcggc 300
caagggacca aggtggaaat caaa 324

<210> 154
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 154

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

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

Tyr Leu Ala Trp Tyr Gln 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 Asn Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Gly Val Phe Tyr Cys Gln Gln Tyr Glu Ser Ala Pro

Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 155
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 155
cagagtttta acttcaacta c

21

<210> 156
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 156

Gln Ser Phe Asn Phe Asn Tyr
1 5

<210> 157
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 157
ggtgcatcc

9

<210> 158
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 158

Gly Ala Ser
1

<210> 159
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 159
cagcagtatg aaagcgcacc ttggacg 27

<210> 160
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 160

Gln Gln Tyr Glu Ser Ala Pro Trp Thr
1 5

<210> 161
<211> 345
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 161
gaggtgcagc ttgtagagtc tgggggagac ttggtacatc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggttt cccctttgat gagtatgcca tgcactgggt ccggcaagtt 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga gtaataataa cataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgcaaaaaa ctccctgtat 240
ctacaaatga acagtctgag acctgaggac acggcctttt attactgtgc aaaatctgga 300
atctttgact cctggggcca gggaaccctg gtcaccgtct cctca 345

<210> 162

<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 162

Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val His Pro Gly Arg
1 5 10 15

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

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

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

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

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

Ala Lys Ser Gly Ile Phe Asp Ser Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 163
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 163

ggtttcccct ttgatgagta tgcc

24

<210> 164

<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 164

Gly Phe Pro Phe Asp Glu Tyr Ala
1 5

<210> 165
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 165
attagttgga gtaataataa cata

24

<210> 166
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 166

Ile Ser Trp Ser Asn Asn Asn Ile
1 5

<210> 167
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 167
gcaaaatctg gaatctttga ctcc

24

<210> 168
<211> 8
<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 168

Ala Lys Ser Gly Ile Phe Asp Ser
1 5

<210> 169

<211> 315

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 169

gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca 120
gggaagctcc tgatctatgc tgcattcagt ttgcaaagtg ggggtcccatc acggttcagt 180
ggcgggtggat ctgggacaga tttcactctc accatcagca gtctgcgacc tgaagatttt 240
gcaacttact actgtcaaca gagttactgt acccctccga tcaccttcgg ccaagggaca 300
cgactggaga ttaaa 315

<210> 170

<211> 105

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 170

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 Ser Ile Ser Ser Tyr
20 25 30

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

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

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

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

Gly Gln Gly Thr Arg Leu Glu Ile Lys
100 105

<210> 171
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 171
cagagcatta gcagctat

18

<210> 172
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 172

Gln Ser Ile Ser Ser Tyr
1 5

<210> 173
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 173
gctgcatcc

9

<210> 174
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 174

Ala Ala Ser
1

<210> 175
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 175
caacagagtt actgtacccc tccgatacc

30

<210> 176
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 176

Gln Gln Ser Tyr Cys Thr Pro Pro Ile Thr
1 5 10

<210> 177
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 177
gaggtgcagc tgggtggagtc cgggggaggc gtggtccagc ctgggaggtc cctgagactc 60

tcctgtgcag cctctggatt caccttcagt agttatggca tgcactgggt ccgccaggct 120

ccaggcaagg gactggagtg ggtgacactt atatcatatg agggaaggaa taaatactat	180
gcagactccg tgaagggccg attcaccatt tccagagaca attccaagaa cacgctgtat	240
ctgcaaatac acagcctgag agctgaggac acggctgtat attactgtgc gaaagatagg	300
accctttacg gtatggacgt ctggggccaa ggaaccacgg tcaccgtctc ctca	354

<210> 178
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 178

Glu	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	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Tyr
			20					25					30		

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

Thr	Leu	Ile	Ser	Tyr	Glu	Gly	Arg	Asn	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	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	Thr	Leu	Tyr	Gly	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr
			100					105					110		

Thr	Val	Thr	Val	Ser	Ser
					115

<210> 179
 <211> 24
 <212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 179

ggattcacct tcagtagtta tggc

24

<210> 180

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 180

Gly Phe Thr Phe Ser Ser Tyr Gly

1 5

<210> 181

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 181

atatcatatg agggaaggaa taaa

24

<210> 182

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 182

Ile Ser Tyr Glu Gly Arg Asn Lys

1 5

<210> 183

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 183

gcgaaagata ggacccttta cggtatggac gtc

33

<210> 184

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 184

Ala Lys Asp Arg Thr Leu Tyr Gly Met Asp Val

1

5

10

<210> 185

<211> 363

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 185

caggtcacct tgaggagtc tggctctgcg ctggtgaaaa ccacacagac cctcacactg 60

acctgcacct tctctggggtt ctcactcagc actaatagaa tgtgtgtgac ctggatccgt 120

cagccccag ggaaggccct ggagtggctt gcgcgcattg attgggatgg tgttaaatac 180

tacaacacat ctctgaagac caggctcacc atctccaagg acacctcaa aaaccaggtg 240

gtccttacia tgaccaacat ggaccctgtg gacacagcca ctttttactg tgcacggtcg 300

acttcgttga ctttttacta ctttgactac tggggccagg gaaccctggt caccgtctcc 360

tca 363

<210> 186

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 186

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

Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu Ser Thr Asn
20 25 30

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

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

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

Val Leu Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Phe Tyr
85 90 95

Cys Ala Arg Ser Thr Ser Leu Thr Phe Tyr Tyr Phe Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 187
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 187
gggttctcac tcagcactaa tagaatgtgt

30

<210> 188
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 188

Gly Phe Ser Leu Ser Thr Asn Arg Met Cys
1 5 10

<210> 189
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 189
attgattggg atggtgttaa a 21

<210> 190
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 190

Ile Asp Trp Asp Gly Val Lys
1 5

<210> 191
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 191
gcacggtcga cttcggtgac tttttactac ttgactac 39

<210> 192
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 192

Ala Arg Ser Thr Ser Leu Thr Phe Tyr Tyr Phe Asp Tyr

1 5 10

<210> 193
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 193
gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta cccctccgat caccttcggc 300
caagggacac gactggagat taaa 324

<210> 194
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 194

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 Ser Ile Ser Ser Tyr
20 25 30

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

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

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

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

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

<210> 195
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 195
cagagcatta gcagctat

18

<210> 196
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 196

Gln Ser Ile Ser Ser Tyr
1 5

<210> 197
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 197
gctgcatcc

9

<210> 198
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 198

Ala Ala Ser
1

<210> 199

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 199

caacagagtt acagtacccc tccgatcacc

30

<210> 200

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 200

Gln Gln Ser Tyr Ser Thr Pro Pro Ile Thr
1 5 10

<210> 201

<211> 345

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 201

gaggtgcagc tggaggagtc tggaggagtc ttggtccagc cggggggggtc cctgagactc 60

tcctgtgcag cctctgagtt caccgtcggc accaaccaca tgaactgggt ccgccaggct 120

ccagggaagg gactggagtg ggtctcagtt atttatagcg gtggtaacac attctacgca 180

gactccgtga agggccgatt caccatctcc agacacactt ccaagaacac gctgtatctt 240

caaatgaaca gcctgacagc agaggacacg gccgtatatt actgtgcgcg aggattgggg 300

ggtatggacg tctggggcca agggaccacg gtcaccgtct cctca 345

<210> 202
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 202

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

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

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

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

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

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

Arg Gly Leu Gly Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 203
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 203

gagttcaccg tcggtaccaa ccac

<210> 204
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 204

Glu Phe Thr Val Gly Thr Asn His
1 5

<210> 205
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 205
atttatagcg gtggtaacac a

21

<210> 206
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 206

Ile Tyr Ser Gly Gly Asn Thr
1 5

<210> 207
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 207
gcgcgaggat tggggggtat ggacgtc

27

<210> 208

<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 208

Ala Arg Gly Leu Gly Gly Met Asp Val
1 5

<210> 209
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 209

gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcgagtca ggtcattagc aattatttag cctggtatca gcagaaacca 120
gggaaagttc ctaggctcct gatctatgct gcatccactt tgcaatcagg ggtcccatct 180
cgtttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag cctgcagcct 240
gaagatgttg caacttatta ctgtcaaaag tataacagtg cccctcggac gttcggccaa 300
gggaccaagg tggaaatcaa a 321

<210> 210
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 210

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 Val Ile Ser Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Arg Leu Leu Ile

35

40

45

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

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

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Arg
 85 90 95

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

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

<220>
 <223> synthetic

<400> 211
 caggtcatta gcaattat

18

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

<220>
 <223> synthetic

<400> 212

Gln Val Ile Ser Asn Tyr
 1 5

<210> 213
 <211> 9
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 213

gctgcatcc

9

<210> 214
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 214

Ala Ala Ser
1

<210> 215
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 215
caaaagtata acagtgcccc tcggacg

27

<210> 216
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 216

Gln Lys Tyr Asn Ser Ala Pro Arg Thr
1 5

<210> 217
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 217
gaggtgcagc tggtggagtc tgggggaggc ttggtccagc ggggggagtc cctgagactt

60

tactgtgcag cctctggatt cacctttagt aaatattgga tgaactgggt ccgccaggct	120
ccaggggaagg ggctggagtg ggtggccaac ataaaggag atggaagtga gaaatactat	180
gtggactctg tgaagggccg gttcaccatc tccagagaca acgccaagaa ctcactatat	240
ctacaaatga acagcctgag agccgaggac acggctgttt attactgtgc gagagattat	300
tggggatcag gctactactt tgacttctgg ggccagggaa ccctggtcac cgtctcctca	360

<210> 218
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 218

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Arg Gly Glu	
1 5 10 15	

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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser 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 Arg Asp Tyr Trp Gly Ser Gly Tyr Tyr Phe Asp Phe Trp Gly Gln	
100 105 110	

Gly Thr Leu Val Thr Val Ser Ser	
115 120	

<210> 219

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

<220>
<223> synthetic

<400> 219
ggattcacct ttagtaaata ttgg

24

<210> 220
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 220

Gly Phe Thr Phe Ser Lys Tyr Trp
1 5

<210> 221
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 221
ataaagggag atggaagtga gaaa

24

<210> 222
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 222

Ile Lys Gly Asp Gly Ser Glu Lys
1 5

<210> 223
<211> 39
<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 223

gcgagagatt attggggatc aggctactac tttgacttc

39

<210> 224

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 224

Ala Arg Asp Tyr Trp Gly Ser Gly Tyr Tyr Phe Asp Phe

1

5

10

<210> 225

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 225

gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc

60

atcacttgcc gggcaagtca gaacattaac aactatttaa attggtatca gcagaaacca

120

gggaaagccc ctaaactcct gatctatgct gcatccagtt tccaaaatgc ggtcccatca

180

aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct

240

gaagattttg caacttacta ctgtcaacag agttacaata ccccgctcac tttcggcggg

300

gggaccaagg tggagatcaa a

321

<210> 226

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 226

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 Asn Ile Asn Asn Tyr
20 25 30

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

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

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

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

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 227
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 227
cagaacatta acaactat

18

<210> 228
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 228

Gln Asn Ile Asn Asn Tyr
1 5

<210> 229
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 229
gctgcatcc

9

<210> 230
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 230

Ala Ala Ser
1

<210> 231
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 231
caacagagtt acaatacccc gtcact

27

<210> 232
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 232

Gln Gln Ser Tyr Asn Thr Pro Leu Thr
1 5

<210> 233

<211> 390
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 233
gaggtgcagc tgggtggagtc tgggggaggc ttggtccagt ctgggggggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttagt agctattgga tgagctgggt ccgccaggct 120
ccaggggaagg ggctggagtg ggtggccaac ataaagcaag atggaagtga gaaatactat 180
gtggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctactgtat 240
ctgcaaatga acagcctgag agccgatgac acggctgtgt attactgtgc gagagatgat 300
attgtagtag taccagctcc tatgggatat tactactact acttcggtat ggacgtctgg 360
ggccaaggga ccacggtcac cgtctcctca 390

<210> 234
<211> 130
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 234

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

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

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

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

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

Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val Tyr Tyr Cys

85

90

95

Ala Arg Asp Asp Ile Val Val Val Pro Ala Pro Met Gly Tyr Tyr Tyr
 100 105 110

Tyr Tyr Phe Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val
 115 120 125

Ser Ser
 130

<210> 235
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 235
 ggattcacct ttagtagcta ttgg

24

<210> 236
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 236

Gly Phe Thr Phe Ser Ser Tyr Trp
 1 5

<210> 237
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 237
 ataaagcaag atggaagtga gaaa

24

<210> 238

<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 238

Ile Lys Gln Asp Gly Ser Glu Lys
1 5

<210> 239
<211> 69
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 239
gcgagagatg atattgtagt agtaccagct cctatgggat attactacta ctacttcggt 60
atggacgtc 69

<210> 240
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 240

Ala Arg Asp Asp Ile Val Val Val Pro Ala Pro Met Gly Tyr Tyr Tyr
1 5 10 15

Tyr Tyr Phe Gly Met Asp Val
20

<210> 241
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 241

gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc	60
atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca	120
gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca	180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct	240
gaagattttg caacttatta ctgtctacag cataatagtt acccgtacac ttttggccag	300
gggaccaagc tggagatcaa a	321

<210> 242
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 242

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	Gly	Ile	Arg	Asn	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	Gln	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	Tyr
			85					90						95	

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

<210> 243
 <211> 18
 <212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 243

cagggcatta gaaatgat

18

<210> 244

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 244

Gln Gly Ile Arg Asn Asp

1 5

<210> 245

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 245

gctgcatcc

9

<210> 246

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 246

Ala Ala Ser

1

<210> 247

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 247

ctacagcata atagttaccc gtacact

27

<210> 248

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 248

Leu Gln His Asn Ser Tyr Pro Tyr Thr

1

5

<210> 249

<211> 369

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 249

gaagtgcagc tgggtggagtc tgggggaggc ttggttcagc ctggcaggtc cctgagactc 60

tcctgtgcag cctctggatt cacctttgat gattttgcc a tgcactgggt ccgacaagct 120

ccaggggaagg gcctggagtg ggtctcaggc attagttgga ctggtggtaa catggactat 180

gcgaactctg tgaagggccg attcaccatc tccagagagg acgccaagaa ttccctgtat 240

ctgcaaatga acagtctgag agctgcggac acggccttgt attactgtgt aaaagatata 300

aggggggatag tggctacggg gggggccttt gatattctggg gccgaggac aatggtcacc 360

gtctcttca 369

<210> 250

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 250

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

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

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

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

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

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

Val Lys Asp Ile Arg Gly Ile Val Ala Thr Gly Gly Ala Phe Asp Ile
100 105 110

Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 251
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 251
ggattcacct ttgatgattt tgcc

24

<210> 252
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 252

Gly Phe Thr Phe Asp Asp Phe Ala
1 5

<210> 253
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 253
attagttgga ctggtggtaa catg 24

<210> 254
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 254

Ile Ser Trp Thr Gly Gly Asn Met
1 5

<210> 255
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 255
gtaaaagata taaggggggat agtggctacg gggggggcctt ttgatatc 48

<210> 256
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 256

Val Lys Asp Ile Arg Gly Ile Val Ala Thr Gly Gly Ala Phe Asp Ile

1 5 10 15

<210> 257
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 257
gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atctcttgcc gggcaagtca gaccattagc acttatttaa attggtttca gcagaaacca 120
gggaaagccc ctaagctcct gatctatggt gtgtccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttatta ctgtcaacag agttacagta cccattcac tttcggccct 300
gggaccaaag tggatatcaa a 321

<210> 258
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 258

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 Ser Cys Arg Ala Ser Gln Thr Ile Ser Thr Tyr
20 25 30

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

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

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

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

Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
100 105

<210> 259
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 259
cagaccatta gcacttat 18

<210> 260
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 260

Gln Thr Ile Ser Thr Tyr
1 5

<210> 261
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 261
gttgtgtcc 9

<210> 262
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 262

Val Val Ser
1

<210> 263

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 263

caacagagtt acagtacccc attcact

27

<210> 264

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 264

Gln Gln Ser Tyr Ser Thr Pro Phe Thr
1 5

<210> 265

<211> 345

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 265

gaggtgcagc tggaggagtc tggaggagtc ttggtccagc cggggggggtc cctgagactc 60

tcctgtgcag cctctggatt caccgtcggc accaactaca tgaactgggt ccgccaggct 120

ccagggaagg gactggagtg gatctcagtt atttatagcg gtggttagcac attctacgca 180

gactccgtga agggccgatt caccatctcc agacagactt cccagaacac gctgtatctt 240

caaatgaaca gcctgagacc tgaggacacg gccgtatatt actgtgagag aggtatacgt 300

ggttttgata tctggggcca agggacaatg gtcaccgtct cttca 345

<210> 266
 <211> 115
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 266

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

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

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

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

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

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

Arg Gly Ile Arg Gly Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr
 100 105 110

Val Ser Ser
 115

<210> 267
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 267

ggattcaccg tcggtaccaa ctac

<210> 268
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 268

Gly Phe Thr Val Gly Thr Asn Tyr
1 5

<210> 269
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 269
atttatagcg gtggtagcac a

21

<210> 270
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 270

Ile Tyr Ser Gly Gly Ser Thr
1 5

<210> 271
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 271
gcgagaggta tacgtggttt tgatatc

27

<210> 272

<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 272

Ala Arg Gly Ile Arg Gly Phe Asp Ile
1 5

<210> 273
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 273

gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccgtca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta cccctccgat caccttcggc 300
caagggacac gactggagat taaa 324

<210> 274
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 274

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 Ser Ile Ser Ser Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile

35

40

45

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

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

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

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

<210> 275
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 275
 cagagcatta gcagctat

18

<210> 276
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 276

Gln Ser Ile Ser Ser Tyr
 1 5

<210> 277
 <211> 9
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 277

gctgcatcc

9

<210> 278
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 278

Ala Ala Ser
1

<210> 279
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 279
caacagagtt acagtacccc tccgatcacc

30

<210> 280
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 280

Gln Gln Ser Tyr Ser Thr Pro Pro Ile Thr
1 5 10

<210> 281
<211> 345
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 281
gaggtgcagc tgggtggagtc tggaggaggc ttggtccagc cggggggggtc cctgagactc

60

tcctgtgcag cctctgggtt taccatcagt accaactaca tgaactgggt ccgccaggct	120
ccaggggaagg ggctggagtg ggtcgcagtt atttatagca gtggttccac atactatatc	180
gactccgtga agggccgatt caccatctcc agactcactt ccaagaacac ggtgtatctt	240
caaatgagca gcctgaattc tgaagacacg gccgtgtatt actgtgagag ggggatcagg	300
ggttttgata tttggggcca agggacaatg gtcaccgtct cttca	345

<210> 282
 <211> 115
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 282

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

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

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

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

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

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

Arg Gly Ile Arg Gly Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr	
100 105 110	

Val Ser Ser	
115	

<210> 283

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

<220>
<223> synthetic

<400> 283
gggtttacca tcagtaccaa ctac

24

<210> 284
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 284

Gly Phe Thr Ile Ser Thr Asn Tyr
1 5

<210> 285
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 285
atttatagca gtggttcac a

21

<210> 286
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 286

Ile Tyr Ser Ser Gly Ser Thr
1 5

<210> 287
<211> 27
<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 287

gcgaggggga tcaggggttt tgatatt

27

<210> 288

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 288

Ala Arg Gly Ile Arg Gly Phe Asp Ile

1

5

<210> 289

<211> 372

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 289

gaagtgcagc tggtggagtc ggggggaggc ttggtacagc ctggcaggtc cctgagactc 60

tcctgtgcag cctctggatt caccattgat gatagtgcc a tgactgggt ccggcaaact 120

ccagggaagg gcctggagtg ggtctcaggt attagttgga aaagtggtag cataggttat 180

gcggactctg tgaggggccg attcaccatc tccagagaca acgccaagaa ttccctctat 240

ctgcaaatga acagtctgag agttgaggac acggccttgt attactgtgt aaaagatata 300

aggggcaact ggaactacgg gggaaactgg ttcgaccct ggggccaggg aaccctggtc 360

actgtctcct ca 372

<210> 290

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 290

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

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

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

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

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

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

Val Lys Asp Ile Arg Gly Asn Trp Asn Tyr Gly Gly Asn Trp Phe Asp
100 105 110

Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 291

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 291

ggattcacca ttgatgatag tgcc

24

<210> 292

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 292

Gly Phe Thr Ile Asp Asp Ser Ala
1 5

<210> 293

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 293

attagttgga aaagtggtag cata

24

<210> 294

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 294

Ile Ser Trp Lys Ser Gly Ser Ile
1 5

<210> 295

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 295

gtaaaagata taaggggcaa ctggaactac gggggaaact ggttcgaccc c

51

<210> 296

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 296

Val Lys Asp Ile Arg Gly Asn Trp Asn Tyr Gly Gly Asn Trp Phe Asp
1 5 10 15

Pro

<210> 297
<211> 345
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 297
gaggtgcagc tgggtggagtc tggaggaggc ttggtccagc ctgggggggtc cctgagactc 60
tcatgtgaag cctctggggtt caccgtcggg gtcaaccaca tgaactgggt ccgccaggct 120
ccagggaagg gtctggagtg ggtctcagtt attttcagta gtggtaggac attctacgga 180
gactacgtga aggggcgatt aaccatcttc agacaaacct ccgagaacac ggtgtatctt 240
caaatgaata gcctgagaag tgaggacacg gccatatatt actgtgagag agggattggc 300
ggtttggaca tctggggccg agggacaatg gtcaccgtct cttca 345

<210> 298
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 298

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

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

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

Ser Val Ile Phe Ser Ser Gly Arg Thr Phe Tyr Gly Asp Tyr Val Lys

50

55

60

Gly Arg Leu Thr Ile Phe Arg Gln Thr Ser Gln Asn Thr Val Tyr Leu
 65 70 75 80

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

Arg Gly Ile Gly Gly Leu Asp Ile Trp Gly Arg Gly Thr Met Val Thr
 100 105 110

Val Ser Ser
 115

<210> 299
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 299
 gggttcaccg tcggtgtcaa ccac

24

<210> 300
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 300

Gly Phe Thr Val Gly Val Asn His
 1 5

<210> 301
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 301

attttcagta gtggtaggac a

21

<210> 302
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 302

Ile Phe Ser Ser Gly Arg Thr
1 5

<210> 303
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 303
gcgagaggga ttggcggttt ggacatc

27

<210> 304
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 304

Ala Arg Gly Ile Gly Gly Leu Asp Ile
1 5

<210> 305
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 305
gaagtgcagc tgggtggagtc tgggggaggc ttggttcagc ctggcaggtc cctaagactc

60

tcctgtgcag cctctggatt cacctttgat gattatgcct tgcactgggt cggcaagct	120
ccaggaagg gcctggagtg ggtctcaggt attagttgga ctggtggtac tatagactat	180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat	240
ctgcaaatga gcagtctgag aactgaggac acggccatat attactgtac aagagatata	300
cgggggaact ggaagtacgg aggctggttc gaccctggg gccaggaac cctggtcacc	360
gtctcctca	369

<210> 306
 <211> 123
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 306

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

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

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

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

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

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

Thr Arg Asp Ile Arg Gly Asn Trp Lys Tyr Gly Gly Trp Phe Asp Pro	
100 105 110	

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

<210> 307
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 307
ggattcacct ttgatgatta tgcc

24

<210> 308
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 308

Gly Phe Thr Phe Asp Asp Tyr Ala
1 5

<210> 309
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 309
attagttgga ctggtggtac tata

24

<210> 310
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 310

Ile Ser Trp Thr Gly Gly Thr Ile
1 5

<210> 311

<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 311
acaagagata tccgggggaa ctggaagtac ggaggctggt tcgacccc

48

<210> 312
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 312

Thr	Arg	Asp	Ile	Arg	Gly	Asn	Trp	Lys	Tyr	Gly	Gly	Trp	Phe	Asp	Pro
1			5					10					15		

<210> 313
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 313
caggtgcagc tgggtgcagtc tgggactgag gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaagg cttctggata caccttcacc gcctactata tgcactgggt gcgacaggcc 120
cctgggtcaag gacttgactg gatgggatgg atcagcccta acagtggttt cacaaactat 180
gcacagaagt ttcagggcag ggtcaccatg accagggaca cgtccatcaa cacattttat 240
atggagctga gtggactgag atctgacgac acggccgtat attactgtgc gcgagagggt 300
tctactcacc acaattcttt cgacccttgg ggccagggaa ccctggtcac cgtctcctca 360

<210> 314
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 314

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ala Tyr
20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Asp Trp Met
35 40 45

Gly Trp Ile Ser Pro Asn Ser Gly Phe Thr Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Asn Thr Phe Tyr
65 70 75 80

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

Ala Arg Glu Gly Ser Thr His His Asn Ser Phe Asp Pro Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 315

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 315

ggatacacct tcaccgccta ctat

24

<210> 316

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 316

Gly Tyr Thr Phe Thr Ala Tyr Tyr
1 5

<210> 317

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 317

atcagcccta acagtggttt caca

24

<210> 318

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 318

Ile Ser Pro Asn Ser Gly Phe Thr
1 5

<210> 319

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 319

gcgcgagagg gttctactca ccacaattct ttcgacccc

39

<210> 320

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 320

Ala Arg Glu Gly Ser Thr His His Asn Ser Phe Asp Pro
1 5 10

<210> 321
<211> 342
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 321
gaggtgcagc tggaggagtc tggaggagtc ttggtccaac cggggggggtc cctgaggctc 60
tcctgtgcag cctctggggt caccgtcggg actaacttca tgaattgggt ccgccaggct 120
ccagggaagg ggctggagtg ggtctcagcg atttatagcg gtggtaccgc taactacgca 180
gactccgtga agggccgatt caccatttcc agagacactt ccaggaacac gctgtatctt 240
caaatgaaca gcctgagaac tgaggacacg gccgtttatt attgtgagag aggggggggt 300
atggacgtct ggggccaagg gaccacgggc accgtctcct ca 342

<210> 322
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 322

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

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

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

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

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

65		70		75		80
Gln Met Asn Ser	Leu Arg Thr Glu Asp Thr Ala Val Tyr Tyr Cys Ala					
	85		90		95	
Arg Gly Gly Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val						
	100		105		110	
Ser Ser						

<210> 323
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 323
 gggttcaccg tcggtactaa cttc

24

<210> 324
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 324

Gly Phe Thr Val Gly Thr Asn Phe
1 5

<210> 325
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> synthetic

<400> 325
 atttatagcg gtggtaccgc t

21

<210> 326

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

<220>
<223> synthetic

<400> 326

Ile Tyr Ser Gly Gly Thr Ala
1 5

<210> 327
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 327
gcgagagggg ggggtatgga cgtc

24

<210> 328
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 328

Ala Arg Gly Gly Gly Met Asp Val
1 5

<210> 329
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 329
caggtccagc tgggtgcagtc tggggctgag gtgaagaagc ctgggtcctc ggtgaaggtc 60

tcctgcaagg cttctggagg caccttcaac acctatgttc tcagctgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggagag atcatcccta tcttaggtgc agcaaactac 180

gcacagaact tccagggcag agtcactttt accacggacg aatccacgaa tacagcctac 240
atggacctga gcagcctaag atctgaggac acggccgtgt attactgtgc gagagatcgg 300
acctccgggg ggttcgaccc ctggggccag ggaaccctgg tcactgtctc ctca 354

<210> 330
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 330

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Asn Thr Tyr
20 25 30

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

Gly Glu Ile Ile Pro Ile Leu Gly Ala Ala Asn Tyr Ala Gln Asn Phe
50 55 60

Gln Gly Arg Val Thr Phe Thr Thr Asp Glu Ser Thr Asn Thr Ala Tyr
65 70 75 80

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

Ala Arg Asp Arg Thr Ser Gly Gly Phe Asp Pro Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 331
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> synthetic

<400> 331

ggaggcacct tcaacaccta tggt

24

<210> 332

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 332

Gly Gly Thr Phe Asn Thr Tyr Val

1

5

<210> 333

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 333

atcatcccta tcttaggtgc agca

24

<210> 334

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic

<400> 334

Ile Ile Pro Ile Leu Gly Ala Ala

1

5

<210> 335

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic

<400> 335
gcgagagatc ggacctccgg ggggttcgac ccc 33

<210> 336
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 336
Ala Arg Asp Arg Thr Ser Gly Gly Phe Asp Pro
1 5 10

<210> 337
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 337
caggttcagc tgggtgcagtc tggagctgag gtggagaagc ctggggcctc agtgaaggtc 60
tcctgcaagg cttctgggta catctttacc cactatggta tcagctgggt gcgacaggcc 120
cctggacaag gacttgagtg ggtgggctgg atcagccctt acaatgggta cacagactat 180
gcacagaaac tccagggcag agtcaccttg accacagaca catccacgac cacagcctac 240
atggagctga ggaacctgag atctgacgac acggccatgt attactgttc gagagggagg 300
ggcccttact ggtccttcga tctctggggc cgtggcacc tggtcaccgt ctcctca 357

<210> 338
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 338
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Glu Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Thr His Tyr
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Pro Tyr Asn Gly Tyr Thr Asp Tyr Ala Gln Lys Leu
50 55 60

Gln Gly Arg Val Thr Leu Thr Thr Asp Thr Ser Thr Thr Thr Ala Tyr
65 70 75 80

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

Ser Arg Gly Arg Gly Pro Tyr Trp Ser Phe Asp Leu Trp Gly Arg Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 339
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 339
ggttacatct ttaccacta tggt

24

<210> 340
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 340

Gly Tyr Ile Phe Thr His Tyr Gly
1 5

<210> 341
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 341
atcagccctt acaatgggta caca

24

<210> 342
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 342

Ile Ser Pro Tyr Asn Gly Tyr Thr
1 5

<210> 343
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> synthetic

<400> 343
tcgagaggga ggggccctta ctggtccttc gatctc

36

<210> 344
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic

<400> 344

Ser Arg Gly Arg Gly Pro Tyr Trp Ser Phe Asp Leu
1 5 10