

_SL
SEQUENCE LISTING

<110> BEDOYA, FELIPE
GHASSEMI, SABA
JUNE, CARL H.
LEVINE, BRUCE L.
KAWALEKAR, OMKAR U.
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MILONE, MICHAEL C.
POWELL, JR., DANIEL J.
ZHENG, ZOE

<120> METHODS FOR IMPROVING THE EFFICACY AND EXPANSION OF IMMUNE CELLS

<130> N2067-7081W0

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<150> 62/195,056

<151> 2015-07-21

<160> 986

<170> PatentIn version 3.5

<210> 1

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<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

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His	Ala	Ala	Arg	Pro
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<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

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<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

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<210> 5

<211> 1132

<212> PRT

<213> Homo sapiens

<400> 5

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20 25 30

Pro Gln Gly Trp Arg Leu Val Gln Arg Gly Asp Pro Ala Ala Phe Arg
35 40 45

Ala Leu Val Ala Gln Cys Leu Val Cys Val Pro Trp Asp Ala Arg Pro
50 55 60

Pro Pro Ala Ala Pro Ser Phe Arg Gln Val Ser Cys Leu Lys Glu Leu
65 70 75 80

Val Ala Arg Val Leu Gln Arg Leu Cys Glu Arg Gly Ala Lys Asn Val
85 90 95

Leu Ala Phe Gly Phe Ala Leu Leu Asp Gly Ala Arg Gly Gly Pro Pro
100 105 110

Glu Ala Phe Thr Thr Ser Val Arg Ser Tyr Leu Pro Asn Thr Val Thr
115 120 125

Asp Ala Leu Arg Gly Ser Gly Ala Trp Gly Leu Leu Leu Arg Arg Val
130 135 140

Gly Asp Asp Val Leu Val His Leu Leu Ala Arg Cys Ala Leu Phe Val
145 150 155 160

Leu Val Ala Pro Ser Cys Ala Tyr Gln Val Cys Gly Pro Pro Leu Tyr
165 170 175

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Gln Leu Gly Ala Ala Thr Gln Ala Arg Pro Pro Pro His Ala Ser Gly
180 185 190

Pro Arg Arg Arg Leu Gly Cys Glu Arg Ala Trp Asn His Ser Val Arg
195 200 205

Glu Ala Gly Val Pro Leu Gly Leu Pro Ala Pro Gly Ala Arg Arg Arg
210 215 220

Gly Gly Ser Ala Ser Arg Ser Leu Pro Leu Pro Lys Arg Pro Arg Arg
225 230 235 240

Gly Ala Ala Pro Glu Pro Glu Arg Thr Pro Val Gly Gln Gly Ser Trp
245 250 255

Ala His Pro Gly Arg Thr Arg Gly Pro Ser Asp Arg Gly Phe Cys Val
260 265 270

Val Ser Pro Ala Arg Pro Ala Glu Glu Ala Thr Ser Leu Glu Gly Ala
275 280 285

Leu Ser Gly Thr Arg His Ser His Pro Ser Val Gly Arg Gln His His
290 295 300

Ala Gly Pro Pro Ser Thr Ser Arg Pro Pro Arg Pro Trp Asp Thr Pro
305 310 315 320

Cys Pro Pro Val Tyr Ala Glu Thr Lys His Phe Leu Tyr Ser Ser Gly
325 330 335

Asp Lys Glu Gln Leu Arg Pro Ser Phe Leu Leu Ser Ser Leu Arg Pro
340 345 350

Ser Leu Thr Gly Ala Arg Arg Leu Val Glu Thr Ile Phe Leu Gly Ser
355 360 365

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Arg Pro Trp Met Pro Gly Thr Pro Arg Arg Leu Pro Arg Leu Pro Gln
370 375 380

Arg Tyr Trp Gln Met Arg Pro Leu Phe Leu Glu Leu Leu Gly Asn His
385 390 395 400

Ala Gln Cys Pro Tyr Gly Val Leu Leu Lys Thr His Cys Pro Leu Arg
405 410 415

Ala Ala Val Thr Pro Ala Ala Gly Val Cys Ala Arg Glu Lys Pro Gln
420 425 430

Gly Ser Val Ala Ala Pro Glu Glu Glu Asp Thr Asp Pro Arg Arg Leu
435 440 445

Val Gln Leu Leu Arg Gln His Ser Ser Pro Trp Gln Val Tyr Gly Phe
450 455 460

Val Arg Ala Cys Leu Arg Arg Leu Val Pro Pro Gly Leu Trp Gly Ser
465 470 475 480

Arg His Asn Glu Arg Arg Phe Leu Arg Asn Thr Lys Lys Phe Ile Ser
485 490 495

Leu Gly Lys His Ala Lys Leu Ser Leu Gln Glu Leu Thr Trp Lys Met
500 505 510

Ser Val Arg Gly Cys Ala Trp Leu Arg Arg Ser Pro Gly Val Gly Cys
515 520 525

Val Pro Ala Ala Glu His Arg Leu Arg Glu Glu Ile Leu Ala Lys Phe
530 535 540

Leu His Trp Leu Met Ser Val Tyr Val Val Glu Leu Leu Arg Ser Phe
545 550 555 560

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Phe Tyr Val Thr Glu Thr Thr Phe Gln Lys Asn Arg Leu Phe Phe Tyr
565 570 575

Arg Lys Ser Val Trp Ser Lys Leu Gln Ser Ile Gly Ile Arg Gln His
580 585 590

Leu Lys Arg Val Gln Leu Arg Glu Leu Ser Glu Ala Glu Val Arg Gln
595 600 605

His Arg Glu Ala Arg Pro Ala Leu Leu Thr Ser Arg Leu Arg Phe Ile
610 615 620

Pro Lys Pro Asp Gly Leu Arg Pro Ile Val Asn Met Asp Tyr Val Val
625 630 635 640

Gly Ala Arg Thr Phe Arg Arg Glu Lys Arg Ala Glu Arg Leu Thr Ser
645 650 655

Arg Val Lys Ala Leu Phe Ser Val Leu Asn Tyr Glu Arg Ala Arg Arg
660 665 670

Pro Gly Leu Leu Gly Ala Ser Val Leu Gly Leu Asp Asp Ile His Arg
675 680 685

Ala Trp Arg Thr Phe Val Leu Arg Val Arg Ala Gln Asp Pro Pro Pro
690 695 700

Glu Leu Tyr Phe Val Lys Val Asp Val Thr Gly Ala Tyr Asp Thr Ile
705 710 715 720

Pro Gln Asp Arg Leu Thr Glu Val Ile Ala Ser Ile Ile Lys Pro Gln
725 730 735

Asn Thr Tyr Cys Val Arg Arg Tyr Ala Val Val Gln Lys Ala Ala His
740 745 750

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Gly His Val Arg Lys Ala Phe Lys Ser His Val Ser Thr Leu Thr Asp
755 760 765

Leu Gln Pro Tyr Met Arg Gln Phe Val Ala His Leu Gln Glu Thr Ser
770 775 780

Pro Leu Arg Asp Ala Val Val Ile Glu Gln Ser Ser Ser Leu Asn Glu
785 790 795 800

Ala Ser Ser Gly Leu Phe Asp Val Phe Leu Arg Phe Met Cys His His
805 810 815

Ala Val Arg Ile Arg Gly Lys Ser Tyr Val Gln Cys Gln Gly Ile Pro
820 825 830

Gln Gly Ser Ile Leu Ser Thr Leu Leu Cys Ser Leu Cys Tyr Gly Asp
835 840 845

Met Glu Asn Lys Leu Phe Ala Gly Ile Arg Arg Asp Gly Leu Leu Leu
850 855 860

Arg Leu Val Asp Asp Phe Leu Leu Val Thr Pro His Leu Thr His Ala
865 870 875 880

Lys Thr Phe Leu Arg Thr Leu Val Arg Gly Val Pro Glu Tyr Gly Cys
885 890 895

Val Val Asn Leu Arg Lys Thr Val Val Asn Phe Pro Val Glu Asp Glu
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915 920 925

Pro Trp Cys Gly Leu Leu Leu Asp Thr Arg Thr Leu Glu Val Gln Ser
930 935 940

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Asp Tyr Ser Ser Tyr Ala Arg Thr Ser Ile Arg Ala Ser Leu Thr Phe
945 950 955 960

Asn Arg Gly Phe Lys Ala Gly Arg Asn Met Arg Arg Lys Leu Phe Gly
965 970 975

Val Leu Arg Leu Lys Cys His Ser Leu Phe Leu Asp Leu Gln Val Asn
980 985 990

Ser Leu Gln Thr Val Cys Thr Asn Ile Tyr Lys Ile Leu Leu Leu Gln
995 1000 1005

Ala Tyr Arg Phe His Ala Cys Val Leu Gln Leu Pro Phe His Gln
1010 1015 1020

Gln Val Trp Lys Asn Pro Thr Phe Phe Leu Arg Val Ile Ser Asp
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Thr Ala Ser Leu Cys Tyr Ser Ile Leu Lys Ala Lys Asn Ala Gly
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Met Ser Leu Gly Ala Lys Gly Ala Ala Gly Pro Leu Pro Ser Glu
1055 1060 1065

Ala Val Gln Trp Leu Cys His Gln Ala Phe Leu Leu Lys Leu Thr
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Arg His Arg Val Thr Tyr Val Pro Leu Leu Gly Ser Leu Arg Thr
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Ala Gln Thr Gln Leu Ser Arg Lys Leu Pro Gly Thr Thr Leu Thr
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Ala Leu Glu Ala Ala Ala Asn Pro Ala Leu Pro Ser Asp Phe Lys
1115 1120 1125

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Thr Ile Leu Asp
1130

<210> 6
<211> 24
<212> PRT
<213> Artificial Sequence

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

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<211> 42
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<213> Artificial Sequence

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

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1 5 10 15

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
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Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu
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<210> 8

<211> 4027

<212> DNA

<213> Homo sapiens

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<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

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Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr
20 25 30

Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
35 40 45

Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
50 55 60

Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
65 70 75 80

Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
85 90 95

Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
100 105 110

<210> 10

<211> 112

<212> PRT

<213> Homo sapiens

<400> 10

Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Gln Gln Gly
1 5 10 15

Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu ^{SL}Gly Arg Arg Glu Glu Tyr
 20 25 30
 Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys
 35 40 45
 Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys
 50 55 60
 Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg
 65 70 75 80
 Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala
 85 90 95
 Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 100 105 110

<210> 11
 <211> 1184
 <212> DNA
 <213> Artificial Sequence

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

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 gtgccgtgtg tggttcccg cggcctggcc tctttacggg ttatggccct tgcgtgcctt 300
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<210> 12

<211> 63

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

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ccc 63

<210> 13

<211> 135

<212> DNA

<213> Artificial Sequence

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<220>

<221> source

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

<400> 13

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tccctgcgcc cagaggcgtg ccggccagcg gcggggggcg cagtgcacac gagggggctg 120

gacttcgcct gtgat 135

<210> 14

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 14

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10

<210> 15

<211> 123

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 15

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gggcccaccc gcaagcatta ccagccctat gccccaccac gcgacttcgc agcctatcgc 120

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<210> 16

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<211> 48

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 16

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1 5 10 15

Ala Glu Pro Cys Arg Tyr Ser Cys Pro Arg Glu Glu Glu Gly Ser Thr
20 25 30

Ile Pro Ile Gln Glu Asp Tyr Arg Lys Pro Glu Pro Ala Cys Ser Pro
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<210> 17

<211> 72

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 17

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<211> 126

<212> DNA

<213> Artificial Sequence

<220>

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

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<400> 18
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gaactg 126

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<212> DNA
<213> Artificial Sequence

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

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<212> DNA
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polynucleotide"

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gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc 240
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<210> 21
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<212> DNA

<213> Homo sapiens

<400> 21

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gaactgcaga aagataagat ggcggaggcc tacagtgaga ttgggatgaa aggcgagcgc      240
cggaggggca aggggcacga tggcctttac cagggtctca gtacagccac caaggacacc      300
tacgacgccc ttcacatgca ggccctgccc cctcgc                                336
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<210> 22

<211> 40

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<220>

<221> MISC_FEATURE

<222> (1)..(40)

<223> /note="This sequence may encompass 1-10 'Gly Gly Gly Ser'
repeating units"

<400> 22

```
Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
1           5           10          15
```

```
Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
20          25          30
```

```
Gly Gly Gly Ser Gly Gly Gly Ser
35          40
```

<210> 23

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<211> 282

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 23

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

Gln Pro Gln Ala Glu Gly Ser Leu Ala Lys Ala Thr Thr Ala Pro Ala
20 25 30

Thr Thr Arg Asn Thr Gly Arg Gly Gly Glu Glu Lys Lys Lys Glu Lys
35 40 45

Glu Lys Glu Glu Gln Glu Glu Arg Glu Thr Lys Thr Pro Glu Cys Pro
50 55 60

Ser His Thr Gln Pro Leu Gly Val Tyr Leu Leu Thr Pro Ala Val Gln
65 70 75 80

Asp Leu Trp Leu Arg Asp Lys Ala Thr Phe Thr Cys Phe Val Val Gly
85 90 95

Ser Asp Leu Lys Asp Ala His Leu Thr Trp Glu Val Ala Gly Lys Val
100 105 110

Pro Thr Gly Gly Val Glu Glu Gly Leu Leu Glu Arg His Ser Asn Gly
115 120 125

Ser Gln Ser Gln His Ser Arg Leu Thr Leu Pro Arg Ser Leu Trp Asn
130 135 140

Ala Gly Thr Ser Val Thr Cys Thr Leu Asn His Pro Ser Leu Pro Pro
145 150 155 160

_SL

Gln Arg Leu Met Ala Leu Arg Glu Pro Ala Ala Gln Ala Pro Val Lys
165 170 175

Leu Ser Leu Asn Leu Leu Ala Ser Ser Asp Pro Pro Glu Ala Ala Ser
180 185 190

Trp Leu Leu Cys Glu Val Ser Gly Phe Ser Pro Pro Asn Ile Leu Leu
195 200 205

Met Trp Leu Glu Asp Gln Arg Glu Val Asn Thr Ser Gly Phe Ala Pro
210 215 220

Ala Arg Pro Pro Pro Gln Pro Gly Ser Thr Thr Phe Trp Ala Trp Ser
225 230 235 240

Val Leu Arg Val Pro Ala Pro Pro Ser Pro Gln Pro Ala Thr Tyr Thr
245 250 255

Cys Val Val Ser His Glu Asp Ser Arg Thr Leu Leu Asn Ala Ser Arg
260 265 270

Ser Leu Glu Val Ser Tyr Val Thr Asp His
275 280

<210> 24
<211> 847
<212> DNA
<213> Artificial Sequence

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

<400> 24
agggtggcccg aaagtcccaa ggcccaggca tctagtgttc ctactgcaca gccccaggca 60
gaaggcagcc tagccaaagc tactactgca cctgccacta cgcgcaatac tggccgtggc 120

_SL

ggggaggaga agaaaaagga gaaagagaaa gaagaacagg aagagaggga gaccaagacc 180
cctgaatgtc catcccatac ccagccgctg ggcgtctatc tcttgactcc cgcagtacag 240
gacttgtggc ttagagataa ggccaccttt acatgtttcg tcgtgggctc tgacctgaag 300
gatgcccatt tgacttggga gggtgccgga aaggtaccca caggggggggt tgaggaaggg 360
ttgctggagc gccattccaa tggctctcag agccagcact caagactcac ctttccgaga 420
tccctgtgga acgccgggac ctctgtcaca tgtactctaa atcatcctag cctgccccca 480
cagcgtctga tggcccttag agagccagcc gccagggcac cagttaagct tagcctgaat 540
ctgctcgcca gtagtgatcc ccagaggcc gccagctggc tcttatgcga agtgtccggc 600
ttagcccgcc ccaacatctt gctcatgtgg ctggaggacc agcgagaagt gaacaccagc 660
ggcttcgctc cagcccggcc cccaccccag ccgggttcta ccacattctg ggcttggagt 720
gtcttaaggg tcccagcacc acctagcccc cagccagcca catacacctg tgttgtgtcc 780
catgaagata gcaggaccct gctaaatgct tctaggagtc tggaggtttc ctacgtgact 840
gaccatt 847

<210> 25

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 25

Gly Gly Gly Gly Ser

1 5

<210> 26

<211> 30

<212> PRT

<213> Artificial Sequence

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<220>

<221> source

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

<220>

<221> MISC_FEATURE

<222> (1)..(30)

<223> /note="This sequence may encompass 1-6 'Gly Gly Gly Gly Ser' repeating units"

<400> 26

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
20 25 30

<210> 27

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 27

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

Gly Gly Gly Ser
20

<210> 28

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

peptide"

<400> 28

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 29

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 29

Gly Gly Gly Ser
1

<210> 30

<211> 5000

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<220>

<221> misc_feature

<222> (1)..(5000)

<223> /note="This sequence may encompass 50-5000 nucleotides"

<400> 30

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300

_SL

[illegible]

_SL

[illegible]

_SL

[illegible]

_SL

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4740
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4800
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4860
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4920
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4980
aaaaaaaaaa aaaaaaaaaa	5000

<210> 31
<211> 100
<212> DNA
<213> Artificial Sequence

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

<400> 31 tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	60
tttttttttt tttttttttt tttttttttt tttttttttt	100

<210> 32
<211> 5000
<212> DNA
<213> Artificial Sequence

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

<220>
<221> misc_feature
<222> (1)..(5000)
<223> /note="This sequence may encompass 50-5000 nucleotides"

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<400> 32

tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	60
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	120
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	180
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	240
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	300
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	360
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	420
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	480
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	540
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	600
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	660
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	720
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	780
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	840
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	900
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	960
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	1020
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	1080
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	1140
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	1200
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	1260
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	1320
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	1380
tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	tttttttttt	1440

_SL

t	t	t	t	t	t	1500
t	t	t	t	t	t	1560
t	t	t	t	t	t	1620
t	t	t	t	t	t	1680
t	t	t	t	t	t	1740
t	t	t	t	t	t	1800
t	t	t	t	t	t	1860
t	t	t	t	t	t	1920
t	t	t	t	t	t	1980
t	t	t	t	t	t	2040
t	t	t	t	t	t	2100
t	t	t	t	t	t	2160
t	t	t	t	t	t	2220
t	t	t	t	t	t	2280
t	t	t	t	t	t	2340
t	t	t	t	t	t	2400
t	t	t	t	t	t	2460
t	t	t	t	t	t	2520
t	t	t	t	t	t	2580
t	t	t	t	t	t	2640
t	t	t	t	t	t	2700
t	t	t	t	t	t	2760
t	t	t	t	t	t	2820
t	t	t	t	t	t	2880

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t	t	t	t	t	t	2940
t	t	t	t	t	t	3000
t	t	t	t	t	t	3060
t	t	t	t	t	t	3120
t	t	t	t	t	t	3180
t	t	t	t	t	t	3240
t	t	t	t	t	t	3300
t	t	t	t	t	t	3360
t	t	t	t	t	t	3420
t	t	t	t	t	t	3480
t	t	t	t	t	t	3540
t	t	t	t	t	t	3600
t	t	t	t	t	t	3660
t	t	t	t	t	t	3720
t	t	t	t	t	t	3780
t	t	t	t	t	t	3840
t	t	t	t	t	t	3900
t	t	t	t	t	t	3960
t	t	t	t	t	t	4020
t	t	t	t	t	t	4080
t	t	t	t	t	t	4140
t	t	t	t	t	t	4200
t	t	t	t	t	t	4260
t	t	t	t	t	t	4320

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tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4380
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4440
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4500
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4560
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4620
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4680
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4740
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4800
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4860
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4920
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4980
tttttttttt tttttttttt	5000

<210> 33

<211> 5000

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<220>

<221> misc_feature

<222> (1)..(5000)

<223> /note="This sequence may encompass 100-5000 nucleotides"

<400> 33

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	60
---	----

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	120
---	-----

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	180
---	-----

_SL

[illegible]

_SL

[illegible]

_SL

[illegible]

_SL

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4560
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4620
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4740
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4800
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4860
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4920
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	4980
aaaaaaaaaa aaaaaaaaaa	5000

<210> 34
<211> 400
<212> DNA
<213> Artificial Sequence

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

<220>
<221> misc_feature
<222> (1)..(400)
<223> /note="This sequence may encompass 100-400 nucleotides"

<400> 34 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	60
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	300
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	360

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 400

<210> 35
<211> 2000
<212> DNA
<213> Artificial Sequence

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

<220>
<221> misc_feature
<222> (1)..(2000)
<223> /note="This sequence may encompass 50-2000 nucleotides"

<400> 35
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 420

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 480

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 540

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 600

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 660

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 720

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 780

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 840

_SL

aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	900
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	960
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1020
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1080
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1140
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1200
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1260
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1320
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1380
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1440
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1500
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1560
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1620
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1680
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1740
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1800
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1860
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1920
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1980
aaaaaaaaaa	aaaaaaaaaa					2000

<210> 36
<211> 230
<212> PRT
<213> Artificial Sequence

<220>

_SL

<221> source

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

<400> 36

Glu Ser Lys Tyr Gly Pro Pro Cys Pro Pro Cys Pro Ala Pro Glu Phe
1 5 10 15

Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
20 25 30

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
35 40 45

Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val
50 55 60

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
65 70 75 80

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
85 90 95

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
100 105 110

Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
115 120 125

Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
130 135 140

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

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
165 170 175

_SL

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu
180 185 190

Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser
195 200 205

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
210 215 220

Leu Ser Leu Gly Lys Met
225 230

<210> 37

<211> 690

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 37

gagagcaagt acggccctcc ctgccccct tgccctgccc ccgagttcct gggcggaccc	60
agcgtgttcc tgttcccccc caagcccaag gacaccctga tgatcagccg gacccccgag	120
gtgacctgtg tgggtggtgga cgtgtcccag gaggaccccg aggtccagtt caactggtac	180
gtggacggcg tggagggtgca caacgccaag accaagcccc gggaggagca gttcaatagc	240
acctaccggg tgggtgtccgt gctgaccgtg ctgcaccagg actggctgaa cggcaaggaa	300
tacaagtgta aggtgtccaa caagggcctg cccagcagca tcgagaaaac catcagcaag	360
gccaagggcc agcctcggga gccccaggtg tacaccctgc cccctagcca agaggagatg	420
accaagaacc aggtgtccct gacctgcctg gtgaagggtc tctaccccag cgacatcgcc	480
gtggagtggg agagcaacgg ccagcccag aacaactaca agaccacccc ccctgtgctg	540
gacagcgacg gcagcttctt cctgtacagc cggctgaccg tggacaagag ccggtggcag	600

_SL

gagggcaacg tcttttagctg ctccgtgatg cacgaggccc tgcacaacca ctacaccag 660

aagagcctga gcctgtccct gggcaagatg 690

<210> 38
 <211> 40
 <212> PRT
 <213> Artificial Sequence

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

<220>
 <221> MISC_FEATURE
 <222> (1)..(40)
 <223> /note="This sequence may encompass 1-10 'Gly Gly Gly Ser' repeating units"

<400> 38
 Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
 1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
 20 25 30

Gly Gly Gly Ser Gly Gly Gly Ser
 35 40

<210> 39
 <211> 242
 <212> PRT
 <213> Artificial Sequence

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

<400> 39
 Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
 1 5 10 15

_SL

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

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

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

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

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

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys Ser Arg Val Thr Ile Ser
180 185 190

Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr
195 200 205

_SL

Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
225 230 235 240

Ser Ser

<210> 40

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 40

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

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

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

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

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

_SL

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys Ser Arg Val Thr Ile Ser
180 185 190

Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr
195 200 205

Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
225 230 235 240

Ser Ser

<210> 41

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

_SL

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

<400> 41

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

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

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

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys
50 55 60

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

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Ala
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Ala Pro Arg Leu Leu Ile Tyr His Thr ^{SL}Ser Arg Leu His Ser Gly
180 185 190

Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln
210 215 220

Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
225 230 235 240

Ile Lys

<210> 42
<211> 242
<212> PRT
<213> Artificial Sequence

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

<400> 42
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

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

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu

65		70		<u>SL</u> 75		80									
Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
				85				90						95	
Lys	His	Tyr	Tyr	Tyr	Gly	Gly	Ser	Tyr	Ala	Met	Asp	Tyr	Trp	Gly	Gln
			100					105					110		
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly
		115						120				125			
Gly	Ser	Gly	Gly	Gly	Gly	Ser	Glu	Ile	Val	Met	Thr	Gln	Ser	Pro	Ala
	130						135				140				
Thr	Leu	Ser	Leu	Ser	Pro	Gly	Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala
145					150					155					160
Ser	Gln	Asp	Ile	Ser	Lys	Tyr	Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly
				165					170					175	
Gln	Ala	Pro	Arg	Leu	Leu	Ile	Tyr	His	Thr	Ser	Arg	Leu	His	Ser	Gly
			180					185					190		
Ile	Pro	Ala	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Tyr	Thr	Leu
		195					200					205			
Thr	Ile	Ser	Ser	Leu	Gln	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Phe	Cys	Gln
	210					215					220				
Gln	Gly	Asn	Thr	Leu	Pro	Tyr	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu
225					230					235					240
Ile	Lys														

<210> 43

_SL

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 43

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

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

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

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

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

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
130 135 140

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
145 150 155 160

_SL

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
165 170 175

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys Ser
180 185 190

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
195 200 205

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
210 215 220

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
225 230 235 240

Thr Leu Val Thr Val Ser Ser
245

<210> 44

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 44

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

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

_SL

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

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

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

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
130 135 140

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
145 150 155 160

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
165 170 175

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys Ser
180 185 190

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
195 200 205

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
210 215 220

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
225 230 235 240

_SL

Thr Leu Val Thr Val Ser Ser
245

<210> 45

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 45

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

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

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

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys
50 55 60

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

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly ^{SL}Gly Ser Glu Ile Val Met
 130 135 140

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
 145 150 155 160

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
 165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
 180 185 190

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
 195 200 205

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 210 215 220

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
 225 230 235 240

Gly Thr Lys Leu Glu Ile Lys
 245

<210> 46

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 46

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

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr

20 25 30

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys
50 55 60

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

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
130 135 140

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
145 150 155 160

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
180 185 190

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala

210

215

_SL

220

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
 225 230 235 240

Gly Thr Lys Leu Glu Ile Lys
 245

<210> 47

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 47

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
 20 25 30

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

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

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

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

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
 100 105 110

_SL

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
130 135 140

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
145 150 155 160

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
165 170 175

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys Ser
180 185 190

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
195 200 205

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
210 215 220

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
225 230 235 240

Thr Leu Val Thr Val Ser Ser
245

<210> 48

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

<400> 48

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

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

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

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys
50 55 60

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

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
130 135 140

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
145 150 155 160

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
180 185 190

_SL

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
210 215 220

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
225 230 235 240

Gly Thr Lys Leu Glu Ile Lys
245

<210> 49

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 49

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

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

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

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

Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln ^{SL}Gly Asn Thr Leu Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys Ser Arg Val Thr Ile Ser
180 185 190

Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr
195 200 205

Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
225 230 235 240

Ser Ser

<210> 50

<211> 242

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

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

<400> 50

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

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

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

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys
50 55 60

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

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Ala
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly

165 170 ^{-SL} 175

Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly
180 185 190

Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln
210 215 220

Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
225 230 235 240

Ile Lys

<210> 51
<211> 242
<212> PRT
<213> Artificial Sequence

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

<400> 51
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

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

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

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

_SL

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

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

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Lys Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser Val Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu Thr Ile Ile
180 185 190

Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn Ser Leu Gln
195 200 205

Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr Val
225 230 235 240

Ser Ser

_SL

<210> 52
<211> 813
<212> DNA
<213> Artificial Sequence

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

<400> 52
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgaattg tgatgacca gtcacccgcc actcttagcc ttccacccgg tgagcgcgca 120
accctgtctt gcagagcctc ccaagacatc tcaaaatacc ttaattggta tcaacagaag 180
cccggacagg ctctcgcct tctgatctac cacaccagcc ggctccattc tggaatccct 240
gccaggttca gcggtagcgg atctgggacc gactacaccc tctactatcag ctactgcag 300
ccagaggact tcgctgtcta tttctgtcag caagggaaca ccctgcccta cacctttgga 360
cagggcacca agctcgagat taaagggtgga ggtggcagcg gaggagggtg gtccggcggt 420
ggaggaagcc aggtccaact ccaagaaagc ggaccgggtc ttgtgaagcc atcagaaact 480
ctttcactga cttgtactgt gagcggagtg tctctccccg attacgggt gtcttgatc 540
agacagccac cggggaaggg tctggaatgg attggagtga tttggggctc tgagactact 600
tactactctt catccctcaa gtcacgcgtc accatctcaa aggacaactc taagaatcag 660
gtgtcactga aactgtcatc tgtgaccgca gccgacaccg ccgtgtacta ttgcgctaag 720
cattactatt atggcgggag ctacgcaatg gattactggg gacagggtac tctggtcacc 780
gtgtccagcc accaccatca tcaccatcac cat 813

<210> 53
<211> 813
<212> DNA
<213> Artificial Sequence

<220>

_SL

<221> source

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

<400> 53

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaaattg tgatgacca gtcacccgcc actcttagcc tttcaccggt tgagcgcgca	120
accctgtctt gcagagcctc ccaagacatc tcaaaatacc ttaattggta tcaacagaag	180
cccggacagg ctctcgcct tctgatctac cacaccagcc ggctccattc tggaatccct	240
gccaggttca gcggtagcgg atctgggacc gactacaccc tcactatcag ctactgcag	300
ccagaggact tcgctgtcta tttctgtcag caagggaaca ccctgcccta cacctttgga	360
cagggcacca agctcgagat taaaggtgga ggtggcagcg gaggaggtgg gtccggcggt	420
ggaggaagcc aggtccaact ccaagaaagc ggaccgggtc ttgtgaagcc atcagaaact	480
ctttcactga cttgtactgt gagcggagtg tctctccccg attacggggt gtcttgatc	540
agacagccac cggggaaggg tctggaatgg attggagtga tttggggctc tgagactact	600
tactaccaat catccctcaa gtcacgcgtc accatctcaa aggacaactc taagaatcag	660
gtgtcactga aactgtcatc tgtgaccgca gccgacaccg ccgtgtacta ttgcgctaag	720
cattactatt atggcgggag ctacgcaatg gattactggg gacagggtac tctggtcacc	780
gtgtccagcc accaccatca tcaccatcac cat	813

<210> 54

<211> 813

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 54

atggctctgc ccgtgaccgc actcctcctg ccactggctc tgctgcttca cgccgctcgc	60
ccacaagtcc agcttcaaga atcagggcct ggtctgggtga agccatctga gactctgtcc	120

_SL

ctcacttgca ccgtgagcgg agtgtccctc ccagactacg gagtgagctg gattagacag 180
cctcccggaaggaggactgga gtggatcgga gtgatttggg gtagcgaaac cacttactat 240
tcattttccc tgaagtcacg gggtcaccatt tcaaaggata actcaaagaa tcaagtgagc 300
ctcaagctct catcagtcac cgccgctgac accgccgtgt attactgtgc caagcattac 360
tactatggag ggtcctacgc catggactac tggggccagg gaactctggg cactgtgtca 420
tctggtaggag gaggtagcgg aggaggcggg agcggtaggag gtggctccga aatcgtgatg 480
accagagcc ctgcaaccct gtccctttct cccggggaac gggctaccct ttcttgctcg 540
gcatcacaag atatctcaaa atacctcaat tggatcaac agaagccggg acaggcccct 600
aggcttctta tctaccacac ctctgcctg catagcggga ttcccgcacg ctttagcggg 660
tctggaagcg ggaccgacta cactctgacc atctcatctc tccagcccga ggacttcgcc 720
gtctacttct gccagcaggg taacaccctg ccgtacacct tcggccaggg caccaagctt 780
gagatcaaac atcaccacca tcattcaccat cac 813

<210> 55

<211> 813

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 55

atgggtctgc ccgtgaccgc actcctcctg ccactggctc tgctgcttca cgccgctcgc 60
ccacaagtcc agcttcaaga atcagggcct ggtctgggtga agccatctga gactctgtcc 120
ctcacttgca ccgtgagcgg agtgtccctc ccagactacg gagtgagctg gattagacag 180
cctcccggaaggaggactgga gtggatcgga gtgatttggg gtagcgaaac cacttactat 240
caattttccc tgaagtcacg gggtcaccatt tcaaaggata actcaaagaa tcaagtgagc 300
ctcaagctct catcagtcac cgccgctgac accgccgtgt attactgtgc caagcattac 360

_SL

tactatggag ggtcctacgc catggactac tggggccagg gaactctggt cactgtgtca 420
tctggtaggag gaggtacggg aggaggcggg agcggtaggag gtggctccga aatcgtgatg 480
accagagacc ctgcaaccct gtccctttct cccggggaac gggctaccct ttcttgtcgg 540
gcatcacaag atatctcaaa atacctcaat tggatatcaac agaagccggg acaggcccct 600
aggcttctta tctaccacac ctctcgcctg catagcggga ttcccgcacg ctttagcggg 660
tctggaagcg ggaccgacta cactctgacc atctcatctc tccagcccga ggacttcgcc 720
gtctacttct gccagcaggg taacaccctg ccgtacacct tcggccaggg caccaagctt 780
gagatcaaac atcaccacca tcatcaccat cac 813

<210> 56

<211> 828

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 56

atggccctcc cagtgaccgc tctgctgctg cctctcgac ttcttctcca tgccgctcgg 60
cctgagatcg tcatgacca aagccccgct accctgtccc tgtcaccgg cgagagggca 120
accctttcat gcagggccag ccaggacatt tctaagtacc tcaactggta tcagcagaag 180
ccagggcagg ctctcgcct gctgatctac cacaccagcc gcctccacag cggatatccc 240
gccagatfff cgggagcgg gtctggaacc gactacaccc tcaccatctc ttctctgcag 300
cccgaggatt tcgccgtcta tttctgccag cagggaata ctctgccgta caccttcggt 360
caaggtacca agctggaaat caaggaggc ggaggatcag gcggtggcgg aagcggagga 420
ggtggctccg gaggaggagg ttcccaagtg cagcttcaag aatcaggacc cggacttggt 480
aagccatcag aaaccctctc cctgacttgt accgtgtccg gtgtgagcct ccccgactac 540
ggagtctctt ggattcgcca gcctccgggg aagggtcttg aatggattgg ggtgatttgg 600

_SL

ggatcagaga ctacttacta ctcttcatca ctttaagtcac gggtcaccat cagcaaagat	660
aatagcaaga accaagtgtc acttaagctg tcatctgtga ccgccgctga caccgccgtg	720
tactattgtg ccaaacatta ctattacgga gggtcttatg ctatggacta ctggggacag	780
gggaccctgg tgactgtctc tagccatcac catcaccacc atcatcac	828

<210> 57

<211> 828

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 57

atggccctcc cagtgaccgc tctgctgctg cctctcgac ttcttctcca tgccgctcgg	60
cctgagatcg tcatgaccca aagccccgct accctgtccc tgtcaccgga cgagagggca	120
accctttcat gcagggccag ccaggacatt tctaagtacc tcaactggta tcagcagaag	180
ccagggcagg ctctcgcct gctgatctac cacaccagcc gcctccacag cggtatcccc	240
gccagatfff ccgggagcgg gtctggaacc gactacaccc tcaccatctc ttctctgcag	300
cccgaggatt tcgccgtcta tttctgccag caggggaata ctctgccgta caccttcggt	360
caaggtacca agctggaaat caagggaggc ggaggatcag gcggtggcgg aagcggagga	420
ggtggctccg gaggaggagg ttccaagtg cagcttcaag aatcaggacc cggacttgtg	480
aagccatcag aaaccctctc cctgacttgt accgtgtccg gtgtgagcct ccccgactac	540
ggagtctctt ggattcgcca gcctccgggg aagggtcttg aatggattgg ggtgatttgg	600
ggatcagaga ctacttacta ccagtcatca ctttaagtcac gggtcaccat cagcaaagat	660
aatagcaaga accaagtgtc acttaagctg tcatctgtga ccgccgctga caccgccgtg	720
tactattgtg ccaaacatta ctattacgga gggtcttatg ctatggacta ctggggacag	780
gggaccctgg tgactgtctc tagccatcac catcaccacc atcatcac	828

_SL

<210> 58
<211> 828
<212> DNA
<213> Artificial Sequence

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

<400> 58
atggcactgc ctgtcactgc cctcctgctg cctctggccc tccttctgca tgccgccagg 60
ccccaagtcc agctgcaaga gtcaggaccc ggactgggtga agccgtctga gactctctca 120
ctgacttgta ccgtcagcgg cgtgtccctc cccgactacg gagtgtcatg gatccgccaa 180
cctcccggga aagggttga atggattggg gtcactctggg gttctgaaac cacctactac 240
tcactttccc tgaagtccag ggtgaccatc agcaaggata attccaagaa ccaggtcagc 300
cttaagctgt catctgtgac cgctgctgac accgccgtgt attactgcgc caagcactac 360
tattacggag gaagctacgc tatggactat tggggacagg gcactctcgt gactgtgagc 420
agcggcggtg gagggctctgg aggtggagga tccgggtggtg gtgggtcagg cggaggaggg 480
agcgagattg tgatgactca gtcaccagcc accctttctc tttcaccgg cgagagagca 540
accctgagct gtagagccag ccaggacatt tctaagtacc tcaactggta tcagcaaaaa 600
ccggggcagg cccctcgcct cctgatctac catacctcac gccttcactc tggtatcccc 660
gctcggttta gcggatcagg atctgggtacc gactacactc tgaccatttc cagcctgcag 720
ccagaagatt tcgcagtgt tttctgccag cagggaata ccttcctta caccttcggt 780
cagggaacca agctcgaaat caagcaccat caccatcatc accaccat 828

<210> 59
<211> 828
<212> DNA
<213> Artificial Sequence

<220>

_SL

<221> source

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

<400> 59

atggcactgc ctgtcactgc cctcctgctg cctctggccc tccttctgca tgccgccagg	60
ccccaagtcc agctgcaaga gtcaggaccc ggactgggtga agccgtctga gactctctca	120
ctgacttgta ccgtcagcgg cgtgtccctc cccgactacg gagtgatcatg gatccgccaa	180
cctcccggga aagggtctga atggattggt gtcactctggg gttctgaaac cacctactac	240
cagtcttccc tgaagtccag ggtgaccatc agcaaggata attccaagaa ccaggtcagc	300
cttaagctgt catctgtgac cgctgctgac accgccgtgt attactgcgc caagcactac	360
tattacggag gaagctacgc tatggactat tggggacagg gcactctcgt gactgtgagc	420
agcggcggtg gagggctctgg aggtggagga tccgggtggtg gtgggtcagg cggaggaggg	480
agcgagattg tgatgactca gtcaccagcc accctttctc tttcaccgga cgagagagca	540
accctgagct gtagagccag ccaggacatt tctaagtacc tcaactggta tcagcaaaaa	600
ccggggcagg cccctcgcct cctgatctac catacctcac gccttcactc tggatatcccc	660
gctcggttta gcggatcagg atctggtacc gactacactc tgaccatttc cagcctgcag	720
ccagaagatt tcgcagtgtg tttctgccag cagggaata cccttcctta caccttcggt	780
caggaacca agctcgaaat caagcaccat caccatcatc atcaccac	828

<210> 60

<211> 828

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 60

atggccctcc cagtgaccgc tctgctgctg cctctcgac ttcttctcca tgccgctcgg	60
cctgagatcg tcatgacca aagccccgct accctgtccc tgtcacccgg cgagagggca	120

_SL

accctttcat gcagggccag ccaggacatt tctaagtacc tcaactggta tcagcagaag 180
ccagggcagg ctctctgcct gctgatctac cacaccagcc gcctccacag cggtatcccc 240
gccagatttt ccgggagcgg gtctggaacc gactacaccc tcaccatctc ttctctgcag 300
cccgaggatt tcgccgtcta tttctgccag caggggaata ctctgccgta caccttcggt 360
caaggtacca agctggaaat caagggaggc ggaggatcag gcggtggcgg aagcggagga 420
ggtggctccg gaggaggagg ttcccaagtg cagcttcaag aatcaggacc cggacttgtg 480
aagccatcag aaacctctc cctgacttgt accgtgtccg gtgtgagcct ccccgactac 540
ggagtctctt ggattcgcca gcctccgggg aagggtcttg aatggattgg ggtgatttgg 600
ggatcagaga ctacttacta caattcatca cttaagtcac gggtcaccat cagcaaagat 660
aatagcaaga accaagtgtc acttaagctg tcattctgtga ccgccgctga caccgccgtg 720
tactattgtg ccaaacatta ctattacgga gggctttatg ctatggacta ctggggacag 780
gggaccctgg tgactgtctc tagccatcac catcaccacc atcatcac 828

<210> 61

<211> 828

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 61

atggcactgc ctgtcactgc cctcctgctg cctctggccc tccttctgca tgccgccagg 60
ccccaagtcc agctgcaaga gtcaggaccc ggactgggtga agccgtctga gactctctca 120
ctgacttgta ccgtcagcgg cgtgtccctc cccgactacg gagtgatcatg gatccgcca 180
cctcccgga aagggttga atggattggg gtcatctggg gttctgaaac cacctactac 240
aactcttccc tgaagtccag ggtgaccatc agcaaggata attccaagaa ccaggtcagc 300
cttaagctgt catctgtgac cgctgctgac accgccgtgt attactgcgc caagcactac 360

_SL

tattacggag gaagctacgc tatggactat tggggacagg gcactctcgt gactgtgagc 420
agcggcgggtg gaggggtctgg aggtggagga tccgggtgggtg gtgggtcagg cggaggaggg 480
agcgagattg tgatgactca gtcaccagcc accctttctc tttcaccg cgagagagca 540
accctgagct gtagagccag ccaggacatt tctaagtacc tcaactggta tcagcaaaaa 600
ccggggcagg cccctcgcct cctgatctac catacctcac gccttcactc tggtatcccc 660
gctcggttta gcggatcagg atctgggtacc gactacactc tgaccatttc cagcctgcag 720
ccagaagatt tcgcagtgtg tttctgccag cagggaata cccttcctta caccttcggt 780
cagggaacca agctcgaaat caagcaccat caccatcatc accaccat 828

<210> 62

<211> 813

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 62

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgaattg tgatgacca gtcaccgcc actcttagcc tttcaccg tgagcgcgca 120
accctgtctt gcagagcctc ccaagacatc taaaaatacc ttaattggta tcaacagaag 180
cccggacagg ctctcgcct tctgatctac cacaccagcc ggctccattc tggaatccct 240
gccaggttca gcggtagcgg atctgggacc gactacaccc tcaactatcag ctactgcag 300
ccagaggact tcgctgtcta tttctgtcag caagggaaca ccctgcccta cacctttgga 360
cagggcacca agctcgagat taaagggtgga ggtggcagcg gaggagggtg gtccggcggt 420
ggaggaagcc aggtccaact ccaagaaagc ggaccgggtc ttgtgaagcc atcagaaact 480
ctttcactga cttgtactgt gagcggagtg tctctccccg attacggggt gtcttggatc 540
agacagccac cggggaaggg tctggaatgg attggagtga tttggggctc tgagactact 600

_SL

tactacaatt catccctcaa gtcacgcgtc accatctcaa aggacaactc taagaatcag 660
gtgtcactga aactgtcatc tgtgaccgca gccgacaccg ccgtgtacta ttgcgctaag 720
cattactatt atggcgggag ctacgcaatg gattactggg gacagggtag tctggtcacc 780
gtgtccagcc accaccatca tcaccatcac cat 813

<210> 63

<211> 813

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 63

atggctctgc ccgtgaccgc actcctcctg ccactggctc tgctgcttca cgccgctcgc 60
ccacaagtcc agcttcaaga atcagggcct ggtctggtga agccatctga gactctgtcc 120
ctcacttgca ccgtgagcgg agtgtccctc ccagactacg gagtgagctg gattagacag 180
cctcccggaaggaggactgga gtggatcgga gtgatttggg gtagcgaaac cacttactat 240
aactcttccc tgaagtcacg ggtcaccatt tcaaaggata actcaaagaa tcaagtgagc 300
ctcaagctct catcagtcac cgccgctgac accgccgtgt attactgtgc caagcattac 360
tactatggag ggtcctacgc catggactac tggggccagg gaactctggt cactgtgtca 420
tctggtggag gaggtagcgg aggaggcggg agcgggtggag gtggctccga aatcgtgatg 480
accagagacc ctgcaaccct gtccctttct cccggggaac gggctaccct ttcttgtcgg 540
gcatcacaag atatctcaaa atacctcaat tggatatcaac agaagccggg acaggcccct 600
aggcttctta tctaccacac ctctcgcctg catagcggga ttcccgacg ctttagcggg 660
tctggaagcg ggaccgacta cactctgacc atctcatctc tccagcccga ggacttcgcc 720
gtctacttct gccagcaggg taacaccctg ccgtacacct tcggccaggg caccaagctt 780
gagatcaaac atcaccacca tcatcaccat cac 813

_SL

<210> 64

<211> 271

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 64

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

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

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
130 135 140

_SL

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
145 150 155 160

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
165 170 175

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys Ser
195 200 205

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
210 215 220

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
225 230 235 240

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Leu Val Thr Val Ser Ser His His His His His His His His
260 265 270

<210> 65

<211> 271

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 65

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr ^{SL}Gln Ser Pro Ala Thr Leu
 20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
 35 40 45

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

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
 65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
 85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
 100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
 130 135 140

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
 145 150 155 160

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
 165 170 175

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
 180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys Ser
 195 200 205

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys ^{_SL}Asn Gln Val Ser Leu Lys
 210 215 220

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
 225 230 235 240

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
 245 250 255

Thr Leu Val Thr Val Ser Ser His His His His His His His His
 260 265 270

<210> 66
 <211> 271
 <212> PRT
 <213> Artificial Sequence

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

<400> 66
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
 20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
 35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
 65 70 75 80

Ser Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys

_SL

<211> 271

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 67

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Gln Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
145 150 155 160

_SL

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
165 170 175

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
195 200 205

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
245 250 255

Gly Thr Lys Leu Glu Ile Lys His His His His His His His His
260 265 270

<210> 68

<211> 276

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 68

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

_SL

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

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

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val
145 150 155 160

Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser
165 170 175

Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly
180 185 190

Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser
195 200 205

Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn
210 215 220

_SL

Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val
225 230 235 240

Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp
245 250 255

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser His His His His
260 265 270

His His His His
275

<210> 69

<211> 276

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 69

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

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

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr ^{SL}Asp Tyr Thr Leu Thr Ile
 85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
 100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val
 145 150 155 160

Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser
 165 170 175

Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly
 180 185 190

Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln
 195 200 205

Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn
 210 215 220

Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val
 225 230 235 240

Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp
 245 250 255

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser His His His His
 260 265 270

_SL

His His His His
275

<210> 70

<211> 276

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 70

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Ser Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly

_SL

<400> 71

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Gln Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro
165 170 175

Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys
180 185 190

_SL

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
195 200 205

Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln
225 230 235 240

Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro
245 250 255

Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys His His His His
260 265 270

His His His His
275

<210> 72

<211> 276

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 72

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

_SL

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

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val
145 150 155 160

Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser
165 170 175

Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly
180 185 190

Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn
195 200 205

Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn
210 215 220

Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val
225 230 235 240

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Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp
245 250 255

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser His His His His
260 265 270

His His His His
275

<210> 73

<211> 276

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 73

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Asn Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn	Gln	Val	Ser	Leu	Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala
			100					105		SL			110		
Val	Tyr	Tyr	Cys	Ala	Lys	His	Tyr	Tyr	Tyr	Gly	Gly	Ser	Tyr	Ala	Met
		115					120					125			
Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly
	130					135					140				
Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly
145					150					155					160
Ser	Glu	Ile	Val	Met	Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Leu	Ser	Pro
			165					170						175	
Gly	Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Asp	Ile	Ser	Lys
			180					185					190		
Tyr	Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu
		195					200					205			
Ile	Tyr	His	Thr	Ser	Arg	Leu	His	Ser	Gly	Ile	Pro	Ala	Arg	Phe	Ser
	210					215					220				
Gly	Ser	Gly	Ser	Gly	Thr	Asp	Tyr	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln
225					230					235					240
Pro	Glu	Asp	Phe	Ala	Val	Tyr	Phe	Cys	Gln	Gln	Gly	Asn	Thr	Leu	Pro
			245						250					255	
Tyr	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys	His	His	His	His
			260					265					270		
His	His	His	His												
		275													

_SL

<210> 74

<211> 271

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 74

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

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

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
130 135 140

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr

_SL

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Asn Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
145 150 155 160

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
165 170 175

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
195 200 205

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

_SL

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
245 250 255

Gly Thr Lys Leu Glu Ile Lys His His His His His His His His
260 265 270

<210> 76

<211> 271

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 76

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu
20 25 30

Ser Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln
35 40 45

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

Val Lys Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile
85 90 95

_SL

Ser Asn Leu Glu Gln Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
130 135 140

Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser
145 150 155 160

Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
165 170 175

Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly
180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser
195 200 205

Arg Leu Thr Ile Ile Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys
210 215 220

Met Asn Ser Leu Gln Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys
225 230 235 240

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Ser Val Thr Val Ser Ser His His His His His His His His
260 265 270

<210> 77
<211> 486
<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

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

<400> 77

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

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

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
130 135 140

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
145 150 155 160

Leu Ser Leu Thr Cys Thr Val Ser Gly Val ^{SL}Ser Leu Pro Asp Tyr Gly
 165 170 175

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
 180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys Ser
 195 200 205

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
 210 215 220

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
 225 230 235 240

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
 245 250 255

Thr Leu Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys ^{_SL} Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 78
 <211> 486
 <212> PRT
 <213> Artificial Sequence

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

<400> 78
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

1 5 10 _SL 15
 His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
 20 25 30
 Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
 35 40 45
 Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala
 50 55 60
 Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
 65 70 75 80
 Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
 85 90 95
 Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
 100 105 110
 Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 115 120 125
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
 130 135 140
 Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
 145 150 155 160
 Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
 165 170 175
 Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
 180 185 190
 Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys Ser

_SL

195		200		205											
Arg	Val	Thr	Ile	Ser	Lys	Asp	Asn	Ser	Lys	Asn	Gln	Val	Ser	Leu	Lys
	210					215					220				
Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Lys
225					230					235					240
His	Tyr	Tyr	Tyr	Gly	Gly	Ser	Tyr	Ala	Met	Asp	Tyr	Trp	Gly	Gln	Gly
				245					250					255	
Thr	Leu	Val	Thr	Val	Ser	Ser	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro
			260						265				270		
Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro	Glu
		275					280					285			
Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp
	290					295					300				
Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly
305					310					315					320
Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg
				325					330					335	
Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln
			340					345					350		
Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu	Glu
		355					360					365			
Glu	Gly	Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg	Ser	Ala	Asp	Ala
	370					375					380				
Pro	Ala	Tyr	Lys	Gln	Gly	Gln	Asn	Gln	Leu	Tyr	Asn	Glu	Leu	Asn	Leu

_SL

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Ser Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
145 150 155 160

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
165 170 175

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
195 200 205

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

_SL

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
245 250 255

Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

_SL

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 80

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 80

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

_SL

Gln Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
145 150 155 160

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
165 170 175

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
195 200 205

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
245 250 255

Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

_SL

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

_SL

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 81
<211> 491
<212> PRT
<213> Artificial Sequence

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

<400> 81
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

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

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr^{SL} Lys Leu Glu Ile Lys
 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val
 145 150 155 160

Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser
 165 170 175

Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly
 180 185 190

Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser
 195 200 205

Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn
 210 215 220

Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val
 225 230 235 240

Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp
 245 250 255

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Thr Thr Thr Pro
 260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
 275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
 290 295 300

Thr	Arg	Gly	Leu	Asp	Phe	Ala	Cys	Asp	Ile	<u>SL</u> Tyr	Ile	Trp	Ala	Pro	Leu
305					310					315					320
Ala	Gly	Thr	Cys	Gly	Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr
				325					330					335	
Cys	Lys	Arg	Gly	Arg	Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe
			340						345					350	
Met	Arg	Pro	Val	Gln	Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg
			355							360			365		
Phe	Pro	Glu	Glu	Glu	Glu	Gly	Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser
	370						375					380			
Arg	Ser	Ala	Asp	Ala	Pro	Ala	Tyr	Lys	Gln	Gly	Gln	Asn	Gln	Leu	Tyr
385						390				395					400
Asn	Glu	Leu	Asn	Leu	Gly	Arg	Arg	Glu	Glu	Tyr	Asp	Val	Leu	Asp	Lys
				405					410					415	
Arg	Arg	Gly	Arg	Asp	Pro	Glu	Met	Gly	Gly	Lys	Pro	Arg	Arg	Lys	Asn
			420						425				430		
Pro	Gln	Glu	Gly	Leu	Tyr	Asn	Glu	Leu	Gln	Lys	Asp	Lys	Met	Ala	Glu
		435						440					445		
Ala	Tyr	Ser	Glu	Ile	Gly	Met	Lys	Gly	Glu	Arg	Arg	Arg	Gly	Lys	Gly
	450					455					460				
His	Asp	Gly	Leu	Tyr	Gln	Gly	Leu	Ser	Thr	Ala	Thr	Lys	Asp	Thr	Tyr
465						470				475					480
Asp	Ala	Leu	His	Met	Gln	Ala	Leu	Pro	Pro	Arg					
				485					490						

_SL

<210> 82

<211> 491

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 82

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

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

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

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

145		150		<u>SL</u> 155		160									
Lys	Pro	Ser	Glu	Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Val	Ser
				165					170					175	
Leu	Pro	Asp	Tyr	Gly	Val	Ser	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly
			180					185					190		
Leu	Glu	Trp	Ile	Gly	Val	Ile	Trp	Gly	Ser	Glu	Thr	Thr	Tyr	Tyr	Gln
		195					200					205			
Ser	Ser	Leu	Lys	Ser	Arg	Val	Thr	Ile	Ser	Lys	Asp	Asn	Ser	Lys	Asn
	210					215					220				
Gln	Val	Ser	Leu	Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val
225					230					235					240
Tyr	Tyr	Cys	Ala	Lys	His	Tyr	Tyr	Tyr	Gly	Gly	Ser	Tyr	Ala	Met	Asp
				245					250					255	
Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Thr	Thr	Thr	Pro
			260					265					270		
Ala	Pro	Arg	Pro	Pro	Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu
		275					280					285			
Ser	Leu	Arg	Pro	Glu	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His
	290					295					300				
Thr	Arg	Gly	Leu	Asp	Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu
305					310					315					320
Ala	Gly	Thr	Cys	Gly	Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr
				325					330					335	
Cys	Lys	Arg	Gly	Arg	Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe

_SL

<400> 83

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Ser Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro
165 170 175

Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys
180 185 190

_SL

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
195 200 205

Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln
225 230 235 240

Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro
245 250 255

Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
355 360 365

Phe Pro Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
370 375 380

_SL

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
405 410 415

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 84

<211> 491

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 84

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

_SL

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Gln Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro
165 170 175

Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys
180 185 190

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
195 200 205

Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser
210 215 220

_SL

Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln
225 230 235 240

Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro
245 250 255

Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
355 360 365

Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
405 410 415

_SL

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 85

<211> 491

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 85

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

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

Pro	Arg	Leu	Leu	Ile	Tyr	His	Thr	Ser	Arg	<u>SL</u> Leu	His	Ser	Gly	Ile	Pro
65					70					75					80
Ala	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Tyr	Thr	Leu	Thr	Ile
				85					90					95	
Ser	Ser	Leu	Gln	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Phe	Cys	Gln	Gln	Gly
			100					105					110		
Asn	Thr	Leu	Pro	Tyr	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys
		115					120					125			
Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly
		130				135						140			
Gly	Gly	Gly	Ser	Gln	Val	Gln	Leu	Gln	Glu	Ser	Gly	Pro	Gly	Leu	Val
145					150					155					160
Lys	Pro	Ser	Glu	Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Val	Ser
				165					170					175	
Leu	Pro	Asp	Tyr	Gly	Val	Ser	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly
			180					185					190		
Leu	Glu	Trp	Ile	Gly	Val	Ile	Trp	Gly	Ser	Glu	Thr	Thr	Tyr	Tyr	Asn
		195					200					205			
Ser	Ser	Leu	Lys	Ser	Arg	Val	Thr	Ile	Ser	Lys	Asp	Asn	Ser	Lys	Asn
		210				215					220				
Gln	Val	Ser	Leu	Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val
225					230					235					240
Tyr	Tyr	Cys	Ala	Lys	His	Tyr	Tyr	Tyr	Gly	Gly	Ser	Tyr	Ala	Met	Asp
				245					250					255	

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val ^{SL}Ser Ser Thr Thr Thr Pro
 260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
 275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
 290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
 305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
 325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
 340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
 355 360 365

Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
 370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
 385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
 405 410 415

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
 420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
 435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu ^{_SL}Arg Arg Arg Gly Lys Gly
 450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
 465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 86
 <211> 491
 <212> PRT
 <213> Artificial Sequence

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

<400> 86
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
 20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
 35 40 45

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

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
 65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
 85 90 95

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

_SL

100	105	110
Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys		
115	120	125
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly		
130	135	140
Gly Gly Gly Ser Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val		
145	150	155
Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser		
165	170	175
Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly		
180	185	190
Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn		
195	200	205
Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn		
210	215	220
Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val		
225	230	235
Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp		
245	250	255
Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Thr Thr Thr Pro		
260	265	270
Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu		
275	280	285
Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His		

485

490 _SL

<210> 87

<211> 491

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 87

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val
35 40 45

Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr
65 70 75 80

Asn Ser Ser Leu Lys Ser Arg Val Thr Ile Ser Lys Asp Asn Ser Lys
85 90 95

Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

_SL

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro
165 170 175

Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys
180 185 190

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
195 200 205

Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln
225 230 235 240

Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro
245 250 255

Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
325 330 335

_SL

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
355 360 365

Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
405 410 415

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 88

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

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

<400> 88

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
35 40 45

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

Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Ile Pro
65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln Gln Gly
100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
130 135 140

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
145 150 155 160

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
165 170 175

_SL

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys Ser
195 200 205

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
210 215 220

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
225 230 235 240

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Leu Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

_SL

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 89

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 89

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Ile Gln Met Thr ^{SL}Gln Thr Thr Ser Ser Leu
 20 25 30

Ser Ala Ser Leu Gly Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln
 35 40 45

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

Val Lys Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly Val Pro
 65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile
 85 90 95

Ser Asn Leu Glu Gln Glu Asp Ile Ala Thr Tyr Phe Cys Gln Gln Gly
 100 105 110

Asn Thr Leu Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr
 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
 130 135 140

Val Lys Leu Gln Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser
 145 150 155 160

Leu Ser Val Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
 165 170 175

Val Ser Trp Ile Arg Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly
 180 185 190

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser
 195 200 205

Arg	Leu	Thr	Ile	Ile	Lys	Asp	Asn	Ser	Lys	^{SL} Ser	Gln	Val	Phe	Leu	Lys
210						215					220				
Met	Asn	Ser	Leu	Gln	Thr	Asp	Asp	Thr	Ala	Ile	Tyr	Tyr	Cys	Ala	Lys
225					230					235					240
His	Tyr	Tyr	Tyr	Gly	Gly	Ser	Tyr	Ala	Met	Asp	Tyr	Trp	Gly	Gln	Gly
				245					250					255	
Thr	Ser	Val	Thr	Val	Ser	Ser	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro
			260						265				270		
Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro	Glu
		275					280					285			
Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp
	290					295					300				
Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly
305					310					315					320
Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg
				325					330					335	
Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln
			340					345					350		
Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu	Glu
		355				360						365			
Glu	Gly	Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg	Ser	Ala	Asp	Ala
	370					375					380				
Pro	Ala	Tyr	Lys	Gln	Gly	Gln	Asn	Gln	Leu	Tyr	Asn	Glu	Leu	Asn	Leu
385					390					395					400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp ^{SL}Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 90
 <211> 1458
 <212> DNA
 <213> Artificial Sequence

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

<400> 90
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccgaaattg tgatgaccca gtcacccgcc actcttagcc tttcacccgg tgagcgcgca 120
 accctgtctt gcagagcctc ccaagacatc tcaaaatacc ttaattggta tcaacagaag 180
 cccggacagg ctctcgcct tctgatctac cacaccagcc ggctccattc tggaatccct 240
 gccaggttca gcggtagcgg atctgggacc gactacaccc tcaactatcag ctactgcag 300
 ccagaggact tcgctgtcta tttctgtcag caagggaaca ccctgcccta cacctttgga 360
 cagggcacca agctcgagat taaaggtgga ggtggcagcg gaggaggtgg gtccggcggt 420

_SL

ggaggaagcc aggtccaact ccaagaaagc ggaccgggtc ttgtgaagcc atcagaaact 480
ctttcactga cttgtactgt gagcggagtg tctctccccg attacgggggt gtcttggatc 540
agacagccac cggggaaggg tctggaatgg attggagtga tttggggctc tgagactact 600
tactactctt catccctcaa gtcacgcgtc accatctcaa aggacaactc taagaatcag 660
gtgtcactga aactgtcatc tgtgaccgca gccgacaccg ccgtgtacta ttgcgctaag 720
cattactatt atggcgggag ctacgcaatg gattactggg gacagggtac tctggtcacc 780
gtgtccagca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc 840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc 900
cggggctcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg 960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg 1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt 1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc 1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt 1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc 1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag 1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac 1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg 1440
caggccctgc cgctcgg 1458

<210> 91

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

_SL

<400> 91

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaattg tgatgacca gtcacccgcc actcttagcc tttcacccgg tgagcgcgca	120
accctgtctt gcagagcctc ccaagacatc tcaaaatacc ttaattggta tcaacagaag	180
cccggacagg ctctcgcct tctgatctac cacaccagcc ggctccattc tggaatccct	240
gccaggttca gcggtagcgg atctgggacc gactacaccc tcaactatcag ctactgcag	300
ccagaggact tcgctgtcta tttctgtcag caagggaaca ccctgcccta cacctttgga	360
cagggcacca agctcgagat taaagggtga ggtggcagcg gaggagggtg gtccggcggt	420
ggaggaagcc aggtccaact ccaagaaagc ggaccgggtc ttgtgaagcc atcagaaact	480
ctttcactga cttgtactgt gagcggagtg tctctccccg attacgggggt gtcttgatc	540
agacagccac cggggaaggg tctggaatgg attggagtga tttggggctc tgagactact	600
tactaccaat catccctcaa gtcacgcgtc accatctcaa aggacaactc taagaatcag	660
gtgtcactga aactgtcatc tgtgaccgca gccgacaccg ccgtgtacta ttgcgctaag	720
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1458

<210> 92

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 92

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<210> 93

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

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<210> 94

<211> 1473

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
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<400> 94

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<210> 95

<211> 1473

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 95

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<210> 96

<211> 1473

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 96

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<211> 1473

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

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<210> 98

<211> 1473

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

polynucleotide"

<400> 98

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<211> 1473

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

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<210> 100

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<213> Artificial Sequence

<220>

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

<400> 100

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ccacaagtcc agcttcaaga atcagggcct ggtctgggtga agccatctga gactctgtcc 120
ctcacttgca ccgtgagcgg agtgtccctc ccagactacg gagtgagctg gattagacag 180
cctcccggaaggaggactgga gtggatcgga gtgatttggg gtagcgaaac cacttactat 240
aactcttccc tgaagtcacg ggtcaccatt tcaaaggata actcaaagaa tcaagtgagc 300
ctcaagctct catcagtcac cgccgctgac accgccgtgt attactgtgc caagcattac 360
tactatggag ggtcctacgc catggactac tggggccagg gaactctggc cactgtgtca 420
tctgggtggag gaggtagcgg aggaggcggg agcgggtggag gtggctccgg aggtggcgga 480
agcgaaatcg tgatgacca gagccctgca accctgtccc tttctcccgg ggaacgggct 540

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accctttctt gtcgggcatc acaagatatc tcaaaatacc tcaattggta tcaacagaag 600
ccgggacagg cccctaggct tcttatctac cacacctctc gcctgcatag cgggattccc 660
gcacgcttta gcgggtctgg aagcgggacc gactacactc tgaccatctc atctctccag 720
cccgaggact tcgccgtcta cttctgccag cagggttaaca ccctgccgta caccttcggc 780
cagggcacca agcttgagat caaaaccact actcccgtc caaggccacc caccctgcc 840
ccgaccatcg cctctcagcc gctttccctg cgtccggagg catgtagacc cgcagctggt 900
ggggccgtgc ataccggggg tcttgacttc gcctgcgata tctacatttg ggccccctctg 960
gctggtactt gcggggtcct gctgctttca ctcgtgatca ctctttactg taagcgcggt 1020
cggaagaagc tgctgtacat ctttaagcaa cccttcatga ggctgtgca gactactcaa 1080
gaggaggacg gctgttcatg ccggttccca gaggaggagg aaggcggctg cgaactgcgc 1140
gtgaaattca gccgcagcgc agatgctcca gcctacaagc aggggcagaa ccagctctac 1200
aacgaactca atcttggtcg gagagaggag tacgacgtgc tggacaagcg gagaggacgg 1260
gaccagaaa tgggcgggaa gccgcgcaga aagaatcccc aagagggcct gtacaacgag 1320
ctccaaaagg ataagatggc agaagcctat agcgagattg gtatgaaagg ggaacgcaga 1380
agaggcaaag gccacgacgg actgtaccag ggactcagca ccgccaccaa ggacacctat 1440
gacgctcttc acatgcaggc cctgccgcct cgg 1473

<210> 101

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 101

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgaattg tgatgacca gtcacccgcc actcttagcc tttcaccggt tgagcgcgca 120

_SL

accctgtctt gcagagcctc ccaagacatc tcaaaatacc ttaattggta tcaacagaag	180
cccggacagg ctccctgcct tctgatctac cacaccagcc ggctccattc tggaatccct	240
gccaggttca gcggtagcgg atctgggacc gactacaccc tcactatcag ctactgcag	300
ccagaggact tcgctgtcta tttctgtcag caagggaaca ccctgcccta cacctttgga	360
cagggcacca agctcgagat taaaggtgga ggtggcagcg gaggaggtgg gtccggcggt	420
ggaggaagcc aggtccaact ccaagaaagc ggaccgggtc ttgtgaagcc atcagaaact	480
ctttcactga cttgtactgt gagcggagtg tctctccccg attacgggggt gtcttggatc	540
agacagccac cggggaaggg tctggaatgg attggagtga tttggggctc tgagactact	600
tactacaact catccctcaa gtcacgcgtc accatctcaa aggacaactc taagaatcag	660
gtgtcactga aactgtcatc tgtgaccgca gccgacaccg ccgtgtacta ttgcgctaag	720
cattactatt atggcgggag ctacgcaatg gattactggg gacagggtag tctggtcacc	780
gtgtccagca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttgggccc ctctggctgg tacttgcggg	960
gtcctgtgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgtg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgctcgg	1458

<210> 102
<211> 1458
<212> DNA
<213> Artificial Sequence

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

<400> 102
atggccttac cagtgaccgc cttgctcctg ccgctggcct tgctgctcca cgccgccagg 60
ccggacatcc agatgacaca gactacatcc tccctgtctg cctctctggg agacagagtc 120
accatcagtt gcagggcaag tcaggacatt agtaaatatt taaattggta tcagcagaaa 180
ccagatggaa ctgttaaact cctgatctac catacatcaa gattacactc aggagtccca 240
tcaaggttca gtggcagtgg gtctggaaca gattattctc tcaccattag caacctggag 300
caagaagata ttgccactta cttttgccaa cagggttaata cgcttccgta cacgttcgga 360
ggggggacca agctggagat cacaggtggc ggtggctcgg gcggtgggtgg gtcgggtggc 420
ggcggatctg aggtgaaact gcaggagtca ggacctggcc tgggtggcgcc ctcacagagc 480
ctgtccgtca catgcactgt ctcaggggtc tcattaccgc actatggtgt aagctggatt 540
cgccagcctc cacgaaaggg tctggagtgg ctgggagtaa tatgggtag tgaaaccaca 600
tactataatt cagctctcaa atccagactg accatcatca aggacaactc caagagccaa 660
gttttcttaa aaatgaacag tctgcaaact gatgacacag ccatttacta ctgtgccaaa 720
cattattact acggtggtag ctatgctatg gactactggg gccaaaggaa ctcagtcacc 780
gtctcctcaa ccacgacgcc agcgccgcga ccaccaaac cggcgcccac catcgcgtcg 840
cagcccctgt ccctgcgccc agaggcgtgc cggccagcgg cggggggcgc agtgcacacg 900
agggggctgg acttcgcctg tgatatctac atctgggcgc ctttggccgg gacttgtggg 960
gtccttctcc tgtcactggg tatcaccctt tactgcaaac ggggcagaaa gaaactcctg 1020
tatatattca aacaaccatt tatgagacca gtacaaacta ctcaagagga agatggctgt 1080
agctgccgat ttccagaaga agaagaagga ggatgtgaac tgagagtga gttcagcagg 1140

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agcgcagacg cccccgcgta caagcagggc cagaaccagc tctataacga gctcaatcta 1200
ggacgaagag aggagtacga tgtttttgac aagagacgtg gccgggaccc tgagatgggg 1260
ggaaagccga gaaggaagaa ccctcaggaa ggcctgtaca atgaactgca gaaagataag 1320
atggcggagg cctacagtga gattgggatg aaaggcgagc gccggagggg caaggggcac 1380
gatggccttt accaggggtct cagtacagcc accaaggaca cctacgacgc cttcacatg 1440
caggccctgc cccctcgc 1458

<210> 103

<211> 1182

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 103

atggccctcc ctgtcactgc cctgcttctc cccctcgcac tcctgctcca cgccgctaga 60
ccacccggat ggtttctgga ctctccggat cgcccggtgga atcccccaac cttctcaccg 120
gcactcttgg ttgtgactga gggcgataat gcgaccttca cgtgctcgtt ctccaacacc 180
tccgaatcat tcgtgctgaa ctggtaccgc atgagcccgt caaaccagac cgacaagctc 240
gccgcgtttc cggaagatcg gtcgcaaccg ggacaggatt gtcggttccg cgtgactcaa 300
ctgccgaatg gcagagactt ccacatgagc gtggtccgcg ctaggcgaaa cgactccggg 360
acctacctgt gcggagccat ctgctggcg cctaaggccc aaatcaaaga gagcttgagg 420
gccgaactga gagtgaccga gcgcagagct gaggtgcca ctgcacatcc atccccatcg 480
cctcggcctg cggggcagtt tcagaccctg gtcacgacca ctccggcgcc gcgcccaccg 540
actccggccc caactatcgc gagccagccc ctgtcgtgga ggccggaagc atgccgccct 600
gccgccggag gtgctgtgca taccggggga ttggacttcg catgcgacat ctacatttgg 660
gctcctctcg ccggaacttg tggcgtgctc cttctgtccc tggtcacac cctgtactgc 720

_SL

aagcgggggtc ggaaaaagct tctgtacatt ttcaagcagc cttcatgag gcccgtgcaa 780
accacccagg aggaggacgg ttgctcctgc cggttccccg aagaggaaga aggaggttgc 840
gagctgcgcg tgaagttctc ccggagcgcc gacgcccccg cctataagca gggccagaac 900
cagctgtaca acgaactgaa cctgggacgg cgggaagagt acgatgtgct ggacaagcgg 960
cgcgggccggg accccgaaat gggcgggaag cctagaagaa agaaccctca ggaaggcctg 1020
tataacgagc tgcagaagga caagatggcc gaggcctact ccgaaattgg gatgaaggga 1080
gagcggcgga ggggaaaggg gcacgacggc ctgtaccaag gactgtccac cgccaccaag 1140
gacacatacg atgccctgca catgcaggcc cttccccctc gc 1182

<210> 104
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 104
Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Thr
1 5 10 15

Lys Gly

<210> 105
<211> 394
<212> PRT
<213> Artificial Sequence

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

<400> 105

Met Ala Leu Pro Val Thr Ala Leu Leu Leu ^{SL}Pro Leu Ala Leu Leu
1 5 10 15
His Ala Ala Arg Pro Pro Gly Trp Phe Leu Asp Ser Pro Asp Arg Pro
20 25 30
Trp Asn Pro Pro Thr Phe Ser Pro Ala Leu Leu Val Val Thr Glu Gly
35 40 45
Asp Asn Ala Thr Phe Thr Cys Ser Phe Ser Asn Thr Ser Glu Ser Phe
50 55 60
Val Leu Asn Trp Tyr Arg Met Ser Pro Ser Asn Gln Thr Asp Lys Leu
65 70 75 80
Ala Ala Phe Pro Glu Asp Arg Ser Gln Pro Gly Gln Asp Cys Arg Phe
85 90 95
Arg Val Thr Gln Leu Pro Asn Gly Arg Asp Phe His Met Ser Val Val
100 105 110
Arg Ala Arg Arg Asn Asp Ser Gly Thr Tyr Leu Cys Gly Ala Ile Ser
115 120 125
Leu Ala Pro Lys Ala Gln Ile Lys Glu Ser Leu Arg Ala Glu Leu Arg
130 135 140
Val Thr Glu Arg Arg Ala Glu Val Pro Thr Ala His Pro Ser Pro Ser
145 150 155 160
Pro Arg Pro Ala Gly Gln Phe Gln Thr Leu Val Thr Thr Thr Pro Ala
165 170 175
Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
180 185 190

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala ^{SL}Gly Gly Ala Val His Thr
 195 200 205

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
 210 215 220

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
 225 230 235 240

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
 245 250 255

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
 260 265 270

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
 275 280 285

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
 290 295 300

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
 305 310 315 320

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
 325 330 335

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
 340 345 350

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
 355 360 365

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
 370 375 380

Ala Leu His Met Gln Ala Leu Pro Pro Arg _SL
385 390

<210> 106
<211> 373
<212> PRT
<213> Artificial Sequence

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

<400> 106
Pro Gly Trp Phe Leu Asp Ser Pro Asp Arg Pro Trp Asn Pro Pro Thr
1 5 10 15

Phe Ser Pro Ala Leu Leu Val Val Thr Glu Gly Asp Asn Ala Thr Phe
20 25 30

Thr Cys Ser Phe Ser Asn Thr Ser Glu Ser Phe Val Leu Asn Trp Tyr
35 40 45

Arg Met Ser Pro Ser Asn Gln Thr Asp Lys Leu Ala Ala Phe Pro Glu
50 55 60

Asp Arg Ser Gln Pro Gly Gln Asp Cys Arg Phe Arg Val Thr Gln Leu
65 70 75 80

Pro Asn Gly Arg Asp Phe His Met Ser Val Val Arg Ala Arg Arg Asn
85 90 95

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

Gln Ile Lys Glu Ser Leu Arg Ala Glu Leu Arg Val Thr Glu Arg Arg
115 120 125

Ala Glu Val Pro Thr Ala His Pro Ser Pro Ser Pro Arg Pro Ala Gly

SL

340

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<213> Artificial Sequence

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<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"
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Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys Ser Arg Val Thr Ile Ser
180 185 190

Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr
195 200 205

Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
225 230 235 240

Ser Ser

<210> 108

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

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

<400> 108

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

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

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

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

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

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly Val Ile Trp Gly Ser
165 170 175

_SL

Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys Ser Arg Val Thr Ile Ser
180 185 190

Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr
195 200 205

Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
225 230 235 240

Ser Ser

<210> 109

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 109

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

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

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

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Lys Asp Asn Ser ^{_SL}Lys Asn Gln Val Ser Leu
65 70 75 80

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Ala
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser Arg Leu His Ser Gly
180 185 190

Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Phe Cys Gln
210 215 220

Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu
225 230 235 240

Ile Lys

_SL

<210> 110

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 110

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

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

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

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys
50 55 60

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

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Ala
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala

_SL

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

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

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

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
130 135 140

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
145 150 155 160

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
165 170 175

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Ser Ser Ser Leu Lys Ser
180 185 190

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
195 200 205

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
210 215 220

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
225 230 235 240

_SL

Thr Leu Val Thr Val Ser Ser
245

<210> 112

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 112

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

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

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

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

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

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

_SL

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
130 135 140

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
145 150 155 160

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
165 170 175

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys Ser
180 185 190

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
195 200 205

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
210 215 220

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
225 230 235 240

Thr Leu Val Thr Val Ser Ser
245

<210> 113

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 113

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

Thr	Leu	Ser	Leu	Thr	Cys	Thr	Val	Ser	Gly	Val	Ser	Leu	Pro	Asp	Tyr
			20					25		SL			30		
Gly	Val	Ser	Trp	Ile	Arg	Gln	Pro	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile
		35					40					45			
Gly	Val	Ile	Trp	Gly	Ser	Glu	Thr	Thr	Tyr	Tyr	Ser	Ser	Ser	Leu	Lys
	50					55					60				
Ser	Arg	Val	Thr	Ile	Ser	Lys	Asp	Asn	Ser	Lys	Asn	Gln	Val	Ser	Leu
65					70					75					80
Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
				85					90					95	
Lys	His	Tyr	Tyr	Tyr	Gly	Gly	Ser	Tyr	Ala	Met	Asp	Tyr	Trp	Gly	Gln
			100					105					110		
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly
		115						120					125		
Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Glu	Ile	Val	Met
	130						135					140			
Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Leu	Ser	Pro	Gly	Glu	Arg	Ala	Thr
145					150					155					160
Leu	Ser	Cys	Arg	Ala	Ser	Gln	Asp	Ile	Ser	Lys	Tyr	Leu	Asn	Trp	Tyr
				165					170					175	
Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Ile	Tyr	His	Thr	Ser
			180					185					190		
Arg	Leu	His	Ser	Gly	Ile	Pro	Ala	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly
		195					200					205			

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu ^{SL}Gln Pro Glu Asp Phe Ala
 210 215 220

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
 225 230 235 240

Gly Thr Lys Leu Glu Ile Lys
 245

<210> 114

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 114

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

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
 20 25 30

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

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Gln Ser Ser Leu Lys
 50 55 60

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

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln

_SL

100	105	110
Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly		
115	120	125
Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met		
130	135	140
Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr		
145	150	155
Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr		
165	170	175
Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser		
180	185	190
Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly		
195	200	205
Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala		
210	215	220
Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln		
225	230	235
Gly Thr Lys Leu Glu Ile Lys		
245		

<210> 115

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

<400> 115

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

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

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

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

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

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr
130 135 140

Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly
145 150 155 160

Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile Gly
165 170 175

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys Ser
180 185 190

_SL

Arg Val Thr Ile Ser Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys
195 200 205

Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys
210 215 220

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly
225 230 235 240

Thr Leu Val Thr Val Ser Ser
245

<210> 116
<211> 247
<212> PRT
<213> Artificial Sequence

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

<400> 116
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

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

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys
50 55 60

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

_SL

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Lys His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met
130 135 140

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
145 150 155 160

Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr His Thr Ser
180 185 190

Arg Leu His Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
210 215 220

Val Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Tyr Thr Phe Gly Gln
225 230 235 240

Gly Thr Lys Leu Glu Ile Lys
245

<210> 117

<211> 242

<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

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

<400> 117

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Asp Ile Ser Lys Tyr
20 25 30

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

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

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

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

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys
130 135 140

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile ^{SL}Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys Ser Arg Val Thr Ile Ser
180 185 190

Lys Asp Asn Ser Lys Asn Gln Val Ser Leu Lys Leu Ser Ser Val Thr
195 200 205

Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
225 230 235 240

Ser Ser

<210> 118

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 118

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

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Val Ser Leu Pro Asp Tyr
20 25 30

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

Gly Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ser Leu Lys

_SL

<210> 119

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 119

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

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

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
65 70 75 80

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

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Thr Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Lys Leu Gln Glu
115 120 125

Ser Gly Pro Gly Leu Val Ala Pro Ser Gln Ser Leu Ser Val Thr Cys
130 135 140

_SL

Thr Val Ser Gly Val Ser Leu Pro Asp Tyr Gly Val Ser Trp Ile Arg
145 150 155 160

Gln Pro Pro Arg Lys Gly Leu Glu Trp Leu Gly Val Ile Trp Gly Ser
165 170 175

Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser Arg Leu Thr Ile Ile
180 185 190

Lys Asp Asn Ser Lys Ser Gln Val Phe Leu Lys Met Asn Ser Leu Gln
195 200 205

Thr Asp Asp Thr Ala Ile Tyr Tyr Cys Ala Lys His Tyr Tyr Tyr Gly
210 215 220

Gly Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr Val
225 230 235 240

Ser Ser

<210> 120

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 120

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

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

_SL

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

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

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

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

Ala Arg Lys Thr Ile Ser Ser Val Val Asp Phe Tyr Phe Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr
115

<210> 121

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 121

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

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

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

Tyr Ser Ala Thr Tyr Arg Asn Ser Gly Val ^{_SL}Pro Asp Arg Phe Thr Gly
50 55 60

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

Lys Asp Leu Ala Asp Tyr Phe Tyr Phe Cys Gln Tyr Asn Arg Tyr Pro
85 90 95

Tyr Thr Ser Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg Arg Ser
100 105 110

<210> 122

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 122

Asp Tyr Gly Val Ser
1 5

<210> 123

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 123

Val Ile Trp Gly Ser Glu Thr Thr Tyr Tyr Asn Ser Ala Leu Lys Ser
1 5 10 15

<210> 124

<211> 16

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 124

Val	Ile	Trp	Gly	Ser	Glu	Thr	Thr	Tyr	Tyr	Ser	Ser	Ser	Leu	Lys	Ser
1				5				10					15		

<210> 125

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 125

Val	Ile	Trp	Gly	Ser	Glu	Thr	Thr	Tyr	Tyr	Gln	Ser	Ser	Leu	Lys	Ser
1				5				10					15		

<210> 126

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 126

Val	Ile	Trp	Gly	Ser	Glu	Thr	Thr	Tyr	Tyr	Asn	Ser	Ser	Leu	Lys	Ser
1				5				10					15		

<210> 127

<211> 12

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

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

<400> 127

His Tyr Tyr Tyr Gly Gly Ser Tyr Ala Met Asp Tyr
1 5 10

<210> 128

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 128

Arg Ala Ser Gln Asp Ile Ser Lys Tyr Leu Asn
1 5 10

<210> 129

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 129

His Thr Ser Arg Leu His Ser
1 5

<210> 130

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

peptide"

<400> 130

Gln Gln Gly Asn Thr Leu Pro Tyr Thr
1 5

<210> 131

<211> 132

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 131

Asp Val Pro Asp Tyr Ala Ser Leu Gly Gly Pro Ser Ser Pro Lys Lys
1 5 10 15

Lys Arg Lys Val Ser Arg Gly Val Gln Val Glu Thr Ile Ser Pro Gly
20 25 30

Asp Gly Arg Thr Phe Pro Lys Arg Gly Gln Thr Cys Val Val His Tyr
35 40 45

Thr Gly Met Leu Glu Asp Gly Lys Lys Phe Asp Ser Ser Arg Asp Arg
50 55 60

Asn Lys Pro Phe Lys Phe Met Leu Gly Lys Gln Glu Val Ile Arg Gly
65 70 75 80

Trp Glu Glu Gly Val Ala Gln Met Ser Val Gly Gln Arg Ala Lys Leu
85 90 95

Thr Ile Ser Pro Asp Tyr Ala Tyr Gly Ala Thr Gly His Pro Gly Ile
100 105 110

Ile Pro Pro His Ala Thr Leu Val Phe Asp Val Glu Leu Leu Lys Leu
115 120 125

_SL

Glu Thr Ser Tyr
130

<210> 132

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 132

Val Gln Val Glu Thr Ile Ser Pro Gly Asp Gly Arg Thr Phe Pro Lys
1 5 10 15

Arg Gly Gln Thr Cys Val Val His Tyr Thr Gly Met Leu Glu Asp Gly
20 25 30

Lys Lys Phe Asp Ser Ser Arg Asp Arg Asn Lys Pro Phe Lys Phe Met
35 40 45

Leu Gly Lys Gln Glu Val Ile Arg Gly Trp Glu Glu Gly Val Ala Gln
50 55 60

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

Tyr Gly Ala Thr Gly His Pro Gly Ile Ile Pro Pro His Ala Thr Leu
85 90 95

Val Phe Asp Val Glu Leu Leu Lys Leu Glu Thr Ser
100 105

<210> 133

<211> 93

<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

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

<400> 133

Ile Leu Trp His Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg
1 5 10 15

Leu Tyr Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu
20 25 30

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

Ser Phe Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp
50 55 60

Cys Arg Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala
65 70 75 80

Trp Asp Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys
85 90

<210> 134

<211> 95

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 134

Ile Leu Trp His Glu Met Trp His Glu Gly Leu Ile Glu Ala Ser Arg
1 5 10 15

Leu Tyr Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu

_SL

20

25

30

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

Ser Phe Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp
50 55 60

Cys Arg Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala
65 70 75 80

Trp Asp Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys Thr Ser
85 90 95

<210> 135

<211> 95

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 135

Ile Leu Trp His Glu Met Trp His Glu Gly Leu Leu Glu Ala Ser Arg
1 5 10 15

Leu Tyr Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu
20 25 30

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

Ser Phe Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp
50 55 60

Cys Arg Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Thr Gln Ala
65 70 75 80

_SL

Trp Asp Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys Thr Ser
85 90 95

<210> 136

<211> 95

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 136

Ile Leu Trp His Glu Met Trp His Glu Gly Leu Glu Glu Ala Ser Arg
1 5 10 15

Leu Tyr Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu
20 25 30

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

Ser Phe Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp
50 55 60

Cys Arg Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala
65 70 75 80

Trp Asp Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys Thr Ser
85 90 95

<210> 137

<211> 95

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<220>
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<222> (12)..(12)
<223> Any amino acid

<220>
<221> MOD_RES
<222> (78)..(78)
<223> Any amino acid

<400> 137
Ile Leu Trp His Glu Met Trp His Glu Gly Leu Xaa Glu Ala Ser Arg
1 5 10 15

Leu Tyr Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu
20 25 30

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

Ser Phe Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp
50 55 60

Cys Arg Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Xaa Gln Ala
65 70 75 80

Trp Asp Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys Thr Ser
85 90 95

<210> 138
<211> 95
<212> PRT
<213> Artificial Sequence

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

_SL

<400> 138

Ile Leu Trp His Glu Met Trp His Glu Gly Leu Ile Glu Ala Ser Arg
1 5 10 15

Leu Tyr Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu
20 25 30

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

Ser Phe Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp
50 55 60

Cys Arg Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala
65 70 75 80

Trp Asp Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys Thr Ser
85 90 95

<210> 139

<211> 95

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 139

Ile Leu Trp His Glu Met Trp His Glu Gly Leu Leu Glu Ala Ser Arg
1 5 10 15

Leu Tyr Phe Gly Glu Arg Asn Val Lys Gly Met Phe Glu Val Leu Glu
20 25 30

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

_SL

Ser Phe Asn Gln Ala Tyr Gly Arg Asp Leu Met Glu Ala Gln Glu Trp
50 55 60

Cys Arg Lys Tyr Met Lys Ser Gly Asn Val Lys Asp Leu Leu Gln Ala
65 70 75 80

Trp Asp Leu Tyr Tyr His Val Phe Arg Arg Ile Ser Lys Thr Ser
85 90 95

<210> 140

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 140

Arg Gly Asp Ser

1

<210> 141

<211> 813

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 141

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ccggacatcc agatgacca aaccacctca tccctctctg cctctcttgg agacagggtg 120

accatttctt gtcgcgccag ccaggacatc agcaagtatc tgaactggta tcagcagaag 180

ccggacggaa ccgtgaagct cctgatctac catacctctc gcctgcatag cggcgtgccc 240

tcacgcttct ctggaagcgg atcaggaacc gattattctc tcactatttc aaatcttgag 300

_SL

caggaagata ttgccaccta tttctgccag cagggttaata ccctgcccta caccttcgga 360
ggagggacca agctcgaaat caccggtgga ggaggcagcg gcggtggagg gtctggtgga 420
ggtggttctg aggtgaagct gcaagaatca ggccctggac ttgtggcccc ttcacagtcc 480
ctgagcgtga cttgcaccgt gtccggagtc tccctgcccg actacggagt gtcattggatc 540
agacaacctc cacggaaaagg actggaatgg ctcggtgtca tctggggtag cgaaactact 600
tactacaatt cagccctcaa aagcaggctg actattatca aggacaacag caagtcccaa 660
gtctttctta agatgaactc actccagact gacgacaccg caatctacta ttgtgctaag 720
cactactact acggaggatc ctacgctatg gattactggg gacaaggtag ttccgtcact 780
gtctcttcac accatcatca ccatcaccat cac 813

<210> 142

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 142

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

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

Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

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

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

_SL

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

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

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys
130 135 140

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe
145 150 155 160

Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
165 170 175

Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ser
180 185 190

Ala Asp Phe Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser
195 200 205

Thr Ala Tyr Leu Gln Ile Asn Ala Leu Lys Ala Glu Asp Thr Ala Val
210 215 220

Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr Trp Gly
225 230 235 240

Gln Gly Thr Thr Val Thr Val Ser Ser
245

<210> 143

<211> 747

_SL

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 143

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caacaaaaac ctggtcagcc acctaagctg ctgatctacc gcgcctcgaa tctggaatca      180
ggagtgccgg acagattctc ggggtccggc tcccggacgg atttcacttt gaccatctcg      240
tcacttcaag ctgaggacgt cgcggtgtac tactgccagc agagcaacga agatccaccc      300
acgttcggac aaggcaccaa gctggagatt aaaggaggcg gaggctccgg tggaggagga      360
tcgggaggag gcggctccgg cggagggtga tcgcagattc agctggtgca gtcgggttca      420
gaattgaaga aaccaggagc ctcggtgaag gtcagctgca aggcacacagg gtacatcttc      480
actaactacg gcatgaactg ggtgcgccag gctccgggac aggggctgga gtggatggga      540
tggatcaaca cttacaccgg ggagtcaact tactcggctg actttaaggg ccggtttgtg      600
ttctccctcg aactagcgt gagcaccgcc tatcttcaaa tcaacgccct caaggcggaa      660
gataccgccg tctactactg cgcaagatcc ggtgggtacg atccgatgga ttattgggga      720
caggaacca ctgtcacctg gagcagc                                747
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<210> 144

<211> 843

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 144

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actatcaatt gtagggcgtc ggagtccgtg gacaattacg gaaacacctt catgcactgg 180
taccaacaaa aacctggtca gccacctaag ctgctgatct accgcgcctc gaatctggaa 240
tcaggagtgc cggacagatt ctcgggggtcc ggctcccga cggatttcac tttgaccatc 300
tcgtcacttc aagctgagga cgtcgcggtg tactactgcc agcagagcaa cgaagatcca 360
cccacgttcg gacaaggcac caagctggag attaaaggag gcggaggctc cgggtggagga 420
ggatcgggag gaggcggctc cggcggaggt ggatcgaga ttcagctggt gcagtcgggt 480
tcagaattga agaaaccagg agcctcgggt aaggtcagct gcaaggcatc aggttacatc 540
ttcactaact acggcatgaa ctgggtgcgc caggctccgg gacaggggct ggagtggatg 600
ggatggatca acacttacac cggggagtca acttactcgg ctgactttaa gggccggttt 660
gtgttctccc tcgacactag cgtgagcacc gcctatcttc aaatcaacgc cctcaaggcg 720
gaagataccg cagtctacta ctgcgcaaga tccggtgggt acgatccgat ggattattgg 780
ggacagggaa cactgtcac cgtgagcagc ggctcgacc accatcacca tcatcatcac 840
cac 843

<210> 145

<211> 281

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 145

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

_SL

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Glu
35 40 45

Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys
50 55 60

Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu
65 70 75 80

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe
85 90 95

Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr
100 105 110

Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys
115 120 125

Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly
145 150 155 160

Ser Glu Leu Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala
165 170 175

Ser Gly Tyr Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala
180 185 190

Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly
195 200 205

Glu Ser Thr Tyr Ser Ala Asp Phe Lys Gly Arg Phe Val Phe Ser Leu
210 215 220

_SL

Asp Thr Ser Val Ser Thr Ala Tyr Leu Gln Ile Asn Ala Leu Lys Ala
225 230 235 240

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro
245 250 255

Met Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Ser
260 265 270

His His His His His His His His
275 280

<210> 146

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 146

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgacatcg tgctgaccca atccccggac agcctcgag tctcactcgg agaacgcgcc	120
actatcaatt gtagggcgctc ggagtccgtg gacaattacg gaaacacctt catgcactgg	180
taccaacaaa aacctggtca gccacctaag ctgctgatct accgcgcctc gaatctggaa	240
tcaggagtgc cggacagatt ctcggggctc ggctcccga cggatttcac tttgaccatc	300
tcgtcacttc aagctgagga cgtcgcggtg tactactgcc agcagagcaa cgaagatcca	360
cccacgttcg gacaaggcac caagctggag attaaaggag gcggaggctc cgggtggagga	420
ggatcgggag gaggcggctc cggcggagggt ggatcgaga ttcagctggt gcagtcgggt	480
tcagaattga agaaaccagg agcctcggtg aaggtcagct gcaaggcatc aggttacatc	540
ttcactaact acggcatgaa ctgggtgcgc caggctccgg gacaggggct ggagtggatg	600

_SL

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ggatggatca acacttacac cggggagtca acttactcgg ctgactttaa gggccggttt      660
gtgttctccc tcgacactag cgtgagcacc gcctatcttc aaatcaacgc cctcaaggcg      720
gaagataccg ccgtctacta ctgcgcaaga tccggtgggt acgatccgat ggattattgg      780
ggacagggaa ccactgtcac cgtgagcagc accactaccc cagcaccgag gccacccacc      840
ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagacccgca      900
gctggtgggg ccgtgcatac ccggggtctt gacttcgcct gcgatatcta catttgggcc      960
cctctggctg gtacttgcgg ggtcctgctg ctttcactcg tgatcactct ttactgtaag     1020
cgcggtcggg agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact     1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa     1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag     1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga     1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac     1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa     1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac     1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg                             1479

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<210> 147

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 147

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Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1           5           10           15

```

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

```


_SL

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Glu
35 40 45

Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys
50 55 60

Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu
65 70 75 80

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe
85 90 95

Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr
100 105 110

Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys
115 120 125

Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly
145 150 155 160

Ser Glu Leu Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala
165 170 175

Ser Gly Tyr Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala
180 185 190

Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly
195 200 205

Glu Ser Thr Tyr Ser Ala Asp Phe Lys Gly Arg Phe Val Phe Ser Leu
210 215 220

_SL

Asp Thr Ser Val Ser Thr Ala Tyr Leu Gln Ile Asn Ala Leu Lys Ala
225 230 235 240

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro
245 250 255

Met Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Thr Thr
260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
405 410 415

_SL

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 148

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 148

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

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

Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

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

_SL

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

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

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

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
130 135 140

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe
145 150 155 160

Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Arg Leu
165 170 175

Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ser
180 185 190

Ala Asp Phe Lys Gly Arg Val Thr Ile Thr Leu Asp Thr Ser Ala Ser
195 200 205

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
210 215 220

Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr Trp Gly
225 230 235 240

Gln Gly Thr Thr Val Thr Val Ser Ser
245

_SL

<210> 149
<211> 747
<212> DNA
<213> Artificial Sequence

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

<400> 149
gatattgtcc tcactcaatc gccggactca ctggcgggtgt ccctcggaga gagggcgacg 60
atcaattgcc gggcttccga atccgtcgat aactacggaa acacctttat gcactggtac 120
caacagaagc caggacagcc accaaaagctg ttgatctacc gcgcttcaaa ccttgagtcg 180
ggtgtgccgg accgcttcag cggcagcggg tccagaaccg actttaccct caccatcagc 240
tcgctgcagg ccgaagatgt cgccgtctat tactgccaac agagcaacga agatccgcct 300
actttcggac aggggactaa actggaaatc aagggcggag gaggctcggg tggaggagga 360
tcgggaggag gcgggtccgg tgggtggcgga tcgcaaattc agctggtgca gtccggcgca 420
gaagtgaaga agccgggagc gtccgtgaaa gtgagctgca aggcctcagg gtacatcttc 480
accaattacg gcatgaattg ggtgcggcag gcacccggac agcgcctgga gtggatgggc 540
tggtatcaaca cttacaccgg ggaaagcacg tactcggccg acttcaaagg acgggtgacc 600
attaccctgg atacctcggc ctcaaccgct tacatggagc tctcatcact tagatccgag 660
gacactgccg tctactactg tgcaaggagc ggaggctacg accctatgga ctattgggga 720
caaggcacta ctgtgactgt gtcgtcc 747

<210> 150
<211> 843
<212> DNA
<213> Artificial Sequence

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

_SL

<400> 150
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgatattg tcctcactca atcgccggac tctctggcgg tgtccctcgg agagagggcg 120
acgatcaatt gccgggcttc cgaatccgtc gataactacg gaaacacctt tatgcactgg 180
taccaacaga agccaggaca gccaccaaag ctgttgatct accgcgcttc aaaccttgag 240
tcgggtgtgc cggaccgctt cagcggcagc gggtccagaa ccgactttac cctcaccatc 300
agctcgctgc aggccgaaga tgcgcccgtc tattactgcc aacagagcaa cgaagatccg 360
cctactttcg gacaggggac taaactggaa atcaaggcg gagggaggctc gggtggagga 420
ggatcgggag gaggcgggtc cgggtgggtgc ggatcgcaaa tccagctggg gcagtccggc 480
gcagaagtga agaagccggg agcgtccgtg aaagtgagct gcaaggcctc aggggtacatc 540
ttaccaatt acggcatgaa ttgggtgcgg caggcaccgc gacagcgctt ggagtggatg 600
ggctggatca acacttacac cggggaaaagc acgtactcgg ccgacttcaa aggacgggtg 660
accattaccc tggatacctc ggcctcaacc gcttacatgg agctctcatc acttagatcc 720
gaggacactg ccgtctacta ctgtgcaagg agcggaggct acgaccctat ggactattgg 780
ggacaaggca ctactgtgac tgtgtcgtcc ggctcgcacc accatcacca tcatcatcac 840
cac 843

<210> 151
<211> 281
<212> PRT
<213> Artificial Sequence

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

<400> 151
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Ile Val Leu Thr ^{SL}Gln Ser Pro Asp Ser Leu
 20 25 30

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Glu
 35 40 45

Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys
 50 55 60

Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu
 65 70 75 80

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe
 85 90 95

Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr
 100 105 110

Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys
 115 120 125

Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly
 145 150 155 160

Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala
 165 170 175

Ser Gly Tyr Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala
 180 185 190

Pro Gly Gln Arg Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly
 195 200 205

Glu Ser Thr Tyr Ser Ala Asp Phe Lys Gly Arg Val Thr Ile Thr Leu
 210 215 220

Asp Thr Ser Ala Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser
 225 230 235 240

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro
 245 250 255

Met Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Ser
 260 265 270

His His His His His His His His
 275 280

<210> 152
 <211> 1479
 <212> DNA
 <213> Artificial Sequence

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

<400> 152
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccgatattg tcctcactca atcgccggac tctctggcgg tgtccctcgg agagagggcg 120
 acgatcaatt gccgggcttc cgaatccgtc gataactacg gaaacacctt tatgcactgg 180
 taccaacaga agccaggaca gccaccaaag ctgttgatct accgcgcttc aaaccttgag 240
 tcgggtgtgc cggaccgctt cagcggcagc ggttccagaa ccgactttac cctcaccatc 300
 agctcgctgc aggccgaaga tgctgccgtc tattactgcc aacagagcaa cgaagatccg 360
 cctactttcg gacaggggac taaactggaa atcaagggcg gaggaggctc gggtggagga 420
 ggatcgggag gaggcgggtc cgggtgggtgc ggatcgcaaa tccagctggt gcagtccggc 480
 gcagaagtga agaagccggg agcgtccgtg aaagtgagct gcaaggcctc aggttacatc 540

_SL

ttcaccaatt acggcatgaa ttgggtgcgg caggcacccg gacagcgctt ggagtggatg 600
ggctggatca acacttacac cggggaaagc acgtactcgg ccgacttcaa aggacgggtg 660
accattaccc tggatacctc ggcctcaacc gcttacatgg agctctcatc acttagatcc 720
gaggacactg ccgtctacta ctgtgcaagg agcggaggct acgaccctat ggactattgg 780
ggacaaggca ctactgtgac tgtgtcgtcc accactaccc cagcaccgag gccacccacc 840
ccggctccta ccatcgcctc ccagcctctg tccctgcgtc cggaggcatg tagacccgca 900
gctgggtgggg ccgtgcatac ccgggggtctt gacttcgcct gcgatatcta catttggggc 960
cctctggctg gtacttgcgg ggtcctgctg ctttcactcg tgatcactct ttactgtaag 1020
cgcggtcggg agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact 1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa 1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag 1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga 1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac 1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa 1380
cgcagaagag gcaaaggcca cgacggactg taccaggacg tcagcaccgc caccaaggac 1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg 1479

<210> 153

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 153

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

_SL

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

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Glu
35 40 45

Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys
50 55 60

Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu
65 70 75 80

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe
85 90 95

Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr
100 105 110

Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys
115 120 125

Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly
145 150 155 160

Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala
165 170 175

Ser Gly Tyr Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala
180 185 190

Pro Gly Gln Arg Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly
195 200 205

_SL

Glu Ser Thr Tyr Ser Ala Asp Phe Lys Gly Arg Val Thr Ile Thr Leu
210 215 220

Asp Thr Ser Ala Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser
225 230 235 240

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro
245 250 255

Met Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Thr Thr
260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
385 390 395 400

_SL

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 154

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 154

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

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

Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
35 40 45

Arg Leu Leu Ile Tyr Arg Ala Ser Asn Leu ^{SL}Glu Ser Gly Ile Pro Ala
 50 55 60

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

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

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

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 115 120 125

Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys
 130 135 140

Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe
 145 150 155 160

Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
 165 170 175

Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ser
 180 185 190

Ala Asp Phe Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser Val Ser
 195 200 205

Thr Ala Tyr Leu Gln Ile Asn Ala Leu Lys Ala Glu Asp Thr Ala Val
 210 215 220

Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr Trp Gly
 225 230 235 240

Gln Gly Thr Thr Val Thr Val Ser Ser
245

_SL

<210> 155
<211> 747
<212> DNA
<213> Artificial Sequence

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

<400> 155
gaaattgtgc tcacgcaatc acccgccact ctgtcgcttt ccccgggaga gcgggccacc 60
ctctcctgcc gcgcttcgga atcggtcgac aattacggaa atacttttat gcactgggtac 120
caacagaagc cagggcaggc gccaaaggctg ctgatctaca gagcctcgaa cctcgaaagc 180
ggcatccctg cgcggttcag cggtagcgga agccgcaccg atttcaccct gaccatctca 240
tacttgagc cgaggatgt ggcagtgtac tattgtcagc agtcgaacga ggacccgccg 300
actttcgggc agggaaacaa gctggaaatc aagggtggag gagggagcgg cggaggagga 360
tcgggaggag gaggcagcgg aggcggagga tcgcaaatcc aacttgtcca gtcgggctcc 420
gaactcaaaa agcctggcgc gtccgtgaag gtcagctgca aagcatcagg atacatcttc 480
actaactacg gtatgaattg ggtcagacag gtcctgggtc aggggtctgga gtggatggga 540
tggtattaaca cctacactgg ggaatcgact tactccgcgg acttcaaagg gcggttcgtg 600
ttttcactgg acaccagcgt gtccaccgct tacttgcaaa tcaacgccct caaggccgag 660
gacaccgccg tgtactactg cgcacgctca ggcggtacg atccaatgga ctactgggga 720
cagggcacta cggtgactgt gtcctcc 747

<210> 156
<211> 843
<212> DNA
<213> Artificial Sequence

<220>

_SL

<221> source

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

<400> 156

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atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
cccgaaattg tgctcacgca atcacccgcc actctgtcgc tttccccggg agagcgggcc      120
accctctcct gccgcgcttc ggaatcggtc gacaattacg gaaatacttt tatgcactgg      180
taccaacaga agccagggca ggcgccaagg ctgctgatct acagagcctc gaacctcgaa      240
agcggcatcc ctgcgcgggt cagcggtagc ggaagccgca ccgatttcac cctgaccatc      300
tcatacttgg agccggagga tgtggcagtg tactattgtc agcagtcgaa cgaggacccg      360
ccgactttcg ggcaggggaac caagctggaa atcaaggggtg gaggagggag cggcggagga      420
ggatcgggag gaggaggcag cggaggcgga ggatcgcaaa tccaacttgt ccagtcgggc      480
tccgaactca aaaagcctgg cgcgtccgtg aaggtcagct gcaaagcatc aggatacatc      540
ttcactaact acggtatgaa ttgggtcaga caggctccgg gtcaggggtc ggagtggatg      600
ggatggatta acacctacac tggggaatcg acttactccg cggacttcaa agggcgggttc      660
gtgtttttcac tggacaccag cgtgtccacc gcttacttgc aaatcaacgc cctcaaggcc      720
gaggacaccg ccgtgtacta ctgcgcacgc tcaggcggat acgatccaat ggactactgg      780
ggacagggca ctacggtgac tgtgtcctcc ggctcgcacc accatcacca tcatcatcac      840
cac                                                                843
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<210> 157

<211> 281

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 157

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

1 5 10 _SL 15
 His Ala Ala Arg Pro Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu
 20 25 30
 Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Glu
 35 40 45
 Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys
 50 55 60
 Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu
 65 70 75 80
 Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe
 85 90 95
 Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Val Ala Val Tyr Tyr
 100 105 110
 Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys
 115 120 125
 Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 130 135 140
 Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly
 145 150 155 160
 Ser Glu Leu Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala
 165 170 175
 Ser Gly Tyr Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala
 180 185 190
 Pro Gly Gln Gly Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly

_SL

195

200

205

Glu Ser Thr Tyr Ser Ala Asp Phe Lys Gly Arg Phe Val Phe Ser Leu
210 215 220

Asp Thr Ser Val Ser Thr Ala Tyr Leu Gln Ile Asn Ala Leu Lys Ala
225 230 235 240

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro
245 250 255

Met Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Ser
260 265 270

His His His His His His His His
275 280

<210> 158

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 158

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgaaattg tgctcacgca atcacccgcc actctgtcgc tttccccggg agagcgggcc 120

accctctcct gccgcgcttc ggaatcggtc gacaattacg gaaatacttt tatgcactgg 180

taccaacaga agccagggca ggcgccaagg ctgctgatct acagagcctc gaacctcgaa 240

agcggcatcc ctgcgcggtt cagcggtagc ggaagccgca ccgatttcac cctgaccatc 300

tcatcactgg agccggagga tgtggcagtg tactattgtc agcagtcgaa cgaggacccg 360

ccgactttcg ggcagggaac caagctggaa atcaaggggtg gaggagggag cggcggagga 420

_SL

ggatcgggag gaggaggcag cggaggcgga ggatcgcaaa tccaacttgt ccagtcgggc	480
tccgaactca aaaagcctgg cgcgtccgtg aaggtcagct gcaaagcatc aggatacatc	540
ttcactaact acggtatgaa ttgggtcaga caggctccgg gtcaggggtct ggagtggatg	600
ggatggatta acacctacac tggggaatcg acttactccg cggacttcaa agggcggttc	660
gtgttttcac tggacaccag cgtgtccacc gcttacttgc aaatcaacgc cctcaaggcc	720
gaggacaccg cctgttacta ctgcgcacgc tcaggcggat acgatccaat ggactactgg	780
ggacagggca ctacggtgac tgtgtcctcc accactaccc cagcaccgag gccacccacc	840
ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagacccgca	900
gctggtgggg ccgtgcatac ccgggggtctt gacttcgcct gcgatatcta catttgggcc	960
cctctggctg gtacttgctg ggtcctgctg ctttcactcg tgatcactct ttactgtaag	1020
cgcggtcgga agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccagggaac tcagcaccgc caccaaggac	1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg	1479

<210> 159

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 159

Met Ala Leu Pro Val Thr Ala Leu Leu Leu ^{SL}Pro Leu Ala Leu Leu
1 5 10 15
His Ala Ala Arg Pro Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu
20 25 30
Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Glu
35 40 45
Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys
50 55 60
Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu
65 70 75 80
Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe
85 90 95
Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Val Ala Val Tyr Tyr
100 105 110
Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys
115 120 125
Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
130 135 140
Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly
145 150 155 160
Ser Glu Leu Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala
165 170 175
Ser Gly Tyr Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala
180 185 190

Pro Gly Gln Gly Leu Glu Trp Met Gly Trp ^{SL}Ile Asn Thr Tyr Thr Gly
 195 200 205

Glu Ser Thr Tyr Ser Ala Asp Phe Lys Gly Arg Phe Val Phe Ser Leu
 210 215 220

Asp Thr Ser Val Ser Thr Ala Tyr Leu Gln Ile Asn Ala Leu Lys Ala
 225 230 235 240

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro
 245 250 255

Met Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Thr Thr
 260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
 275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
 290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
 305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
 325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
 340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
 355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
 370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr ^{_SL}Lys Gln Gly Gln Asn Gln
 385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
 405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
 420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
 435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
 450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
 465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 160
 <211> 249
 <212> PRT
 <213> Artificial Sequence

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

<400> 160
 Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
 1 5 10 15

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

Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro

35 40 — 45

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

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

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

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
130 135 140

Pro	Gly	Ala	Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Ile	Phe
145					150					155					160

Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln Arg Leu
165 170 175

Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ser
180 185 190

Ala Asp Phe Lys Gly Arg Val Thr Ile Thr Leu Asp Thr Ser Ala Ser
195 200 205

Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
210 215 220

Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr Trp Gly

225	230	<u>SL</u> 235	240
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Gln Gly Thr Thr Val Thr Val Ser Ser
245

<210> 161
<211> 747
<212> DNA
<213> Artificial Sequence

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

<400> 161
gagatcgtct tgacgcaatc gccagccacc ctgtccctga gcccaggcga gcgcgccacc 60
ctcagctgtc gggcgagcga aagcgtggac aattacggaa acacctttat gcactggtac 120
caacagaaac cggggcaggc tccgcgcctc ctcatctacc gcgcatccaa tctggaatca 180
ggaatccccg cgaggttctc cggtagcgga tcgcggactg actttactct gaccatctcg 240
tcccttgaac cggaggatgt ggctgtgtat tactgccagc agtcaaacga ggaccctcca 300
actttcgggc agggaaccaa gctcgaaatc aagggcggtg gcggaagcgg aggaggagga 360
tcaggcggag gcggctcagg cggtggaggt tcacaaattc aactggtgca gtcgggagcg 420
gaggatcaaga agccgggagc ctcagtga aa gtgagctgca aggcttcggg ttacattttc 480
actaattacg gcatgaactg ggtgaggcag gcccttgcc aacggttgga atggatggga 540
tggatcaaca cctacaccgg ggagtcgact tactccgcgg acttcaaggg gagagtcacg 600
atcaccctgg atacgtccgc aagcactgcc tacatggaac tgcctccct gcgctcggaa 660
gataccgcag tctactactg cgccagatcg ggcggatatg acccgatgga ctactgggga 720
cagggaacta ctgtcaccgt gtcctcg 747

<210> 162
<211> 843
<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 162

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atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
cccgagatcg tcttgacgca atcgccagcc accctgtccc tgagcccagg cgagcgcgcc      120
accctcagct gtcgggagcg cgaaagcgtg gacaattacg gaaacacctt tatgcactgg      180
taccaacaga aaccggggca ggctccgcgc ctctcatct accgcgcac caatctggaa      240
tcaggaatcc ccgcgagggt ctccggtagc ggatcgcgga ctgactttac tctgaccatc      300
tcgtcccttg aaccggagga tgtggctgtg tattactgcc agcagtcaaa cgaggaccct      360
ccaactttcg ggcagggaac caagctcgaa atcaagggcg gtggcggaag cggaggagga      420
ggatcaggcg gaggcggctc aggcgggtgga ggttcacaaa ttcaactggg gcagtcggga      480
gcggagggtca agaagccggg agcctcagtg aaagtgagct gcaaggcttc gggttacatt      540
ttcactaatt acggcatgaa ctgggtgagg caggcccctg gccaacgggt ggaatggatg      600
ggatggatca acacctacac cggggagtcg acttactccg cggacttcaa ggggagagtc      660
acgatcacc c tggatacgtc cgcaagcact gcctacatgg aactgtcctc cctgcgctcg      720
gaagataccg cagtctacta ctgcgccaga tcgggcggat atgacccgat ggactactgg      780
ggacaggga ctactgtcac cgtgtcctcg ggctcgcacc accatcacca tcatcatcac      840
cac                                                                843
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<210> 163

<211> 281

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

<400> 163

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Glu
35 40 45

Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys
50 55 60

Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu
65 70 75 80

Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe
85 90 95

Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Val Ala Val Tyr Tyr
100 105 110

Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys
115 120 125

Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly
145 150 155 160

Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala
165 170 175

Ser Gly Tyr Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala
180 185 190

_SL

Pro Gly Gln Arg Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly
195 200 205

Glu Ser Thr Tyr Ser Ala Asp Phe Lys Gly Arg Val Thr Ile Thr Leu
210 215 220

Asp Thr Ser Ala Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser
225 230 235 240

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro
245 250 255

Met Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Ser
260 265 270

His His His His His His His His
275 280

<210> 164

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 164

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgagatcg tcttgacgca atcgccagcc accctgtccc tgagcccagg cgagcgcgcc 120

accctcagct gtcgggagcg cgaaagcgtg gacaattacg gaaacacctt tatgcactgg 180

taccaacaga aaccggggca ggctccgcgc ctctcatct accgcgcatt caatctggaa 240

tcaggaatcc ccgcgagggt ctccggtagc ggatcgcgga ctgactttac tctgaccatc 300

tcgtcccttg aaccggagga tgtggctgtg tattactgcc agcagtcaaa cgaggaccct 360

_SL

ccaacttttcg ggcagggaac caagctcgaa atcaagggcg gtggcggaag cggaggagga 420
ggatcaggcg gaggcggctc aggcgggtgga ggttcacaaa ttcaactggg gcagtcggga 480
gcggagggtca agaagccggg agcctcagtg aaagtgagct gcaaggcttc gggttacatt 540
ttcactaatt acggcatgaa ctgggtgagg caggccccctg gccaacgggtt ggaatggatg 600
ggatggatca acacctacac cggggagtcg acttactccg cggacttcaa ggggagagtc 660
acgatcacc c tggatacgtc cgcaagcact gcctacatgg aactgtcctc cctgcgctcg 720
gaagataccg cagtctacta ctgcgccaga tcgggcggat atgacccgat ggactactgg 780
ggacaggga ctactgtcac cgtgtcctcg accactacc cagcaccgag gccaccacc 840
ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagaccgca 900
gctgggtgggg ccgtgcatac ccgggggtctt gacttcgcct gcgatatcta catttgggcc 960
cctctggctg gtacttgcgg ggtcctgctg ctttactcg tgatcactct ttactgtaag 1020
cgcggtcgga agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact 1080
actcaagagg aggacggctg ttcatgccgg tttccagagg aggaggaagg cggctgcgaa 1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag 1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga 1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac 1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattgggtat gaaaggggaa 1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac 1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg 1479

<210> 165

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

polypeptide"

<400> 165

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Glu
35 40 45

Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His Trp Tyr Gln Gln Lys
50 55 60

Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu
65 70 75 80

Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe
85 90 95

Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Val Ala Val Tyr Tyr
100 105 110

Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys
115 120 125

Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly
145 150 155 160

Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala
165 170 175

Ser Gly Tyr Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala

_SL

180

185

190

Pro Gly Gln Arg Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly
195 200 205

Glu Ser Thr Tyr Ser Ala Asp Phe Lys Gly Arg Val Thr Ile Thr Leu
210 215 220

Asp Thr Ser Ala Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser
225 230 235 240

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro
245 250 255

Met Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Thr Thr
260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys

370

375

_SL

380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
 385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
 405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
 420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
 435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
 450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
 465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 166

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 166

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

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

_SL

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

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ser Ala Asp Phe
50 55 60

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

Leu Gln Ile Asn Ala Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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

Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Leu Thr Gln
130 135 140

Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn
145 150 155 160

Cys Arg Ala Ser Glu Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Arg
180 185 190

Ala Ser Asn Leu Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
195 200 205

Ser Arg Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp
210 215 220

_SL

Val Ala Val Tyr Tyr Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe
225 230 235 240

Gly Gln Gly Thr Lys Leu Glu Ile Lys
245

<210> 167

<211> 747

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 167

cagatccagt tgggtccagtc aggctccgaa ctgaaaaagc cgggtgcatc cgtcaagggtg	60
tcgtgcaaag cctccgggtta cattttcacc aactacggca tgaactgggt cgcgcaggcc	120
cctgggcagg gactcgaatg gatgggggtgg atcaacactt acaccggaga gtcgacttac	180
tcggccgatt tcaaggagcg gttcgtgttt tccctggaca cttcagtctc gaccgcatat	240
ctccaaatca acgcgcttaa ggcggaagat actgctgtct actactgcgc cagatcagga	300
ggttacgatc caatggacta ctggggacag ggcaccactg tgacgggtgtc gtcgggagga	360
ggaggatcgg gcggaggcgg gtccggcggt ggaggagcgg gaggaggcgg aagcgacatc	420
gtgctgaccc agtcgccaga tagcctggcg gtgtccttgg gtgagagggc taccatcaat	480
tgctgcgcgt cagagtccgt ggacaattac gggaataacct tcatgcactg gtaccaacaa	540
aagcccggac aaccgccgaa gctgctgac tacagagcaa gcaacctcga atcaggagtg	600
ccggaccgct ttagcgggtc aggaagccgg actgacttca ccctgactat ctcctcgtc	660
caggccgagg acgtggccgt gtattactgc cagcagagca acgaagatcc tccaacgttc	720
ggccaaggaa ccaaactgga gattaag	747

_SL

<210> 168
<211> 843
<212> DNA
<213> Artificial Sequence

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

<400> 168
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccagatcc agttgggtcca gtcaggctcc gaactgaaaa agccgggtgc atccgtcaag 120
gtgtcgtgca aagcctccgg ttacattttc accaactacg gcatgaactg ggtccgccag 180
gccccctgggc agggactcga atggatgggg tggatcaaca cttacaccgg agagtcgact 240
tactcggccg atttcaaggg acggttcgtg ttttccctgg acatttcagt ctcgaccgca 300
tatctccaaa tcaacgcgct taaggcggaa gatactgctg tctactactg cgccagatca 360
ggaggttacg atccaatgga ctactgggga cagggcacca ctgtgacggt gtcgtcggga 420
ggaggaggat cgggcggagg cgggtccggc ggtggaggga gcggaggagg cggaagcgac 480
atcgtgctga ccagtcgcc agatagcctg gcggtgtcct tgggtgagag ggctaccatc 540
aattgtcgcg cgtcagagtc cgtggacaat tacgggaata cttcatgca ctggtaccaa 600
caaaagcccc gacaaccgcc gaagctgctg atctacagag caagcaacct cgaatcagga 660
gtgccggacc gcttttagcgg gtcaggaagc cggactgact tcaccctgac tatctcctcg 720
ctccaggccg aggacgtggc cgtgtattac tgccagcaga gcaacgaaga tcctccaacg 780
ttcggccaag gaaccaaact ggagattaag ggctcgcacc accatcacca tcatcatcac 840
cac 843

<210> 169
<211> 281
<212> PRT
<213> Artificial Sequence

<220>

_SL

<221> source

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

<400> 169

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr
65 70 75 80

Tyr Ser Ala Asp Phe Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser
85 90 95

Val Ser Thr Ala Tyr Leu Gln Ile Asn Ala Leu Lys Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr
115 120 125

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
145 150 155 160

Ile Val Leu Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu
165 170 175

_SL

Arg Ala Thr Ile Asn Cys Arg Ala Ser Glu Ser Val Asp Asn Tyr Gly
180 185 190

Asn Thr Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys
195 200 205

Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Val Pro Asp Arg
210 215 220

Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Ser Ser
225 230 235 240

Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Ser Asn Glu
245 250 255

Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Ser
260 265 270

His His His His His His His His
275 280

<210> 170

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 170

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

ccccagatcc agttgggtcca gtcaggctcc gaactgaaaa agccgggtgc atccgtcaag 120

gtgtcgtgca aagcctccgg ttacattttc accaactacg gcatgaactg ggtccgccag 180

gcccctgggc agggactcga atggatgggg tggatcaaca cttacaccgg agagtcgact 240

_SL

tactcggccg atttcaaggg acggttcgtg ttttccctgg acacttcagt ctcgaccgca	300
tatctccaaa tcaacgcgct taaggcggaa gatactgctg tctactactg cgccagatca	360
ggagggttacg atccaatgga ctactgggga cagggcacca ctgtgacggg gtcgtcggga	420
ggaggaggat cgggcggagg cgggtccggc ggtggaggga gcggaggagg cggaagcgac	480
atcgtgctga cccagtcgcc agatagcctg gcggtgtcct tgggtgagag ggctaccatc	540
aattgtcgcg cgtcagagtc cgtggacaat tacgggaata ctttcatgca ctggtaccaa	600
caaaagcccg gacaaccgcc gaagctgctg atctacagag caagcaacct cgaatcagga	660
gtgccggacc gctttagcgg gtcaggaagc cggactgact tcaccctgac tatctcctcg	720
ctccaggccg aggacgtggc cgtgtattac tgccagcaga gcaacgaaga tcctccaacg	780
ttcggccaag gaaccaaact ggagattaag accactaccc cagcaccgag gccacccacc	840
ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagacccgca	900
gctggtgggg ccgtgcatac ccggggtctt gacttcgcct gcgatatcta catttgggcc	960
cctctggctg gtacttgagg ggtcctgctg ctttcactcg tgatcactct ttactgtaag	1020
cgcggtcggg agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac	1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg	1479

<210> 171

<211> 493

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

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

<400> 171

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr
65 70 75 80

Tyr Ser Ala Asp Phe Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser
85 90 95

Val Ser Thr Ala Tyr Leu Gln Ile Asn Ala Leu Lys Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr
115 120 125

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
145 150 155 160

Ile Val Leu Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu
165 170 175

_SL

Arg Ala Thr Ile Asn Cys Arg Ala Ser Glu Ser Val Asp Asn Tyr Gly
180 185 190

Asn Thr Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys
195 200 205

Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Val Pro Asp Arg
210 215 220

Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Ser Ser
225 230 235 240

Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Ser Asn Glu
245 250 255

Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr
260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
355 360 365

_SL

Cys Arg Phe Pro Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 172

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 172

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

_SL

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

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

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ser Ala Asp Phe
50 55 60

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

Leu Gln Ile Asn Ala Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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

Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln
130 135 140

Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser
145 150 155 160

Cys Arg Ala Ser Glu Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Arg
180 185 190

Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly
195 200 205

_SL

Ser Arg Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp
210 215 220

Val Ala Val Tyr Tyr Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe
225 230 235 240

Gly Gln Gly Thr Lys Leu Glu Ile Lys
245

<210> 173

<211> 747

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 173

cagatccaac tgggtgcaatc aggatcggag ctgaagaagc ctggggcttc agtgaaagtc	60
agctgcaaag cctccggtta catcttcacc aactacggca tgaactgggt gcgccaggcc	120
cctggacagg gactcgaatg gatgggggtg atcaacacct ataccgggga atccacgtac	180
tcagcagatt tcaagggacg cttcgtcttt tcgctggata cctccgtgtc cactgcgtac	240
ctccaaatca atgccctcaa agccgaagat actgcggtct actactgcgc acggagcgga	300
ggctacgacc cgatggacta ctggggacag ggaaccacgg tgaccgtgtc cagcggagga	360
ggcggatcgg gaggcgggtg ttcaggcggg ggaggcagcg gcggaggtgg aagcgaaatc	420
gtcttgactc agagcccagc gactttgtcc ctgtcgcccg gagagcgggc aactctgtca	480
tgccgcgctt cggaatcggg ggacaactat ggaaacacct ttatgcactg gtaccaacag	540
aagccgggac aagccccgag acttctgatc taccgggcct cgaatctcga aagcggcatc	600
ccggctagat tctcggggtc gggatcaagg accgacttca ctcttactat ttcctcactg	660
gagccagaag atgtggcggg gtactactgt cagcagtcca atgaggaccc gccaaactttc	720

gggcaggga ccaagctgga gattaag

747

<210> 174

<211> 843

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 174

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

ccccagatcc aactggtgca atcaggatcg gagctgaaga agcctggggc ttcagtgaaa 120

gtcagctgca aagcctccgg ttacatcttc accaactacg gcatgaactg ggtgcgccag 180

gcccctggac agggactcga atggatgggg tggatcaaca cctataccgg ggaatccacg 240

tactcagcag atttcaaggg acgcttcgtc ttttcgctgg atacctccgt gtccactgcg 300

tacctccaaa tcaatgccct caaagccgaa gatactgcgg tctactactg cgcacggagc 360

ggaggctacg acccgatgga ctactgggga cagggaacca cggtgaccgt gtccagcgga 420

ggaggcggat cgggaggcgg tggttcaggc ggtggaggca gcggcggagg tggaagcgaa 480

atcgtcttga ctcagagccc agcgactttg tccctgtcgc ccggagagcg ggcaactctg 540

tcatgccgcg cttcgggaatc ggtggacaac tatggaaaca cttttatgca ctggtaccaa 600

cagaagccgg gacaagcccc gagacttctg atctaccggg cctcgaatct cgaaagcggc 660

atccccgcta gattctcggg gtcgggatca aggaccgact tcaactttac tatttcctca 720

ctggagccag aagatgtggc ggtgtactac tgtcagcagt ccaatgagga ccgccaact 780

ttcgggcagg gcaccaagct ggagattaag ggctcgcacc accatcacca tcatcatcac 840

cac 843

<210> 175

<211> 281

<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

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

<400> 175

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr
65 70 75 80

Tyr Ser Ala Asp Phe Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser
85 90 95

Val Ser Thr Ala Tyr Leu Gln Ile Asn Ala Leu Lys Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr
115 120 125

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
145 150 155 160

Ile Val Leu Thr Gln Ser Pro Ala Thr Leu ^{SL}Ser Leu Ser Pro Gly Glu
165 170 175

Arg Ala Thr Leu Ser Cys Arg Ala Ser Glu Ser Val Asp Asn Tyr Gly
180 185 190

Asn Thr Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg
195 200 205

Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala Arg
210 215 220

Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Ser Ser
225 230 235 240

Leu Glu Pro Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Ser Asn Glu
245 250 255

Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Ser
260 265 270

His His His His His His His His
275 280

<210> 176
<211> 1479
<212> DNA
<213> Artificial Sequence

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

<400> 176
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccagatcc aactggtgca atcaggatcg gagctgaaga agcctggggc ttcagtgaaa 120
gtcagctgca aagcctccgg ttacatcttc accaactacg gcatgaactg ggtgcgccag 180

_SL

gccccctggac agggactcga atggatgggg tggatcaaca cctataaccgg ggaatccacg 240
tactcagcag atttcaaggg acgcttcgtc ttttcgctgg atacctccgt gtccactgcg 300
tacctccaaa tcaatgccct caaagccgaa gatactgcgg tctactactg cgcacggagc 360
ggaggctacg acccgatgga ctactgggga cagggaacca cggtgaccgt gtccagcggg 420
ggaggcggat cgggaggcgg tggttcaggc ggtggaggca gcggcggagg tggaagcgaa 480
atcgtcttga ctcagagccc agcgactttg tccctgtcgc ccggagagcg ggcaactctg 540
tcatgccgcg cttcggaatc ggtggacaac tatggaaaca cttttatgca ctggtacca 600
cagaagccgg gacaagcccc gagacttctg atctaccggg cctcgaatct cgaaagcggc 660
atcccggtcga gattctcggg gtcgggatca aggaccgact tctactttac tatttcctca 720
ctggagccag aagatgtggc ggtgtactac tgtcagcagt ccaatgagga cccgccaact 780
ttcgggcagg gcaccaagct ggagattaag accactaccc cagcaccgag gccacccacc 840
ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagaccgcga 900
gctggtgggg ccgtgcatac ccggggtctt gacttcgcct gcgatatcta catttgggcc 960
cctctggctg gtacttgcgg ggtcctgctg ctttcactcg tgatcactct ttactgtaag 1020
cgcggtcggg agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact 1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggtgcgaa 1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag 1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga 1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac 1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa 1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac 1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg 1479

<210> 177

<211> 493

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 177

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr
65 70 75 80

Tyr Ser Ala Asp Phe Lys Gly Arg Phe Val Phe Ser Leu Asp Thr Ser
85 90 95

Val Ser Thr Ala Tyr Leu Gln Ile Asn Ala Leu Lys Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr
115 120 125

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
145 150 155 160

_SL

Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu
165 170 175

Arg Ala Thr Leu Ser Cys Arg Ala Ser Glu Ser Val Asp Asn Tyr Gly
180 185 190

Asn Thr Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg
195 200 205

Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala Arg
210 215 220

Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Ser Ser
225 230 235 240

Leu Glu Pro Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Ser Asn Glu
245 250 255

Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr
260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
340 345 350

_SL

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 178

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 178

Gln Ile Gln 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 Ile Phe Thr Asn Tyr
 20 25 30

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

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ser Ala Asp Phe
 50 55 60

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

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

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

Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Leu Thr Gln
 130 135 140

Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn
 145 150 155 160

Cys Arg Ala Ser Glu Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Arg
 180 185 190

Ala Ser Asn Leu Glu Ser Gly Val Pro Asp ^{_SL}Arg Phe Ser Gly Ser Gly
195 200 205

Ser Arg Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp
210 215 220

Val Ala Val Tyr Tyr Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe
225 230 235 240

Gly Gln Gly Thr Lys Leu Glu Ile Lys
245

<210> 179

<211> 747

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 179

cagatccagc tggatgcagtc gggagctgaa gtgaaaaagc cgggagcatc ggtgaagggtg	60
tcatgcaaag ccagcgggta catcttcact aactacggta tgaactgggt gagacaagcg	120
cctggccaga gattggaatg gatgggatgg atcaatacct acaccgggga atcaacttac	180
agcggcgact tcaagggacg cgtgaccatc acgctggaca cctccgcgtc cactgcctac	240
atggagctct cgtcattgcg gagcgaggac accgccgtct actactgcgc acggtcagga	300
gggtacgata cgatggacta ctggggacag ggcactaccg tcaccgtgag ctccgggtgga	360
ggcggcagcg gcggtggcgg atcaggtgga ggaggatcag gaggaggagg gtccgatatc	420
gtgcttactc agtcacccga ttcgctggca gtctccctcg gagaacgcgc caccatcaat	480
tgtcgcgcgt ccgaatccgt cgacaactac ggcaacacct ttatgcactg gtaccaacag	540
aagcctggac aaccgcaaaa actgctgata taccgcgcta gcaacctcga atcgggcgtg	600
ccagataggt tctcgggctc ggggagccgg acggatttta ctctgactat ttcgtccctc	660

_SL

caagcagagg acgtcgccgt gtattactgc cagcaatcga atgaggaccc gccaaactttc 720
ggacagggga ccaagctgga gattaag 747

<210> 180

<211> 843

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 180

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccagatcc agctggtgca gtcgggagct gaagtgaaaa agccgggagc atcgggtgaag 120
gtgtcatgca aagccagcgg ttacatcttc actaactacg gtatgaactg ggtgagacaa 180
gcgccctggcc agagattgga atggatggga tggatcaata cctacaccgg ggaatcaact 240
tacagcgccg acttcaaggg acgcgtgacc atcacgctgg acacctccgc gtccactgcc 300
tacatggagc tctcgtcatt gcggagcgag gacaccgccg tctactactg cgacagggtca 360
ggagggtacg atccgatgga ctactgggga cagggcacta ccgtcaccgt gagtccgggt 420
ggaggcggca gcggcggtgg cggatcaggt ggaggaggat caggaggagg aggggtccgat 480
atcgtgctta ctcagtcacc cgattcgctg gcagtctccc tcggagaacg cgccaccatc 540
aattgtcgcg cgtccgaatc cgtcgacaac tacggcaaca cttttatgca ctggtaccaa 600
cagaagcctg gacaaccgcc aaaactgctg atctaccgcg ctagcaacct cgaatcgggc 660
gtgccagata ggttctcggg ctcggggagc cggacggatt ttactctgac tatttcgtcc 720
ctccaagcag aggacgtcgc cgtgtattac tgccagcaat cgaatgagga cccgccaact 780
ttcggacagg ggaccaagct ggagattaag ggctcgcacc accatcacca tcatcatcac 840
cac 843

_SL

<210> 181

<211> 281

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 181

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Arg Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr
65 70 75 80

Tyr Ser Ala Asp Phe Lys Gly Arg Val Thr Ile Thr Leu Asp Thr Ser
85 90 95

Ala Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr
115 120 125

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp

_SL

ccccagatcc agctggtgca gtcgggagct gaagtgaaaa agccgggagc atcgggtgaag	120
gtgtcatgca aagccagcgg ttacatcttc actaactacg gtatgaactg ggtgagacaa	180
gcgccctggcc agagattgga atggatggga tggatcaata cctacaccgg ggaatcaact	240
tacagcgccg acttcaaggg acgcgtgacc atcacgctgg acacctccgc gtccactgcc	300
tacatggagc tctcgtcatt gcggagcgag gacaccgccg tctactactg cgacagggtca	360
ggagggtacg atccgatgga ctactgggga cagggcacta ccgtcaccgt gagctccggt	420
ggaggcggca gcggcggtgg cggatcagggt ggaggaggat caggaggagg aggggtccgat	480
atcgtgctta ctcagtcacc cgattcgctg gcagtctccc tcggagaacg cgccaccatc	540
aattgtcgcg cgtccgaatc cgtcgacaac tacggcaaca cttttatgca ctggtaccaa	600
cagaagcctg gacaaccgcc aaaactgctg atctaccgcg ctagcaacct cgaatcgggc	660
gtgccagata ggttctcggg ctcggggagc cggacggatt ttactctgac tatttcgtcc	720
ctccaagcag aggacgtcgc cgtgtattac tgccagcaat cgaatgagga cccgccaact	780
ttcggacagg ggaccaagct ggagattaag accactaccc cagcaccgag gccacccacc	840
ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagacccgca	900
gctggtgggg ccgtgcatac ccggggtctt gacttcgcct gcgatatcta catttgggcc	960
cctctggctg gtacttgctg ggtcctgctg ctttcactcg tgatcactct ttactgtaag	1020
cgcggtcgga agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac	1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg	1479

_SL

<210> 183

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 183

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Arg Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr
65 70 75 80

Tyr Ser Ala Asp Phe Lys Gly Arg Val Thr Ile Thr Leu Asp Thr Ser
85 90 95

Ala Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr
115 120 125

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser
130 135 140

Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	<u>SL</u> Gly	Gly	Gly	Gly	Ser	Asp
145					150					155					160
Ile	Val	Leu	Thr	Gln	Ser	Pro	Asp	Ser	Leu	Ala	Val	Ser	Leu	Gly	Glu
				165					170					175	
Arg	Ala	Thr	Ile	Asn	Cys	Arg	Ala	Ser	Glu	Ser	Val	Asp	Asn	Tyr	Gly
			180					185					190		
Asn	Thr	Phe	Met	His	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro	Pro	Lys
		195					200					205			
Leu	Leu	Ile	Tyr	Arg	Ala	Ser	Asn	Leu	Glu	Ser	Gly	Val	Pro	Asp	Arg
	210					215					220				
Phe	Ser	Gly	Ser	Gly	Ser	Arg	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser
225					230					235					240
Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Ser	Asn	Glu
				245					250					255	
Asp	Pro	Pro	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys	Thr	Thr
			260					265					270		
Thr	Pro	Ala	Pro	Arg	Pro	Pro	Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln
		275					280					285			
Pro	Leu	Ser	Leu	Arg	Pro	Glu	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala
	290					295					300				
Val	His	Thr	Arg	Gly	Leu	Asp	Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala
305					310					315					320
Pro	Leu	Ala	Gly	Thr	Cys	Gly	Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr
				325					330					335	

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu ^{SL}Leu Tyr Ile Phe Lys Gln
340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 184

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

polypeptide"

<400> 184

Gln Ile Gln 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 Ile Phe Thr Asn Tyr
20 25 30

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

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ser Ala Asp Phe
50 55 60

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

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

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

Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln
130 135 140

Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser
145 150 155 160

Cys Arg Ala Ser Glu Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His
165 170 175

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

_SL

180	185	190
Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly		
195	200	205
Ser Arg Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp		
210	215	220
Val Ala Val Tyr Tyr Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe		
225	230	235 240
Gly Gln Gly Thr Lys Leu Glu Ile Lys		
245		

<210> 185
 <211> 747
 <212> DNA
 <213> Artificial Sequence

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

<400> 185	
cagatccagc tgggtgcaatc gggagctgaa gtgaagaagc ccggagcttc agtcaaagtc	60
agctgcaagg cgtcgggcta tatcttcacc aactacggga tgaactgggt gcggcaggcc	120
cctggacaaa gactggaatg gatgggatgg atcaacactt atactggcga gagcacgtac	180
tcagccgact ttaaggagc ggtgactatc accctcgata cctccgcctc cactgcgtac	240
atggaactct cgtccttgcg ctccgaggac actgccgtgt actactgcgc caggtcgggt	300
ggctacgata cgatggatta ctgggggtcaa ggaaccaccg tcaactgtgtc gtccggcgga	360
ggcgggagcg gaggtggtgg ttcgggagga ggagggtcag gcggaggagg cagcgaaatc	420
gtgctgaccc aaagcccggc aactctgtca ctacgcccag gggagagggc aaccctgtca	480
tgctgggcta gcgaatccgt ggacaattac ggaaacacgt ttatgcactg gtaccaacag	540

_SL

aaaccaggac aggcgcctag acttctcatc taccgcgcga gcaatttgga atccggcatc	600
ccagcccgt tctccgggtc ggggtcacgc accgatttca ctctgaccat ttcctccctg	660
gaacccgagg acgtggcagt ctactactgc cagcagtcga atgaggaccc gccgaccttc	720
ggacagggca ccaagctgga gattaag	747

<210> 186
 <211> 843
 <212> DNA
 <213> Artificial Sequence

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

<400> 186	
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccagatcc agctgggtgca atcgggagct gaagtgaaga agcccggagc ttcagtcaaa	120
gtcagctgca aggcgtcggg ctatatcttc accaactacg ggatgaactg ggtgcggcag	180
gcccctggac aaagactgga atggatggga tggatcaaca cttatactgg cgagagcacg	240
tactcagccg actttaaggg acgggtgact atcacctcg atacctccgc ctccactgcg	300
tacatggaac tctcgtcctt gcgctccgag gacactgccg tgtactactg cgccaggctg	360
ggtggctacg atccgatgga ttactgggggt caaggaacca ccgtcactgt gtcgtccggc	420
ggaggcggga gcggagggtg tggttcggga ggaggagggt caggcggagg aggcagcgaa	480
atcgtgctga cccaaagccc ggcaactctg tcaactagcc caggggagag ggcaaccctg	540
tcatgtcggg ctagcgaatc cgtggacaat tacggaaaca cgtttatgca ctggtaccaa	600
cagaaaccag gacaggcgcc tagacttctc atctaccgcg cgagcaattt ggaatccggc	660
atcccagccc gcttctccgg gtcgggggtca cgcaccgatt tcaacttgac catttcctcc	720
ctggaacccg aggacgtggc agtctactac tgccagcagt cgaatgagga cccgccgacc	780
ttcggacagg gcaccaagct ggagattaag ggctcgcacc accatcacca tcatcatcac	840

<210> 187

<211> 281

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 187

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Arg Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr
65 70 75 80

Tyr Ser Ala Asp Phe Lys Gly Arg Val Thr Ile Thr Leu Asp Thr Ser
85 90 95

Ala Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr
115 120 125

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser
130 135 140

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Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
145 150 155 160

Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu
165 170 175

Arg Ala Thr Leu Ser Cys Arg Ala Ser Glu Ser Val Asp Asn Tyr Gly
180 185 190

Asn Thr Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg
195 200 205

Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala Arg
210 215 220

Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Ser Ser
225 230 235 240

Leu Glu Pro Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Ser Asn Glu
245 250 255

Asp Pro Pro Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Gly Ser
260 265 270

His His His His His His His His
275 280

<210> 188

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

_SL

<400> 188

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccagatcc agctgggtgca atcggggagct gaagtgaaga agcccggagc ttcagtcaaa	120
gtcagctgca aggcgtcggg ctatatcttc accaactacg ggatgaactg ggtgcggcag	180
gcccctggac aaagactgga atggatggga tggatcaaca cttatactgg cgagagcacg	240
tactcagccg actttaaggg acgggtgact atcacctcg atacctccgc ctccactgcg	300
tacatggaac tctcgtcctt gcgctccgag gacactgccg tgtactactg cgccaggctcg	360
ggtggctacg atccgatgga ttactggggg caaggaacca ccgtcactgt gtcgtccggc	420
ggaggcggga gcggagggtg tggttcggga ggaggagggt caggcggagg aggcagcgaa	480
atcgtgctga cccaaagccc ggcaactctg tctactcagcc caggggagag ggcaaccctg	540
tcatgtcggg ctagcgaatc cgtggacaat tacggaaaca cgtttatgca ctggtacca	600
cagaaaccag gacaggcgcc tagacttctc atctaccgcg cgagcaattt ggaatccggc	660
atcccagccc gcttctccgg gtcgggggtca cgcaccgatt tctacttgac catttcctcc	720
ctggaacccg aggacgtggc agtctactac tgccagcagt cgaatgagga cccgccgacc	780
ttcggacagg gcaccaagct ggagattaag accactaccc cagcaccgag gccaccacc	840
ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagaccgca	900
gctgggtgggg ccgtgcatac ccgggggtctt gacttcgcct gcgatatcta catttgggcc	960
cctctggctg gtacttgctg ggtcctgctg ctttcactcg tgatcactct ttactgtaag	1020
cgcggtcggg agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg gcgagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac	1440

_SL

acctatgacg ctcttcacat gcaggccctg ccgcctcgg

1479

<210> 189

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 189

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Arg Leu Glu Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr
65 70 75 80

Tyr Ser Ala Asp Phe Lys Gly Arg Val Thr Ile Thr Leu Asp Thr Ser
85 90 95

Ala Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr
115 120 125

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser

_SL

<220>

<221> source

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

<400> 190

ggcagcggag agggcagagg aagtcttcta acatgcggtg acgtggagga gaatcccggc	60
cctagagcca ccatggccct gcctgtgaca gccctgctgc tgcctctggc tctgctgctg	120
catgccgcta gacccggatc cgacatcgtg ctgacacaga gccctgcttc cctggccgtg	180
tccctgggac agagagccac aatcagctgc agggccagcg agagcgtgga caactacggc	240
aacaccttca tgcactggta tcagcagaag cccggccagc cccccaagct gctgatctac	300
agagccagca acctggaaaag cggcatcccc gccagatttt ccggcagcgg cagcagaacc	360
gacttcaccc tgaccatcaa ccccgtagga gccgacgacg tggccaccta ctactgccag	420
cagagcaacg aggaccccc cacatttggg gccggcacca agctggaact gaagggcggg	480
ggcggatctg gcggcggagg atcttctggg ggaggctctc agattcagct ggtgcagagc	540
ggcccagagc tgaagaaacc cggcgagaca gtgaagatct cctgcaaggc ctccggctac	600
atcttcacca attacggcat gaactgggtc aagcaggccc ctggcaagag cttcaagtgg	660
atgggctgga tcaacaccta caccggcgag agcacctaca gcgccgactt caagggcaga	720
ttgccttca gcctggaaac cagcgccagc accgcctacc tgcacatcaa cgacctgaag	780
aacgaggaca ccgccaccta tttctgcgcc agaagcggcg gctacgaccc catggattat	840
tggggccagg gcaccagcgt gaccgtgtcc tctgctagct ccggaaccac gacgccagcg	900
ccgcgaccac caacaccggc gccaccatc gcgtcgagc ccctgtccct gcgcccagag	960
gcgtgccggc cagcggcggg gggcgagtg cacacgaggg ggctggactt cgcctgtgat	1020
atctacatct gggcgccctt ggccgggact tgtgggggtcc ttctcctgtc actggttatc	1080
accctttact gcaaacgggg cagaaagaaa ctctgtata tattcaaaca accatttatg	1140
agaccagtac aaactactca agaggaagat ggctgtagct gccgatttcc agaagaagaa	1200
gaaggaggat gtgaactgag agtgaagttc agcaggagcg cagacgcccc cgcgtagaag	1260

_SL

cagggccaga accagctcta taacgagctc aatctaggac gaagagagga gtacgatgtt	1320
ttggacaaga gacgtggccg ggaccctgag atggggggaa agccgagaag gaagaaccct	1380
caggaaggcc tgtacaatga actgcagaaa gataagatgg cggaggccta cagtgaagatt	1440
gggatgaaag gcgagcgccg gaggggcaag gggcacgatg gcctttacca ggggtctcagt	1500
acagccacca aggacaccta cgacgccctt cacatgcagg ccctgcccc tcgctaagtc	1560
gacagctcgc tttcttgctg tccaatttct attaaagggtt cctttgttcc ctaagtccaa	1620
ctactaaact gggggatatt atgaagggcc ttgagcatct ggattctgcc taataaaaaa	1680
catttatttt cattgctgcg tcgagagctc gctttcttgc tgtccaattt ctattaaagg	1740
ttcctttgtt ccctaagtcc aactactaaa ctgggggata ttatgaaggg ccttgagcat	1800
ctggattctg cctaataaaa aacatttatt ttcattgctg cctcgacgaa ttcaaaaaaa	1860
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	1920
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	1980
aaaaaaaaa aaaaaaaaaa aaa	2003

<210> 191

<211> 494

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 191

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5					10					15	

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

Ser	Leu	Ala	Val	Ser	Leu	Gly	Gln	Arg	Ala	Thr	Ile	Ser	Cys	Arg	Ala
			35				40					45			

_SL

Ser Glu Ser Val Asp Asn Tyr Gly Asn Thr Phe Met His Trp Tyr Gln
50 55 60

Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Arg Ala Ser Asn
65 70 75 80

Leu Glu Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr
85 90 95

Asp Phe Thr Leu Thr Ile Asn Pro Val Glu Ala Asp Asp Val Ala Thr
100 105 110

Tyr Tyr Cys Gln Gln Ser Asn Glu Asp Pro Pro Thr Phe Gly Ala Gly
115 120 125

Thr Lys Leu Glu Leu Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
130 135 140

Ser Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu
145 150 155 160

Lys Lys Pro Gly Glu Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr
165 170 175

Ile Phe Thr Asn Tyr Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys
180 185 190

Ser Phe Lys Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr
195 200 205

Tyr Ser Ala Asp Phe Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser
210 215 220

Ala Ser Thr Ala Tyr Leu His Ile Asn Asp Leu Lys Asn Glu Asp Thr
225 230 235 240

_SL

Ala Thr Tyr Phe Cys Ala Arg Ser Gly Gly Tyr Asp Pro Met Asp Tyr
245 250 255

Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser Ser Gly Thr
260 265 270

Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser
275 280 285

Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly
290 295 300

Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp
305 310 315 320

Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile
325 330 335

Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys
340 345 350

Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys
355 360 365

Ser Cys Arg Phe Pro Glu Glu Glu Gly Gly Cys Glu Leu Arg Val
370 375 380

Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn
385 390 395 400

Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val
405 410 415

Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg
420 425 430

_SL

Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys
435 440 445

Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg
450 455 460

Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys
465 470 475 480

Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 192

<211> 2019

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 192

atggccctgc ctgtgacagc cctgctgctg cctctggctc tgctgctgca cgccgctaga	60
cctggatccc aggtgcagct gcagcagcct ggcgctgaac tcgtgcggcc aggcgcttct	120
gtgaagctga gctgtaaagc cagcggctac accttcacca gctactggat gaactgggtc	180
aagcagcggc ccgaccaggg cctggagtgg atcggcagaa tcgacccta cgacagcgag	240
acacactaca accagaagtt caaggacaag gccatcctga ccgtggacaa gagcagcagc	300
accgcctaca tgcagctgtc cagcctgacc agcgaggaca gcgccgtgta ctactgcgcc	360
aggggcaact gggacgacta ttggggccag ggcaccaccc tgacagtgtc tagcggaggc	420
ggaggatctg gcggcggagg aagttctggc ggaggctccg acgtgcagat caccagagc	480
cctagctacc tggccgcctc tcctggcgag acaatcacca tcaactgccg ggccagcaag	540
agcatctcca aggacctggc ctggtatcag gaaaagccc gcaagaccaa caagctgctg	600

_SL

atctacagcg gcagcacctt gcagagcggc atccccagca gattttccgg cagcggctcc 660
ggcaccgact tcacctgac catcagctcc ctggaacccg aggactttgc catgtactat 720
tgccagcagc acaacaagta cccttacacc ttcggcggag gcaccaagct ggaaatcaag 780
gccagctccg gagagagcaa gtacggccct ccctgcccc cttgccctgc ccccgagttc 840
ctgggcggac ccagcgtgtt cctgttcccc cccaagccca aggacacctt gatgatcagc 900
cggacccccg aggtgacctg tgtggtggtg gacgtgtccc aggaggaccc cgaggtccag 960
ttcaactggt acgtggacgg cgtggagggtg cacaacgcca agaccaagcc ccgggaggag 1020
cagttcaata gcacctaccg ggtggtgtcc gtgtgaccg tgctgcacca ggactggctg 1080
aacggcaagg aatacaagtg taaggtgtcc aacaagggcc tgcccagcag catcgagaaa 1140
accatcagca aggccaaggg ccagcctcgg gagccccagg tgtacacctt gccccctagc 1200
caagaggaga tgaccaagaa ccaggtgtcc ctgacctgcc tggatgaagg cttctacccc 1260
agcgacatcg ccgtggagtg ggagagcaac ggccagcccc agaacaacta caagaccacc 1320
ccccctgtgc tggacagcga cggcagcttc ttcctgtaca gccggctgac cgtggacaag 1380
agccggtggc aggagggcaa cgtctttagc tgctccgtga tgcacgaggc cctgcacaac 1440
cactacaccc agaagagcct gagcctgtcc ctgggcaaga tggatatcta catctgggcg 1500
cccttggccg ggacttgtgg ggtccttctc ctgtcactgg ttatcacctt ttactgcaaa 1560
cggggcagaa agaaactcct gtatatattc aaacaaccat ttatgagacc agtacaaact 1620
actcaagagg aagatggctg tagctgccga tttccagaag aagaagaagg aggatgtgaa 1680
ctgagagtga agttcagcag gagcgcagac gccccgcgt acaagcaggg ccagaaccag 1740
ctctataacg agctcaatct aggacgaaga gaggagtacg atgttttgga caagagacgt 1800
ggccgggacc ctgagatggg gggaaagccg agaaggaaga accctcagga aggcctgtac 1860
aatgaactgc agaaagataa gatggcggag gcctacagt agattgggat gaaaggcgag 1920
cgccggaggg gcaaggggca cgatggcctt taccagggtc tcagtacagc caccaaggac 1980
acctacgacg cccttcacat gcaggccctg cccccctgc 2019

_SL

<210> 193
<211> 673
<212> PRT
<213> Artificial Sequence

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

<400> 193
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

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

Glu Leu Val Arg Pro Gly Ala Ser Val Lys Leu Ser Cys Lys Ala Ser
35 40 45

Gly Tyr Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Lys Gln Arg Pro
50 55 60

Asp Gln Gly Leu Glu Trp Ile Gly Arg Ile Asp Pro Tyr Asp Ser Glu
65 70 75 80

Thr His Tyr Asn Gln Lys Phe Lys Asp Lys Ala Ile Leu Thr Val Asp
85 90 95

Lys Ser Ser Ser Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu
100 105 110

Asp Ser Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp
115 120 125

Gly Gln Gly Thr Thr Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
130 135 140

_SL

Gly Gly Gly Ser Ser Gly Gly Gly Ser Asp Val Gln Ile Thr Gln Ser
145 150 155 160

Pro Ser Tyr Leu Ala Ala Ser Pro Gly Glu Thr Ile Thr Ile Asn Cys
165 170 175

Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Glu Lys
180 185 190

Pro Gly Lys Thr Asn Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln
195 200 205

Ser Gly Ile Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
210 215 220

Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Met Tyr Tyr
225 230 235 240

Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys
245 250 255

Leu Glu Ile Lys Ala Ser Ser Gly Glu Ser Lys Tyr Gly Pro Pro Cys
260 265 270

Pro Pro Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu
275 280 285

Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
290 295 300

Val Thr Cys Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln
305 310 315 320

Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
325 330 335

_SL

Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu
340 345 350

Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
355 360 365

Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys
370 375 380

Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
385 390 395 400

Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
405 410 415

Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
420 425 430

Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
435 440 445

Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln
450 455 460

Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
465 470 475 480

His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys Met Asp Ile
485 490 495

Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser
500 505 510

Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr
515 520 525

_SL

Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu
530 535 540

Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu
545 550 555 560

Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln
565 570 575

Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu
580 585 590

Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly
595 600 605

Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln
610 615 620

Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu
625 630 635 640

Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr
645 650 655

Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro
660 665 670

Arg

<210> 194

<211> 1461

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 194

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aactcgtcca aagcggagcg gaagtcaaga aacccggagc gagcgtgaaa	120
gtgtcctgca aagcctccgg ctacaccttt acgggctact acatgcactg ggtgcgccag	180
gcaccaggac agggctcttga atggatggga tggatcaacc ctaattcggg cggaactaac	240
tacgcacaga agttccaggg gagagtgact ctgactcggg atacctccat ctcaactgtc	300
tacatggaac tctcccgtt gcggtcagat gatacggcag tgtactactg cgccgcgac	360
atgaatatcc tggctaccgt gccgttcgac atctggggac aggggactat ggttactgtc	420
tcatcgggcg gtggagggttc aggaggaggc ggctcgggag gcggagggttc ggacattcag	480
atgaccagcgt ccccatcctc tctgtcggcc agcgtcggag atagggtgac cattacctgt	540
cgggcctcgc aaagcatctc ctcgtacctc aactggatat agcaaaagcc gggaaaggcg	600
cctaagctgc tgatctacgc cgcttcgagc ttgcaaagcg gggtgccatc cagattctcg	660
ggatcaggct caggaaccga cttcaccttg accgtgaaca gcctccagcc ggaggacttt	720
gccacttact actgccagca gggagactcc gtgccgctta ctttcggggg gggtaaccgc	780
ctggagatca agaccactac ccagcaccg aggccacca ccccggtcc taccatcgcc	840
tcccagcctc tgtccctgcg tccggaggca tgtagaccg cagctgggtg gcccggtcat	900
acccggggtc ttgacttcgc ctgcgatatc tacatttggg cccctctggc tgggtacttg	960
ggggtcctgc tgctttcact cgtgatcact ctttactgta agcgcggtcg gaagaagctg	1020
ctgtacatct ttaagcaacc cttcatgagg cctgtgcaga ctactcaaga ggaggacggc	1080
tgttcatgcc ggttcccaga ggaggaggaa ggcggctgcg aactgcgcgt gaaattcagc	1140
cgcagcgag atgctccagc ctacaagcag gggcagaacc agctctacaa cgaactcaat	1200
cttggtcggg gagaggagta cgacgtgctg gacaagcgga gaggacggga cccagaaatg	1260
ggcgggaagc cgcgcagaaa gaatcccaa gagggcctgt acaacgagct ccaaaaggat	1320

_SL

aagatggcag aagcctatag cgagattggt atgaaagggg aacgcagaag aggcaaaggc	1380
cacgacggac tgtaccaggg actcagcacc gccaccaagg acacctatga cgctcttcac	1440
atgcaggccc tgccgcctcg g	1461

<210> 195
 <211> 487
 <212> PRT
 <213> Artificial Sequence

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

<400> 195
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn
 65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser
 85 90 95

Ile Ser Thr Val Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro
 115 120 125

_SL

Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly
130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln
145 150 155 160

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
165 170 175

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
180 185 190

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
195 200 205

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
210 215 220

Gly Thr Asp Phe Thr Leu Thr Val Asn Ser Leu Gln Pro Glu Asp Phe
225 230 235 240

Ala Thr Tyr Tyr Cys Gln Gln Gly Asp Ser Val Pro Leu Thr Phe Gly
245 250 255

Gly Gly Thr Arg Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro
260 265 270

Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro
275 280 285

Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu
290 295 300

Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys
305 310 315 320

_SL

Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly
325 330 335

Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val
340 345 350

Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu
355 360 365

Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp
370 375 380

Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn
385 390 395 400

Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg
405 410 415

Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly
420 425 430

Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu
435 440 445

Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu
450 455 460

Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His
465 470 475 480

Met Gln Ala Leu Pro Pro Arg
485

<210> 196

<211> 264

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 196

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser
85 90 95

Ile Ser Thr Val Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro
115 120 125

Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly
130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln
145 150 155 160

_SL

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
165 170 175

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
180 185 190

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
195 200 205

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
210 215 220

Gly Thr Asp Phe Thr Leu Thr Val Asn Ser Leu Gln Pro Glu Asp Phe
225 230 235 240

Ala Thr Tyr Tyr Cys Gln Gln Gly Asp Ser Val Pro Leu Thr Phe Gly
245 250 255

Gly Gly Thr Arg Leu Glu Ile Lys
260

<210> 197

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 197

Gln Val Gln 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 Met His Trp Val Arg Gln Ala Pro Gly ^{SL}Gln Gly Leu Glu Trp Met
 35 40 45

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

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

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

Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro Phe Asp Ile Trp Gly
 100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 198

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 198

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

_SL

60

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

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

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

<210> 199

<211> 1461

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 199

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtcc aactcgttca atccggcgca gaagtcaaga agccaggagc atcagtgaag 120
gtgtcctgca aagcctcagg ctacatcttc acgggatact acatccactg ggtgcgccag 180
gctccggggcc agggccttga gtggatgggc tggatcaacc ctaactctgg gggaaccaac 240
tacgctcaga agttccaggg gagggtcact atgactcgcg atacctccat ctccactgcg 300
tacatggaac tctcgggact gagatccgac gatcctgccg tgtactactg cgcccgggac 360
atgaacatct tggcgaccgt gccgtttgac atttggggac agggcaccct cgtcactgtg 420
tcgagcgggtg gaggaggctc ggggggtggc ggatcaggag ggggaggaag cgacatccag 480
ctgactcaga gcccacgctc gttgtccgcg tcggtggggg atagagtgcg cattacttgc 540
cgcgccagcc agagcatctc atcatatctg aattggtacc agcagaagcc cggaaggcc 600
ccaaaactgc tgatctacgc tgcaagcagc ctccaatcgg gagtgccgctc acggttctcc 660

_SL

gggtccggtt cgggaactga ctttacccctg accgtgaatt cgctgcaacc ggaggatttc	720
gccacgtact actgtcagca aggagactcc gtgccgctga ctttcggtgg aggcaccaag	780
gtcgaaatca agaccactac cccagcaccg aggccaccca ccccggtcc taccatcgcc	840
tcccagcctc tgtccctgcg tccggaggca tgtagaccg cagctggtgg ggccgtgcat	900
acccggggtc ttgacttcgc ctgcgatatc tacatttggg cccctctggc tggacttgc	960
ggggtcctgc tgctttcact cgtgatcact ctttactgta agcgcggtcg gaagaagctg	1020
ctgtacatct ttaagcaacc cttcatgagg cctgtgcaga ctactcaaga ggaggacggc	1080
tgttcatgcc ggttcccaga ggaggaggaa ggcggctgcg aactgcgct gaaattcagc	1140
cgcagcgag atgctccagc ctacaagcag gggcagaacc agctctacaa cgaactcaat	1200
cttggtcggg gagaggagta cgacgtgctg gacaagcgga gaggacggga cccagaaatg	1260
ggcgggaagc cgcgcagaaa gaatcccaa gagggcctgt acaacgagct ccaaaaggat	1320
aagatggcag aagcctatag cgagattggt atgaaagggg aacgcagaag aggcaaaggc	1380
cacgacggac tgtaccaggg actcagcacc gccaccaagg acacctatga cgctcttcac	1440
atgcaggccc tgccgcctcg g	1461

<210> 200

<211> 487

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 200

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5					10					15	

His	Ala	Ala	Arg	Pro	Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val
			20					25					30		

Lys Lys Pro Gly Ala Ser Val Lys Val Ser ^{SL}Cys Lys Ala Ser Gly Tyr
 35 40 45
 Ile Phe Thr Gly Tyr Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60
 Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn
 65 70 75 80
 Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
 85 90 95
 Ile Ser Thr Ala Tyr Met Glu Leu Ser Gly Leu Arg Ser Asp Asp Pro
 100 105 110
 Ala Val Tyr Tyr Cys Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro
 115 120 125
 Phe Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly
 130 135 140
 Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln
 145 150 155 160
 Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
 165 170 175
 Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
 180 185 190
 Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala
 195 200 205
 Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
 210 215 220

Gly	Thr	Asp	Phe	Thr	Leu	Thr	Val	Asn	Ser	<u>SL</u> Leu	Gln	Pro	Glu	Asp	Phe
225					230					235					240
Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Gly	Asp	Ser	Val	Pro	Leu	Thr	Phe	Gly
				245					250					255	
Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro
			260					265					270		
Pro	Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro
		275					280					285			
Glu	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu
	290					295					300				
Asp	Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys
305					310					315					320
Gly	Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly
				325					330					335	
Arg	Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val
			340					345					350		
Gln	Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu
		355					360					365			
Glu	Glu	Gly	Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg	Ser	Ala	Asp
	370					375					380				
Ala	Pro	Ala	Tyr	Lys	Gln	Gly	Gln	Asn	Gln	Leu	Tyr	Asn	Glu	Leu	Asn
385					390					395					400
Leu	Gly	Arg	Arg	Glu	Glu	Tyr	Asp	Val	Leu	Asp	Lys	Arg	Arg	Gly	Arg
				405					410					415	

Asp Pro Glu Met Gly Gly Lys Pro Arg Arg ^{SL}Lys Asn Pro Gln Glu Gly
 420 425 430

Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu
 435 440 445

Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu
 450 455 460

Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His
 465 470 475 480

Met Gln Ala Leu Pro Pro Arg
 485

<210> 201
 <211> 264
 <212> PRT
 <213> Artificial Sequence

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

<400> 201
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Ile Phe Thr Gly Tyr Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn

65		70								<u>SL</u> 75					80
Tyr	Ala	Gln	Lys	Phe	Gln	Gly	Arg	Val	Thr	Met	Thr	Arg	Asp	Thr	Ser
				85					90					95	
Ile	Ser	Thr	Ala	Tyr	Met	Glu	Leu	Ser	Gly	Leu	Arg	Ser	Asp	Asp	Pro
			100					105					110		
Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Asp	Met	Asn	Ile	Leu	Ala	Thr	Val	Pro
		115					120					125			
Phe	Asp	Ile	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly	Gly
	130					135					140				
Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Asp	Ile	Gln
145					150					155					160
Leu	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly	Asp	Arg	Val
				165					170					175	
Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Ser	Ile	Ser	Ser	Tyr	Leu	Asn	Trp
			180					185					190		
Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile	Tyr	Ala	Ala
		195					200					205			
Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	Ser	Gly	Ser
	210					215					220				
Gly	Thr	Asp	Phe	Thr	Leu	Thr	Val	Asn	Ser	Leu	Gln	Pro	Glu	Asp	Phe
225					230					235					240
Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Gly	Asp	Ser	Val	Pro	Leu	Thr	Phe	Gly
				245					250					255	
Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys								

260

<210> 202
<211> 121
<212> PRT
<213> Artificial Sequence

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

<400> 202
Gln Val Gln 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 Ile 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 Gly Thr Asn Tyr Ala Gln Lys Phe
50 55 60

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

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

Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 203
<211> 107

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 203

Asp Ile Gln Leu 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 Val Asn Ser Leu Gln Pro
65 70 75 80

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

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

<210> 204

<211> 1467

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 204

_SL

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactccaaca gtcaggcgca gaagtgaaaa agagcgggtgc atcgggtgaaa	120
gtgtcatgca aagcctcggg ctacaccttc actgactact atatgcactg gctgcggcag	180
gcaccgggac agggacttga gtggatggga tggatcaacc cgaattcagg ggacactaac	240
tacgcgcaga agttccaggg gagagtgacc ctgacgaggg acacctcaat ttcgaccgtc	300
tacatggaat tgtcgcgcct gagatcggac gatactgctg tgtactactg tgcccgcgac	360
atgaacatcc tcgcgactgt gccttttgat atctggggac aggggactat ggtcaccgtt	420
tcctccgctt ccggtggcgg aggctcggga ggccgggcct ccggtggagg aggcagcgac	480
atccagatga ctgagagccc ttctcgctg agcgcctcag tgggagatcg cgtgaccatc	540
acttgccggg ccagccagtc catttcgtcc tacctcaatt ggtaccagca gaagccggga	600
aaggcgccca agctcttgat ctacgctgcg agctccctgc aaagcgggggt gccgagccga	660
ttctcgggtt ccggctcggg aaccgacttc actctgacca tctcatccct gcaaccagag	720
gactttgcca cctactactg ccaacaagga gattctgtcc cactgacgtt cggcggagga	780
accaaggctc aaatcaagac cactacccca gcaccgaggc caccacccc ggctcctacc	840
atgcctccc agcctctgtc cctgcgtccg gaggcagtga gaccgcagc tgggtggggcc	900
gtgcataccc ggggtcttga cttcgctgc gatattaca tttgggcccc tctggctggt	960
acttgccggg tcctgtgctt ttcactcgtg atcactcttt actgtaagcg cggctcgaag	1020
aagctgctgt acatcttta gcaacccttc atgaggcctg tgcagactac tcaagaggag	1080
gacggctgtt catgccggtt cccagaggag gaggaaggcg gctgcgaact gcgcgtgaaa	1140
ttcagccgca gcgcagatgc tccagcctac aagcaggggc agaaccagct ctacaacgaa	1200
ctcaatcttg gtcggagaga ggagtacgac gtgctggaca agcggagagg acgggaccca	1260
gaaatgggcg ggaagccgcg cagaaagaat cccaagagg gcctgtacaa cgagctccaa	1320
aaggataaga tggcagaagc ctatagcgag attggtatga aaggggaacg cagaagaggc	1380
aaaggccacg acggactgta ccagggactc agcaccgcca ccaaggacac ctatgacgct	1440

cttcacatgc aggccctgcc gcctcgg

1467

<210> 205

<211> 336

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 205

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Ser Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Asp Tyr Tyr Met His Trp Leu Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Asp Thr Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser
85 90 95

Ile Ser Thr Val Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro
115 120 125

Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser
130 135 140

_SL

Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp
145 150 155 160

Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
165 170 175

Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu
180 185 190

Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
195 200 205

Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
210 215 220

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
225 230 235 240

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly Asp Ser Val Pro Leu Thr
245 250 255

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro
260 265 270

Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
275 280 285

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
290 295 300

Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
305 310 315 320

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys
325 330 335

_SL

<210> 206

<211> 266

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 206

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Ser Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Asp Tyr Tyr Met His Trp Leu Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Asp Thr Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser
85 90 95

Ile Ser Thr Val Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro
115 120 125

Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser
130 135 140

_SL

Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp
145 150 155 160

Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
165 170 175

Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu
180 185 190

Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
195 200 205

Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
210 215 220

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
225 230 235 240

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Gly Asp Ser Val Pro Leu Thr
245 250 255

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
260 265

<210> 207

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 207

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

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

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

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

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

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

Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 208

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 208

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

_SL

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 Gly Asp Ser Val Pro Leu
85 90 95

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

<210> 209
<211> 1461
<212> DNA
<213> Artificial Sequence

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

<400> 209
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtcc aactcgtcca gtcaggagcg gaagtcaaga agcccggagc gtcagtcaaa 120
gtgtcatgca aagcctcggg ctacactttc actgggtact acatgcactg ggtgcgccag 180
gctccaggac agggactgga atggatggga tggatcaacc cgaactccgg tggcaccaat 240
tacgcccaga agttccaggg gagggtgacc atgactcgcg acacgtcgat cagcaccgca 300
tacatggagc tgtcaagact ccggtccgac gatactgccg tgtactactg cgcacgggac 360
atgaacattc tggccaccgt gccttttgac atctgggggtc agggaactat ggttaccgtg 420
tcctctgggtg gaggcggctc cggcgggggg ggaagcggag gcggtggaag cgacattcag 480
atgacccagt cgccttcac cctttcggcg agcgtgggag atcgcgtcac tatcacttgt 540

_SL

cgggcctcgc agtccatctc cacctacctc aattggtacc agcagaagcc aggaaaagca	600
ccgaatctgc tgatctacgc cgcgttttcc ttgcaatcgg gagtgccaag cagattcagc	660
ggatcgggat caggcactga tttcaccctc accatcaact cgctgcaacc ggaggatttc	720
gctacgtact attgccaaca aggagacagc gtgccgctca ctttcggcgg agggactaag	780
ctggaaatca agaccactac cccagcaccg aggccaccca ccccggtcc taccatcgcc	840
tcccagcctc tgtccctgcg tccggaggca tgtagaccgc cagctggtgg ggccgtgcat	900
accgggggtc ttgacttcgc ctgcgatatc tacatttggg cccctctggc tggctacttc	960
ggggtcctgc tgctttcact cgtgatcact ctttactgta agcgcggtcg gaagaagctg	1020
ctgtacatct ttaagcaacc cttcatgagg cctgtgcaga ctactcaaga ggaggacggc	1080
tgttcatgcc gggtcccaga ggaggaggaa ggcggtcgcg aactgcgcgt gaaattcagc	1140
cgcagcgcag atgctccagc ctacaagcag gggcagaacc agctctacaa cgaactcaat	1200
cttggtcggg gagaggagta cgacgtgctg gacaagcgga gaggacggga cccagaaatg	1260
ggcgggaagc cgcgcagaaa gaatcccca gagggcctgt acaacgagct ccaaaaggat	1320
aagatggcag aagcctatag cgagattggt atgaaagggg aacgcagaag aggcaaaggc	1380
cacgacggac tgtaccaggg actcagcacc gccaccaagg acacctatga cgctcttcac	1440
atgcaggccc tgccgcctcg g	1461

<210> 210

<211> 487

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 210

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

1

5

10

15

His Ala Ala Arg Pro Gln Val Gln Leu Val ^{SL}Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn
 65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
 85 90 95

Ile Ser Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro
 115 120 125

Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly
 130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln
 145 150 155 160

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
 165 170 175

Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Thr Tyr Leu Asn Trp
 180 185 190

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile Tyr Ala Ala
 195 200 205

Phe Ser Leu Gln Ser Gly Val Pro Ser Arg ^{_SL}Phe Ser Gly Ser Gly Ser
 210 215 220

Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser Leu Gln Pro Glu Asp Phe
 225 230 235 240

Ala Thr Tyr Tyr Cys Gln Gln Gly Asp Ser Val Pro Leu Thr Phe Gly
 245 250 255

Gly Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro
 260 265 270

Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro
 275 280 285

Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu
 290 295 300

Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys
 305 310 315 320

Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly
 325 330 335

Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val
 340 345 350

Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu
 355 360 365

Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp
 370 375 380

Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn
 385 390 395 400

Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu ^{_SL}Asp Lys Arg Arg Gly Arg
 405 410 415

Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly
 420 425 430

Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu
 435 440 445

Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu
 450 455 460

Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His
 465 470 475 480

Met Gln Ala Leu Pro Pro Arg
 485

<210> 211
 <211> 264
 <212> PRT
 <213> Artificial Sequence

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

<400> 211
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln

245

250 _SL

255

Gly Gly Thr Lys Leu Glu Ile Lys
260

<210> 212

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 212

Gln Val Gln 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 Met 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 Gly Thr Asn Tyr Ala Gln Lys Phe
50 55 60

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

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

Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

_SL

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

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

<400> 213
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 Thr Tyr
20 25 30

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

Tyr Ala Ala Phe 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 Asn Ser Leu Gln Pro
65 70 75 80

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

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

<210> 214
<211> 1458
<212> DNA
<213> Artificial Sequence

<220>
<221> source

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

<400> 214

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc agctgggtcca gtcgggagcc gaagtcaaga agcccggcgc tagcgtgaaa	120
gtgtcctgca aagcctccgg gtacacattc acctcctact ggatgaattg ggtcagacag	180
gcgcccggcc agggactcga gtggatggga aggattgata cttacgactc cgaaacccat	240
tacaaccaga agttcaagga ccgcgtgacc atgactgtgg ataagtccac ttccaccgct	300
tacatggagc tgtccagcct gcgctccgag gataccgcag tgtactactg cgccggggga	360
aactgggacg actattgggg acagggaact accgtgaccg tgtcaagcgg ggggtggcgg	420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga cgtgcagctc	480
accagtcgc cctcatttct gtcggcctca gtgggagaca gaggaccat tacttgctcg	540
gcctccaaga gcatctccaa ggacctggcc tggatatcagc agaagccagg aaaggcgcct	600
aagttgctca tctactcggg gtcgaccctg caatctggcg tgccgtcccg gttctccggt	660
tcgggaagcg gtaccgaatt cacccttact atctcctccc tgcaaccgga ggacttcgcc	720
acctactact gccaacagca caacaagtac ccgtacactt tcgggggtgg cacgaaggtc	780
gaaatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctgggtggggc cgtgcatacc	900
cggggctctg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320

_SL

atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 215
 <211> 486
 <212> PRT
 <213> Artificial Sequence

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

<400> 215
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
 65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser
 85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
 115 120 125

_SL

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu
145 150 155 160

Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

_SL

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 216

<211> 263

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 216

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu
145 150 155 160

_SL

Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys
260

<210> 217

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 217

Gln Val Gln 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 Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly ^{SL}Gln Gly Leu Glu Trp Met
 35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
 50 55 60

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

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

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

Val Ser Ser
 115

<210> 218
 <211> 107
 <212> PRT
 <213> Artificial Sequence

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

<400> 218
 Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
 1 5 10 15

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

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

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly

50

55

_SL

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 Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 219

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 219

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ccccaagtgc agctggtcca gtcgggagcc gaagtcaaga agcccggcgc tagcgtgaaa      120
gtgtcctgca aagcctccgg gtacacattc acctctact ggatgaattg ggtcagacag      180
gcgcccggcc agggactcga gtggatggga aggattgatc cttacgactc cgaaacccat      240
tacaaccaga agttcaagga ccgcgtgacc atgactgtgg ataagtccac ttccaccgct      300
tacatggagc tgtccagcct gcgctccgag gataccgcag tgtactactg cgcccgggga      360
aactgggacg actattgggg acagggaact accgtgaccg tgtcaagcgg ggggtggcgg      420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga agtggtgctg      480
accagtcgc ccgcaaccct ctctctgtcg ccgggagaac gcgccactct ttcctgtcgg      540
gcgtccaaga gcatctcaaa ggacctcgcc tgggtaccagc agaagcctgg tcaagccccg      600
cggctgtgta tctactccgg ctccacgctg caatcaggaa tcccagccag attttccggt      660

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gtgtattact gccagcagca caacaagtac ccgtacacct tcggaggcgg tactaaggtc	780
gagatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 220

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 220

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5						10					15

His	Ala	Ala	Arg	Pro	Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val
			20					25					30		

Lys Lys Pro Gly Ala Ser Val Lys Val Ser ^{SL}Cys Lys Ala Ser Gly Tyr
 35 40 45
 Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60
 Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
 65 70 75 80
 Tyr Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser
 85 90 95
 Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
 100 105 110
 Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
 115 120 125
 Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 130 135 140
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Val Leu
 145 150 155 160
 Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
 165 170 175
 Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
 180 185 190
 Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Ser Gly Ser
 195 200 205
 Thr Leu Gln Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
 210 215 220

Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	<u>SL</u> Glu	Pro	Glu	Asp	Phe	Ala
225					230					235					240
Val	Tyr	Tyr	Cys	Gln	Gln	His	Asn	Lys	Tyr	Pro	Tyr	Thr	Phe	Gly	Gly
				245					250					255	
Gly	Thr	Lys	Val	Glu	Ile	Lys	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro
			260					265					270		
Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro	Glu
		275					280					285			
Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp
	290					295					300				
Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly
305					310					315					320
Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg
				325					330					335	
Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln
			340					345					350		
Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu	Glu
		355					360					365			
Glu	Gly	Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg	Ser	Ala	Asp	Ala
	370					375					380				
Pro	Ala	Tyr	Lys	Gln	Gly	Gln	Asn	Gln	Leu	Tyr	Asn	Glu	Leu	Asn	Leu
385					390					395					400
Gly	Arg	Arg	Glu	Glu	Tyr	Asp	Val	Leu	Asp	Lys	Arg	Arg	Gly	Arg	Asp
			405					410						415	

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys ^{_SL}Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 221
<211> 263
<212> PRT
<213> Artificial Sequence

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

<400> 221
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His

260

<210> 222
<211> 115
<212> PRT
<213> Artificial Sequence

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

<400> 222
Gln Val Gln 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 Ser Tyr
20 25 30

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

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

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

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

Val Ser Ser
115

<210> 223
<211> 107

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 223

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 224

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 224

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gtgtcctgca aagcctccgg gtacacattc acctcctact ggatgaattg ggtcagacag	180
gcgccccggcc agggactcga gtggatggga aggattgatc cttacgactc cgaaacccat	240
tacaaccaga agttcaagga ccgcgtgacc atgactgtgg ataagtccac ttccaccgct	300
tacatggagc tgtccagcct gcgctccgag gataccgcag tgtactactg cgcccgggga	360
aactgggacg actattgggg acagggaact accgtgaccg tgtcaagcgg ggggtggcgg	420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga cgtcgtgatg	480
accagtcac cggcattcct gtccgtgact cccggagaaa aggtcacgat tacttgccgg	540
gcgtccaaga gcatctcaa ggacctcgcc tggtagaac agaagccgga ccaggcccct	600
aagctgttga tctactcggg gtccaccctt caatcgggag tgccatcgcg gtttagcgg	660
tcgggttctg ggaccgactt cactttcacc atctcctcac tggaagccga ggatgccgcc	720
acttactact gtcagcagca caacaagtat ccgtacacct tcggaggcgg taccaaagt	780
gagatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggctctg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgccgg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
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ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattgggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440

caggccctgc cgcctcgg

1458

<210> 225

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 225

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

_SL

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
145 150 155 160

Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly Glu Lys Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

_SL

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 226

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

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

<400> 226

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
145 150 155 160

Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly Glu Lys Val Thr
165 170 175

_SL

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys
260

<210> 227

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 227

Gln Val Gln 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 Ser Tyr
20 25 30

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

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

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

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

Val Ser Ser
115

<210> 228
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 228
Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly
1 5 10 15

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

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

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

Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala

65 70 75 80

Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr

85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys

100 105

_SL

gaaatcaaga ccactacccc agcaccgagg ccacccaccc cggtccttac catcgctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggctcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
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tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
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gggaagccgc gcagaaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
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caggccctgc cgcctcgg	1458

<210> 230
 <211> 486
 <212> PRT
 <213> Artificial Sequence

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

<400> 230
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val ^{SL}Arg Gln Ala Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
 65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser
 85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
 115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
 145 150 155 160

Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr
 165 170 175

Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
 180 185 190

Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Ser Gly Ser
 195 200 205

Thr Leu Gln Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly
 210 215 220

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala
 225 230 235 240

Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr ^{SL}Pro Tyr Thr Phe Gly Gly
 245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala ^{SL}Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 231

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 231

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser

_SL

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 232

Gln Val Gln 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 Ser Tyr
20 25 30

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

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

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

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

Val Ser Ser
115

<210> 233

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

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

<400> 233

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

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

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

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 234

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 234

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgacgtgc agctcaccca gtcgccctca tttctgtcgg cctcagtggg agacagagtg 120

_SL

accattactt gtcgggcctc caagagcatc tccaaggacc tggcctggta tcagcagaag	180
ccaggaaaagg cgcctaagtt gctcatctac tcggggtcga ccctgcaatc tggcgtgccg	240
tcccggtttct ccggttcggg aagcgggtacc gaattcaccc ttactatctc ctccctgcaa	300
ccggagggact tcgccaccta ctactgccaa cagcacaaca agtaccgta cactttcggg	360
ggtggcacga aggtcgaaat caaggggggt ggcggtagcg gaggaggggg ctccggcggc	420
ggcggctcag ggggcggagg aagccaagtg cagctgggtcc agtcgggagc cgaagtcaag	480
aagcccggcg ctagcgtgaa agtgtcctgc aaagcctccg ggtacacatt cacctcctac	540
tggatgaatt gggtcagaca ggcgcccggc cagggactcg agtggatggg aaggattgat	600
ccttacgact ccgaaaccca ttacaaccag aagttcaagg accgcgtgac catgactgtg	660
gataagtcca cttccaccgc ttacatggag ctgtccagcc tgcgctccga ggataaccgca	720
gtgtactact gcgcccgggg aaactgggac gactattggg gacagggaac taccgtgacc	780
gtgtcaagca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agacccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttgggccc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 235

_SL

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 235

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu
20 25 30

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

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

_SL

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly
180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr
210 215 220

Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

_SL

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 236

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

<400> 236

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu
20 25 30

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

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

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly
180 185 190

_SL

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr
210 215 220

Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser
260

<210> 237

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 237

Gln Val Gln 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 Ser Tyr
20 25 30

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Met Thr Val Asp Lys ^{_SL}Ser Thr Ser Thr Ala Tyr
65 70 75 80

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

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

Val Ser Ser
115

<210> 238

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 238

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

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

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

Tyr Ser Gly Ser Thr 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 Gln Gln His Asn Lys Tyr Pro Tyr

85

90

_SL

95

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

<210> 239

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 239

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atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
ccggaagtgg tgctgacca gtcgcccga accctctctc tgcgcccggg agaacgcgcc      120
actctttcct gtcgggcgtc caagagcatc tcaaaggacc tcgcctggta ccagcagaag      180
cctgggtcaag ccccgcggt gctgatctac tccggctcca cgctgcaatc aggaatccca      240
gccagatttt ccggttcggg gtcggggact gacttcacct tgaccattag ctcgctggaa      300
cctgaggact tcgccgtgta ttactgccag cagcacaaca agtaccgta caccttcgga      360
ggcgggtacta aggtcgagat caaggggggt ggcggtagcg gaggaggggg ctccggcggc      420
ggcgggtcag ggggcggagg aagccaagtg cagctgggtcc agtcgggagc cgaagtcaag      480
aagcccggcg ctagcgtgaa agtgtcctgc aaagcctccg ggtacacatt cacctcctac      540
tggatgaatt gggtcagaca ggcgcccggc cagggactcg agtggatggg aaggattgat      600
ccttacgact ccgaaaccca ttacaaccag aagttcaagg accgcgtgac catgactgtg      660
gataagtcca cttccaccgc ttacatggag ctgtccagcc tgcgctccga ggataaccga      720
gtgtactact gcgcccgggg aaactgggac gactattggg gacagggaac taccgtgacc      780
gtgtcaagca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgctcc      840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc      900

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_SL

cggggtcttg acttcgcctg cgatatctac atttgggccc ctctggctgg tacttgcg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accaggggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgccctcg	1458

<210> 240

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 240

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5				10					15		

His	Ala	Ala	Arg	Pro	Glu	Val	Val	Leu	Thr	Gln	Ser	Pro	Ala	Thr	Leu
			20					25					30		

Ser	Leu	Ser	Pro	Gly	Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Lys
			35				40					45			

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

Pro	Arg	Leu	Leu	Ile	Tyr	Ser	Gly	Ser	Thr	^{SL} Leu	Gln	Ser	Gly	Ile	Pro
65					70					75					80
Ala	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile
				85					90					95	
Ser	Ser	Leu	Glu	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	His
			100					105					110		
Asn	Lys	Tyr	Pro	Tyr	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys
		115					120					125			
Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly
	130					135					140				
Gly	Gly	Gly	Ser	Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys
145					150					155					160
Lys	Pro	Gly	Ala	Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr
				165					170					175	
Phe	Thr	Ser	Tyr	Trp	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly
			180					185					190		
Leu	Glu	Trp	Met	Gly	Arg	Ile	Asp	Pro	Tyr	Asp	Ser	Glu	Thr	His	Tyr
		195					200					205			
Asn	Gln	Lys	Phe	Lys	Asp	Arg	Val	Thr	Met	Thr	Val	Asp	Lys	Ser	Thr
	210					215					220				
Ser	Thr	Ala	Tyr	Met	Glu	Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala
225					230					235					240
Val	Tyr	Tyr	Cys	Ala	Arg	Gly	Asn	Trp	Asp	Asp	Tyr	Trp	Gly	Gln	Gly
				245					250					255	

Thr Thr Val Thr Val Ser Ser Thr Thr Thr ^{SL}Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys ^{SL}Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 241
 <211> 263
 <212> PRT
 <213> Artificial Sequence

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

<400> 241
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu
 20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys
 35 40 45

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

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

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 85 90 95

Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His

_SL

100	105	110
Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys		
115	120	125
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly		
130	135	140
Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys		
145	150	155
Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr		
165	170	175
Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly		
180	185	190
Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr		
195	200	205
Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr		
210	215	220
Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala		
225	230	235
Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly		
245	250	255
Thr Thr Val Thr Val Ser Ser		
260		

<210> 242

<211> 115

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

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

<400> 242

Gln Val Gln 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 Ser Tyr
20 25 30

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

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

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

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

Val Ser Ser
115

<210> 243

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

<400> 243

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 244

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 244

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgacgtcg tgatgacca gtcaccggca ttctgtccg tgactcccg agaaaaggtc 120

acgattactt gccgggcgtc caagagcatc tccaaggacc tcgcctggta ccaacagaag 180

ccggaccagg cccctaagct gttgatctac tcgggggtcca cccttcaatc gggagtgcca 240

_SL

tcgcggttta gcggttcggg ttctgggacc gacttcactt tcaccatctc ctactggaa	300
gccgaggatg ccgccactta ctactgtcag cagcacaaca agtatccgta caccttcgga	360
ggcgggtacca aagtggagat caaggggggt ggcggtagcg gaggaggggg ctccggcggc	420
ggcggctcag ggggcggagg aagccaagtg cagctgggtcc agtcgggagc cgaagtcaag	480
aagcccggcg ctagcgtgaa agtgtcctgc aaagcctccg ggtacacatt cacctcctac	540
tggatgaatt gggtcagaca ggcgcccggc cagggactcg agtggatggg aaggattgat	600
ccttacgact ccgaaacca ttacaaccag aagttcaagg accgcgtgac catgactgtg	660
gataagtcca cttccaccgc ttacatggag ctgtccagcc tgcgctccga ggataccgca	720
gtgtactact gcgcccgggg aaactgggac gactattggg gacagggaaac taccgtgacc	780
gtgtcaagca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcttcgg	1458

<210> 245

<211> 486

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

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

<400> 245

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu
20 25 30

Ser Val Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile
85 90 95

Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

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

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
165 170 175

_SL

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly
180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr
210 215 220

Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

_SL

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 246
<211> 263
<212> PRT
<213> Artificial Sequence

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

<400> 246
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

_SL

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu
20 25 30

Ser Val Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile
85 90 95

Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

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

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly
180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

_SL

Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr
210 215 220

Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser
260

<210> 247

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 247

Gln Val Gln 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 Ser Tyr
20 25 30

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

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

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr^{SL} Ala Val Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

<210> 248
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 248
Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly
1 5 10 15

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

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

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

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

Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys

<210> 249
 <211> 1458
 <212> DNA
 <213> Artificial Sequence

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

<400> 249
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccgacgtgg tcatgactca gtccccggac tctctcgctg tgctgcttgg agagagagcg 120
 accatcaact gtcgggcctc aaagagcatc agcaaggacc tggcctggta ccagcagaag 180
 ccgggacagc cgccaaagct gctgatctac tccgggtcca ccttgcaatc tgggtgtcct 240
 gaccggttct ccggttccgg gtcgggtacc gacttcacgc tctattttc gtcgctgcaa 300
 gccgaagatg tggccgtgta ctattgcca cagcacaaca agtacccta cacttttggc 360
 ggaggcacca aggtggaaat caaggggggt ggcggttagcg gaggaggggg ctccggcggc 420
 ggcggtcag ggggcggagg aagccaagtg cagctgggtcc agtcgggagc cgaagtcaag 480
 aagcccggcg ctagcgtgaa agtgtcctgc aaagcctccg ggtacacatt cacctcctac 540
 tggatgaatt gggtcagaca ggcgcccggc cagggactcg agtggatggg aaggattgat 600
 ccttacgact ccgaaacca ttacaaccag aagttcaagg accgcgtgac catgactgtg 660
 gataagtcca cttccaccgc ttacatggag ctgtccagcc tgcgctccga ggataccgca 720
 gtgtactact gcgcccgggg aaactgggac gactattggg gacaggggaa taccgtgacc 780
 gtgtcaagca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc 840
 cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc 900
 cggggctttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg 960
 gtcctgtgctc ttctactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg 1020

_SL

tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 250

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 250

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5					10					15	

His	Ala	Ala	Arg	Pro	Asp	Val	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu
			20					25					30		

Ala	Val	Ser	Leu	Gly	Glu	Arg	Ala	Thr	Ile	Asn	Cys	Arg	Ala	Ser	Lys
		35					40					45			

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

Pro	Lys	Leu	Leu	Ile	Tyr	Ser	Gly	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro
65				70					75					80	

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr ^{SL}Asp Phe Thr Leu Thr Ile
 85 90 95

Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His
 100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140

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

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
 165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly
 180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
 195 200 205

Asn Gln Lys Phe Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr
 210 215 220

Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala
 225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
 245 250 255

Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro ^{SL}Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr ^{_SL}Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 251
 <211> 263
 <212> PRT
 <213> Artificial Sequence

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

<400> 251
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu
 20 25 30

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys
 35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
 65 70 75 80

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 85 90 95

Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His
 100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys

_SL

<400> 252

Gln Val Gln 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 Ser Tyr
20 25 30

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

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

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

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

Val Ser Ser
115

<210> 253

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 253

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

_SL

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

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

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 254

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 254

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

ccccaagtgc agctggtgca gtcaggcagc gaactgaaga agcccggagc ctccgtcaaa 120

gtgtcctgca aagcctcggg atacaccttc acctcctact ggatgaactg ggtccgccag 180

gcacctggac aggggctgga gtggatggga aggatcgatc cctacgattc cgaaacccat 240

tacaatcaga agttcaagga ccggtttgtg ttctccgtgg acaagtccgt gtccaccgcc 300

tacctccaaa ttagcagcct gaaggcggag gatacagctg tctactactg cgctcgcgga 360

_SL

aactgggatg actattgggg ccaggggaact accgtgactg tgcctccgg gggaggcggt	420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga cgtgcagctc	480
accagtcgc cctcatttct gtcggcctca gtgggagaca gaggaccat tacttgtcgg	540
gcctccaaga gcatctccaa ggacctggcc tggatcagc agaagccagg aaaggcgctt	600
aagttgctca tctactcggg gtcgaccctg caatctggcg tgccgtccc gttctccggt	660
tcgggaagcg gtaccgaatt cacccttact atctcctccc tgcaaccgga ggacttcgcc	720
acctactact gccaacagca caacaagtac ccgtacactt tcgggggtgg cacgaaggtc	780
gaaatcaaga ccactacccc agcaccgagg ccaccacccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggctcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaaagaa tccccaaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 255

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

<400> 255

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser
85 90 95

Val Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu
145 150 155 160

Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

_SL

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

_SL

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 256

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 256

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu
20 25 30

_SL

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser
85 90 95

Val Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu
145 150 155 160

Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

_SL

Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys
260

<210> 257

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 257

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly ^{SL}Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

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

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

<400> 258
Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

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

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

Tyr Ser Gly Ser Thr 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 Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 259

_SL

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 259

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc agctggtgca gtcaggcagc gaactgaaga agcccggagc ctccgtcaaa	120
gtgtcctgca aagcctcggg atacaccttc acctcctact ggatgaactg ggtccgccag	180
gcacctggac aggggctgga gtggatggga aggatcgatc cctacgattc cgaaacccat	240
tacaatcaga agttcaagga ccggtttgtg ttctccgtgg acaagtccgt gtccaccgcc	300
tacctcaaaa ttagcagcct gaaggcggag gatacagctg tctactactg cgctcgcgga	360
aactgggatg actattgggg ccagggaact accgtgactg tgtcctccgg gggtagcggt	420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga agtggtgctg	480
accagtcgc ccgcaaccct ctctctgtcg ccgggagaac gcgccactct ttcctgtcgg	540
gcgtccaaga gcatctcaaa ggacctcgcc tggtagcagc agaagcctgg tcaagccccg	600
cggctgctga tctactccgg ctccacgctg caatcaggaa tcccagccag attttccggt	660
tcggggctcg ggactgactt caccttgacc attagctcgc tggaacctga ggacttcgcc	720
gtgtattact gccagcagca caacaagtac ccgtacacct tcggaggcgg tactaaggtc	780
gagatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggctctg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140

_SL

agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggccctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 260

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 260

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5						10				15	

His	Ala	Ala	Arg	Pro	Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ser	Glu	Leu
			20					25					30		

Lys	Lys	Pro	Gly	Ala	Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr
		35					40					45			

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

Gly	Leu	Glu	Trp	Met	Gly	Arg	Ile	Asp	Pro	Tyr	Asp	Ser	Glu	Thr	His
65					70					75					80

Tyr	Asn	Gln	Lys	Phe	Lys	Asp	Arg	Phe	Val	Phe	Ser	Val	Asp	Lys	Ser
			85						90					95	

Val Ser Thr Ala Tyr Leu Gln Ile Ser Ser ^{SL}Leu Lys Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
 115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Val Leu
 145 150 155 160

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
 165 170 175

Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
 180 185 190

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Ser Gly Ser
 195 200 205

Thr Leu Gln Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
 210 215 220

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala
 225 230 235 240

Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
 245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val ^{SL}His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

_SL

Gln Ala Leu Pro Pro Arg
485

<210> 261

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 261

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser
85 90 95

Val Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly

130

135

_SL

140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Val Leu
 145 150 155 160

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
 165 170 175

Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
 180 185 190

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Ser Gly Ser
 195 200 205

Thr Leu Gln Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
 210 215 220

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala
 225 230 235 240

Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
 245 250 255

Gly Thr Lys Val Glu Ile Lys
 260

<210> 262

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 262

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

_SL

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

<210> 263
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 263
Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

_SL

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

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

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 264

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 264

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc agctggtgca gtcaggcagc gaactgaaga agcccggagc ctccgtcaaa	120
gtgtcctgca aagcctcggg atacaccttc acctcctact ggatgaactg ggtccgccag	180
gcacctggac aggggctgga gtggatggga aggatcgatc cctacgattc cgaaacccat	240
tacaatcaga agttcaagga ccggtttgtg ttctccgtgg acaagtccgt gtccaccgcc	300
tacctcaaaa ttagcagcct gaaggcggag gatacagctg tctactactg cgctcgcgga	360
aactgggatg actattgggg ccagggaact accgtgactg tgtcctccgg ggggtggcgg	420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga cgtcgtgatg	480

_SL

accagtcac cggcattcct gtccgtgact cccggagaaa aggtcacgat tacttgccgg	540
gcgtccaaga gcatctccaa ggacctcgcc tggtagaac agaagccgga ccaggcccct	600
aagctgttga tctactcggg gtccaccctt caatcgggag tgccatcgcg gtttagcgg	660
tcgggttctg ggaccgactt cactttcacc atctcctcac tggaagccga ggatgccgcc	720
acttactact gtcagcagca caacaagtat ccgtacacct tcggaggcgg taccaaagt	780
gagatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgccctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttgggccc ctctggctgg tacttgccgg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accaggggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgccctcg	1458

<210> 265

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 265

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

1

5

10

15

_SL

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser
85 90 95

Val Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
145 150 155 160

Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly Glu Lys Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

_SL

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

_SL

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 266

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 266

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

_SL

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser
85 90 95

Val Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
145 150 155 160

Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly Glu Lys Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala
225 230 235 240

_SL

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys
260

<210> 267

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 267

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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

_SL

Val Ser Ser
115

<210> 268

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 268

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

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

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

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

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

Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 269

<211> 1458

<212> DNA

<213> Artificial Sequence

_SL

<220>

<221> source

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

<400> 269

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc agctgggtgca gtcaggcagc gaactgaaga agcccggagc ctccgtcaaa	120
gtgtcctgca aagcctcggg atacaccttc acctcctact ggatgaactg ggtccgccag	180
gcacctggac aggggctgga gtggatggga aggatcgatc cctacgattc cgaaacccat	240
tacaatcaga agttcaagga ccggtttgtg ttctccgtgg acaagtccgt gtccaccgcc	300
tacctcaaaa ttagcagcct gaaggcggag gatacagctg tctactactg cgctcgcgga	360
aactgggatg actattgggg ccagggaact accgtgactg tgtcctccgg ggggtggcgg	420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga cgtgggtcatg	480
actcagtccc cggactcact cgcggtgtcg cttggagaga gagcgaccat caactgtcgg	540
gcctcaaaga gcatcagcaa ggacctggcc tgggtaccagc agaagccggg acagccgcca	600
aagctgctga tctactccgg gtccaccttg caatctgggtg tccctgaccg gttctccggt	660
tccgggtcgg gtaccgactt cacgctcact atttcgtcgc tgcaagccga agatgtggcc	720
gtgtactatt gccaacagca caacaagtac ccctacactt ttggcggagg caccaagggtg	780
gaaatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260

_SL

gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 270
 <211> 486
 <212> PRT
 <213> Artificial Sequence

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

<400> 270
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu
 20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
 65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser
 85 90 95

Val Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp ^{SL}Asp Asp Tyr Trp Gly Gln
 115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
 145 150 155 160

Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr
 165 170 175

Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
 180 185 190

Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Ser Gly Ser
 195 200 205

Thr Leu Gln Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly
 210 215 220

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala
 225 230 235 240

Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
 245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	<u>SL</u> Leu	Ala	Gly	Thr	Cys	Gly
305					310					315					320
Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg
				325					330					335	
Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln
				340				345					350		
Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu	Glu
		355					360					365			
Glu	Gly	Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg	Ser	Ala	Asp	Ala
	370					375					380				
Pro	Ala	Tyr	Lys	Gln	Gly	Gln	Asn	Gln	Leu	Tyr	Asn	Glu	Leu	Asn	Leu
385					390					395					400
Gly	Arg	Arg	Glu	Glu	Tyr	Asp	Val	Leu	Asp	Lys	Arg	Arg	Gly	Arg	Asp
				405					410					415	
Pro	Glu	Met	Gly	Gly	Lys	Pro	Arg	Arg	Lys	Asn	Pro	Gln	Glu	Gly	Leu
			420					425					430		
Tyr	Asn	Glu	Leu	Gln	Lys	Asp	Lys	Met	Ala	Glu	Ala	Tyr	Ser	Glu	Ile
		435					440					445			
Gly	Met	Lys	Gly	Glu	Arg	Arg	Arg	Gly	Lys	Gly	His	Asp	Gly	Leu	Tyr
	450					455					460				
Gln	Gly	Leu	Ser	Thr	Ala	Thr	Lys	Asp	Thr	Tyr	Asp	Ala	Leu	His	Met
465					470					475					480
Gln	Ala	Leu	Pro	Pro	Arg										
				485											

_SL

<210> 271

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 271

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

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

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser
85 90 95

Val Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met

_SL

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

<210> 273

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 273

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

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

_SL

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

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

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 274

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 274

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgcagtgc agctcaccca gtcgccctca tttctgtcgg cctcagtggg agacagagtg	120
accattactt gtcgggcctc caagagcatc tccaaggacc tggcctggta tcagcagaag	180
ccaggaaagg cgcctaagtt gtcacatctac tcggggctga ccctgcaatc tggcgtgccg	240
tcccggttct ccggttcggg aagcgggtacc gaattcacc ttactatctc ctccctgcaa	300
ccggaggact tcgccaccta ctactgcca cagcacaaca agtaccgta cactttcggg	360
ggtggcacga aggtcgaaat caaggggggt ggcggtagcg gaggaggggg ctccggcggc	420
ggcggctcag ggggcggagg aagccaagtg cagctggtgc agtcaggcag cgaactgaag	480
aagcccggag cctccgtcaa agtgtcctgc aaagcctcgg gatacacctt cacctcctac	540
tggatgaact ggggtccgcca ggcacctgga caggggctgg agtggatggg aaggatcgat	600

_SL

ccctacgatt ccgaaacca ttacaatcag aagttcaagg accggtttgt gttctccgtg	660
gacaagtccg tgtccaccgc ctacctcaa attagcagcc tgaaggcgga ggatacagct	720
gtctactact gcgctcgcgg aaactgggat gactattggg gccagggaac taccgtgact	780
gtgtcctcca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggctcttg acttcgcctg cgatatctac atttggggccc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgctcgg	1458

<210> 275

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 275

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5						10					15

His	Ala	Ala	Arg	Pro	Asp	Val	Gln	Leu	Thr	Gln	Ser	Pro	Ser	Phe	Leu
			20					25					30		

_SL

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys
145 150 155 160

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly
180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val
210 215 220

_SL

Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

_SL

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 276
<211> 263
<212> PRT
<213> Artificial Sequence

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

<400> 276
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu
20 25 30

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

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

_SL

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys
145 150 155 160

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly
180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val
210 215 220

Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

_SL

Thr Thr Val Thr Val Ser Ser
260

<210> 277

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 277

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

_SL

<210> 278

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 278

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

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

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

Tyr Ser Gly Ser Thr 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 Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 279

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

_SL

<400> 279

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgg tgctgaccca gtcgcccga accctctctc tgcgcccggg agaacgcgcc	120
actctttcct gtcgggcgtc caagagcatc tcaaaggacc tcgcctggta ccagcagaag	180
cctgggtcaag ccccgcggt gctgatctac tccggctcca cgctgcaatc aggaatccca	240
gccagatttt ccggttcggg gtcggggact gacttcacct tgaccattag ctcgctggaa	300
cctgaggact tcgccgtgta ttactgccag cagcacaaca agtaccgta caccttcgga	360
ggcggtagct aggtcgagat caaggggggt ggcggtagcg gaggggggg ctccggcggc	420
ggcggctcag ggggcggagg aagccaagt cagctgggtgc agtcaggcag cgaactgaag	480
aagcccggag cctccgtcaa agtgtcctgc aaagcctcgg gatacacctt cacctcctac	540
tggatgaact ggggtccgca ggcacctgga caggggctgg agtggatggg aaggatcgat	600
ccctacgatt ccgaaacca ttacaatcag aagttcaagg accggtttgt gttctccgtg	660
gacaagtccg tgtccaccgc ctacctcaa attagcagcc tgaaggcgga ggatacagct	720
gtctactact gcgctcgcgg aaactgggat gactattggg gccagggaac taccgtgact	780
gtgtcctcca ccactacccc agcaccgagg ccaccacccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggctctg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgctgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380

_SL

gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg 1440

caggccctgc cgcctcgg 1458

<210> 280
 <211> 486
 <212> PRT
 <213> Artificial Sequence

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

<400> 280
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu
 20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys
 35 40 45

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

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

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 85 90 95

Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His
 100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser ^{SL}Gly Gly Gly Gly Ser Gly
 130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys
 145 150 155 160

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
 165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly
 180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
 195 200 205

Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val
 210 215 220

Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala
 225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
 245 250 255

Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu ^{SL}Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 281

<211> 263

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

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

<400> 281

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu
20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys
35 40 45

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

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

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
85 90 95

Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys
145 150 155 160

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr

[illegible]

_SL

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

<210> 283
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 283
Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

_SL

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 284

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 284

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atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
cccgacgtcg tgatgacca gtcaccggca ttctgtccg tgactcccgg agaaaaggctc      120
acgattactt gccgggcgtc caagagcatc tccaaggacc tcgcctggta ccaacagaag      180
ccggaccagg cccctaagct gttgatctac tcgggggtcca cccttcaatc gggagtgcc      240
tcgcggttta gcggttcggg ttctgggacc gacttcactt tcaccatctc ctactggaa      300
gccgaggatg ccgccactta ctactgtcag cagcacaaca agtatccgta caccttcgga      360
ggcggtagca aagtggagat caaggggggt ggcggtagcg gagggggggg ctccggcggc      420
ggcggctcag ggggcggagg aagccaagtg cagctggtgc agtcaggcag cgaactgaag      480
aagcccggag cctccgtcaa agtgtcctgc aaagcctcgg gatacacctt cacctcctac      540
tggatgaact ggggtccgca ggcacctgga caggggctgg agtggatggg aaggatcgat      600
ccctacgatt ccgaaacca ttacaatcag aagttcaagg accggtttgt gttctccgtg      660
gacaagtccg tgtccaccgc ctacctcaa attagcagcc tgaaggcgga ggatacagct      720
```

_SL

```

gtctactact gcgctcgcgg aaactgggat gactattggg gccagggaac taccgtgact      780
gtgtcctcca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc      840
cagcctctgt ccctgcgtcc ggaggcatgt agacccgcag ctggtggggc cgtgcatacc      900
cggggctcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg      960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg     1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt     1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc     1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt     1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc     1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag     1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac     1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg     1440
caggccctgc cgcctcgg                                     1458

```

<210> 285

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 285

```

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1           5           10          15

```

```

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu
          20          25          30

```

```

Ser Val Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys
          35          40          45

```

_SL

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile
85 90 95

Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys
145 150 155 160

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly
180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val
210 215 220

Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala
225 230 235 240

_SL

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

_SL

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 286
<211> 263
<212> PRT
<213> Artificial Sequence

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

<400> 286
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu
20 25 30

Ser Val Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

_SL

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile
85 90 95

Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys
145 150 155 160

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly
180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val
210 215 220

Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser
260

_SL

<210> 287

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 287

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

<210> 288

<211> 107

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

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

<400> 288

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

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

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

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

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

Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 289

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 289

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg

60

_SL

cccgacgtgg tcatgactca gtccccggac tctctgcggtg tgctgcttgg agagagagcg	120
accatcaact gtcgggcctc aaagagcatc agcaaggacc tggcctggta ccagcagaag	180
ccgggacagc cgccaaagct gctgatctac tccgggtcca ccttgcaatc tgggtgtccct	240
gaccggttct ccggttccgg gtcgggtacc gacttcacgc tctattttc gtcgctgcaa	300
gccgaagatg tggccgtgta ctattgcca cagcacaaca agtacccta cacttttggc	360
ggaggcacca aggtggaaat caaggggggt ggcggttagcg gaggaggggg ctccggcggc	420
ggcggctcag ggggcggagg aagccaagtg cagctgggtgc agtcaggcag cgaactgaag	480
aagcccggag cctccgtcaa agtgtcctgc aaagcctcgg gatacacctt cacctcctac	540
tggatgaact ggggtccgcca ggcacctgga caggggctgg agtggatggg aaggatcgat	600
ccctacgatt ccgaaacca ttacaatcag aagttcaagg accggtttgt gttctccgtg	660
gacaagtccg tgtccaccgc ctacctcaa attagcagcc tgaaggcgga ggatacagct	720
gtctactact gcgctcgcgg aaactgggat gactattggg gccagggaac taccgtgact	780
gtgtcctcca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttggggc ctctggctgg tacttgcggg	960
gtcctgtgctg tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgctcgg	1458

_SL

<210> 290

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 290

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu
20 25 30

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly	Gly	Gly	Ser	Gln	Val	Gln	Leu	Val	Gln	<u>SL</u> Ser	Gly	Ser	Glu	Leu	Lys
145					150					155					160
Lys	Pro	Gly	Ala	Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr
				165					170					175	
Phe	Thr	Ser	Tyr	Trp	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly
			180					185					190		
Leu	Glu	Trp	Met	Gly	Arg	Ile	Asp	Pro	Tyr	Asp	Ser	Glu	Thr	His	Tyr
		195					200					205			
Asn	Gln	Lys	Phe	Lys	Asp	Arg	Phe	Val	Phe	Ser	Val	Asp	Lys	Ser	Val
	210					215					220				
Ser	Thr	Ala	Tyr	Leu	Gln	Ile	Ser	Ser	Leu	Lys	Ala	Glu	Asp	Thr	Ala
225					230					235					240
Val	Tyr	Tyr	Cys	Ala	Arg	Gly	Asn	Trp	Asp	Asp	Tyr	Trp	Gly	Gln	Gly
				245					250					255	
Thr	Thr	Val	Thr	Val	Ser	Ser	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro
		260						265					270		
Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro	Glu
		275					280					285			
Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp
	290					295					300				
Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly
305					310					315					320
Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg
				325					330					335	

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe^{_SL} Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 291

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

polypeptide"

<400> 291

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu
20 25 30

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys
145 150 155 160

Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly

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180

185

190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val
210 215 220

Ser Thr Ala Tyr Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser
260

<210> 292

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 292

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

_SL

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

<210> 293
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 293
Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

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

_SL

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 294
<211> 1458
<212> DNA
<213> Artificial Sequence

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

<400> 294
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgagggtgc agctgggtgca gagcggagcc gaggtcaaga agcctggaga atccctgagg 120
atcagctgca aaggcagcgg gtataccttc acctcctact ggatgaattg ggtccgccag 180
atgcccggaa aaggcctgga gtggatggga cggattgacc cctacgactc ggaaacccat 240
tacaaccaga agttcaagga tcacgtgacc atctccgtgg acaagtccat ttccactgcg 300
tacctccagt ggtcaagcct gaaggcctcc gacactgcta tgtactactg cgcacgcgga 360
aactgggatg attactgggg acagggaaca accgtgactg tgcctcccg gggtggcgg 420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga cgtgcagctc 480
accagtcgc cctcatttct gtcggcctca gtgggagaca gagtgaccat tacttgtcgg 540
gcctccaaga gcatctccaa ggacctggcc tggatatcagc agaagccagg aaaggcgcct 600
aagttgctca tctactcggg gtcgaccctg caatctggcg tgccgtccc gttctccggt 660
tcgggaagcg gtaccgaatt cacccttact atctcctccc tgcaaccgga ggacttcgcc 720
acctactact gccaacagca caacaagtac ccgtacactt tcgggggtgg cacgaaggtc 780
gaaatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgctcc 840

_SL

cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcataacc	900
cggggctcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggatatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 295

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 295

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5				10					15		

His	Ala	Ala	Arg	Pro	Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val
			20				25						30		

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

Thr	Phe	Thr	Ser	Tyr	Trp	Met	Asn	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys
	50					55					60				

_SL

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp His Val Thr Ile Ser Val Asp Lys Ser
85 90 95

Ile Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
100 105 110

Ala Met Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu
145 150 155 160

Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

_SL

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

_SL

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 296
<211> 263
<212> PRT
<213> Artificial Sequence

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

<400> 296
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

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

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp His Val Thr Ile Ser Val Asp Lys Ser
85 90 95

_SL

Ile Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
100 105 110

Ala Met Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu
145 150 155 160

Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys
260

<210> 297

<211> 115

<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

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

<400> 297

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

<210> 298

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

polypeptide"

<400> 298

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

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

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

Tyr Ser Gly Ser Thr 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 Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 299

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 299

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgaggtgc agctggtgca gagcggagcc gaggtcaaga agcctggaga atccctgagg 120

atcagctgca aaggcagcgg gtataccttc acctcctact ggatgaattg ggtccgccag 180

_SL

atgcccggaa aaggcctgga gtggatggga cggattgacc cctacgactc ggaaacccat	240
tacaaccaga agttcaagga tcacgtgacc atctccgtgg acaagtccat ttccactgcg	300
tacctccagt ggtcaagcct gaaggcctcc gacactgcta tgtactactg cgcacgcgga	360
aactgggatg attactgggg acaggggaaca accgtgactg tgtcctccgg gggtaggcgt	420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga agtggtgctg	480
acccagtcgc ccgcaaccct ctctctgtcg ccgggagaac gcgccactct ttcctgtcgg	540
gcgtccaaga gcatctcaaa ggacctcgcc tgggtaccagc agaagcctgg tcaagccccg	600
cggctgctga tctactccgg ctccacgctg caatcaggaa tcccagccag attttccggt	660
tcggggtcgg ggactgactt caccttgacc attagctcgc tggaacctga ggacttcgcc	720
gtgtattact gccagcagca caacaagtac ccgtacacct tcggaggcgg tactaaggtc	780
gagatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggctctg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgctcgg	1458

<210> 300
 <211> 486
 <212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

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

<400> 300

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

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

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp His Val Thr Ile Ser Val Asp Lys Ser
85 90 95

Ile Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
100 105 110

Ala Met Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Val Leu
145 150 155 160

Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser ^{SL}Pro Gly Glu Arg Ala Thr
 165 170 175

Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
 180 185 190

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Ser Gly Ser
 195 200 205

Thr Leu Gln Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
 210 215 220

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala
 225 230 235 240

Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
 245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys SL Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 301
<211> 263
<212> PRT
<213> Artificial Sequence

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

<400> 301
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

_SL

195

200

205

Thr Leu Gln Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala
225 230 235 240

Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys
260

<210> 302

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 302

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

_SL

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

<210> 303
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 303
Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

_SL

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

<210> 304

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 304

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgagggtgc agctggtgca gagcggagcc gaggtcaaga agcctggaga atccctgagg	120
atcagctgca aaggcagcgg gtataccttc acctcctact ggatgaattg ggtccgccag	180
atgcccggaa aaggcctgga gtggatggga cggattgacc cctacgactc ggaaacccat	240
tacaaccaga agttcaagga tcacgtgacc atctccgtgg acaagtccat ttccactgcg	300
tacctccagt ggtcaagcct gaaggcctcc gacactgcta tgtactactg cgcacgcgga	360
aactgggatg attactgggg acagggaaca accgtgactg tgtcctccgg gggtggcggt	420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga cgtcgtgatg	480
accagtcac cggcattcct gtccgtgact cccggagaaa aggtcacgat tacttgccgg	540
gcgtccaaga gcatctcaa ggacctgcc tggtagcaac agaagccgga ccaggcccct	600
aagctgttga tctactcggg gtccaccctt caatcgggag tgccatcgcg gtttagcggt	660
tcgggttctg ggaccgactt cactttcacc atctcctcac tggaagccga ggatgccgcc	720
acttactact gtcagcagca caacaagtat ccgtacacct tcggaggcgg taccaaagtg	780
gagatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggctcttg acttcgcctg cgatatctac atttgggccc ctctggctgg tacttgcggg	960

_SL

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gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg      1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt      1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc      1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt      1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc      1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag      1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac      1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg      1440
caggccctgc cgctcggg                                     1458

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<210> 305

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 305

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Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1           5           10          15

```

```

His Ala Ala Arg Pro Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val
          20          25          30

```

```

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

```

```

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys
          50          55          60

```

```

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65          70          75          80

```

_SL

Tyr Asn Gln Lys Phe Lys Asp His Val Thr Ile Ser Val Asp Lys Ser
85 90 95

Ile Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
100 105 110

Ala Met Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
145 150 155 160

Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly Glu Lys Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

_SL

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

_SL

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 306
<211> 263
<212> PRT
<213> Artificial Sequence

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

<400> 306
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

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

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp His Val Thr Ile Ser Val Asp Lys Ser
85 90 95

Ile Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
100 105 110

_SL

Ala Met Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
145 150 155 160

Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly Glu Lys Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys
260

<210> 307

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

_SL

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

<400> 307

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

<210> 308

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 308

Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly

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

<210> 309
 <211> 1458
 <212> DNA
 <213> Artificial Sequence

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

<400> 309
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccgaggtgc agctggtgca gagcggagcc gaggtcaaga agcctggaga atccctgagg 120
 atcagctgca aaggcagcgg gtataccttc acctcctact ggatgaattg ggtccgccag 180
 atgcccggaa aaggcctgga gtggatggga cggattgacc cctacgactc ggaaacccat 240
 tacaaccaga agttcaagga tcacgtgacc atctccgtgg acaagtccat ttccactgcg 300

_SL

tacctccagt ggtcaagcct gaaggcctcc gacactgcta tgtactactg cgcacgcgga	360
aactgggatg attactgggg acaggggaaca accgtgactg tgcctccgg ggggtggcgg	420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga cgtggtcagt	480
actcagtccc cggactcact cgcgggtgtcg cttggagaga gagcgacat caactgtcgg	540
gcctcaaaga gcatcagcaa ggacctggcc tggtagcagc agaagccggg acagccgcca	600
aagctgctga tctactccgg gtccaccttg caatctgggtg tccctgaccg gttctccgg	660
tccgggtcgg gtaccgactt cagctcact atttcgtcgc tgcaagccga agatgtggcc	720
gtgtactatt gccaacagca caacaagtac ccctacactt ttggcggagg caccaagggtg	780
gaaatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctgggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgccgg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggg tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattgggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 310

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

_SL

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

<400> 310

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

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

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp His Val Thr Ile Ser Val Asp Lys Ser
85 90 95

Ile Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
100 105 110

Ala Met Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
145 150 155 160

Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr
165 170 175

Ile	Asn	Cys	Arg	Ala	Ser	Lys	Ser	Ile	Ser	Lys	Asp	Leu	Ala	Trp	Tyr
			180					185		SL			190		
Gln	Gln	Lys	Pro	Gly	Gln	Pro	Pro	Lys	Leu	Leu	Ile	Tyr	Ser	Gly	Ser
		195					200					205			
Thr	Leu	Gln	Ser	Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly
	210					215					220				
Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala
225					230					235					240
Val	Tyr	Tyr	Cys	Gln	Gln	His	Asn	Lys	Tyr	Pro	Tyr	Thr	Phe	Gly	Gly
				245					250					255	
Gly	Thr	Lys	Val	Glu	Ile	Lys	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro
			260					265					270		
Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro	Glu
		275					280					285			
Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp
	290					295					300				
Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly
305				310						315					320
Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg
				325					330					335	
Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln
			340					345					350		
Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu	Glu
		355					360					365			

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe ^{_SL}Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 311

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 311

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val

210

215

_SL

220

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala
 225 230 235 240

Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
 245 250 255

Gly Thr Lys Val Glu Ile Lys
 260

<210> 312

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 312

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
 50 55 60

Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr
 65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95

_SL

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

Val Ser Ser
115

<210> 313
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 313
Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

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

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

_SL

<210> 314
<211> 1458
<212> DNA
<213> Artificial Sequence

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

<400> 314
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgacgtgc agctcaccca gtcgccctca tttctgtcgg cctcagtggg agacagagtg 120
accattactt gtcgggcctc caagagcatc tccaaggacc tggcctggta tcagcagaag 180
ccaggaaagg cgcctaagtt gctcatctac tcggggtcga ccctgcaatc tggcgtgccg 240
tcccggttct ccggttcggg aagcgggtacc gaattcacc ttactatctc ctccctgcaa 300
ccggaggact tcgccaccta ctactgcca cagcacaaca agtaccgta cactttcggg 360
ggtggcacga aggtcgaaat caaggggggt ggcggtagcg gaggaggggg ctccggcggc 420
ggcggctcag ggggcggagg aagcgagggt cagctgggtg agagcggagc cgagggtcaag 480
aagcctggag aatccctgag gatcagctgc aaaggcagcg ggtatacctt cacctcctac 540
tggatgaatt ggggtccgca gatgcccga aaaggcctgg agtggatggg acggattgac 600
ccctacgact cggaaccca ttacaaccag aagttcaagg atcacgtgac catctccgtg 660
gacaagtcca tttccactgc gtacctccag tgggtcaagcc tgaaggcctc cgacactgct 720
atgtactact gcgcacgcgg aaactgggat gattactggg gacagggaac aaccgtgact 780
gtgtcctcca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgctcc 840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc 900
cggggtcttg acttcgctg cgatatctac atttggggcc ctctggctgg tacttgcggg 960
gtcctgtgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgtg 1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt 1080

_SL

tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 315

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 315

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5						10					15

His	Ala	Ala	Arg	Pro	Asp	Val	Gln	Leu	Thr	Gln	Ser	Pro	Ser	Phe	Leu
			20					25						30	

Ser	Ala	Ser	Val	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Lys
			35				40					45			

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

Pro	Lys	Leu	Leu	Ile	Tyr	Ser	Gly	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro
65					70					75					80

Ser	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile
				85					90					95	

_SL

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

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

Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly
180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile
210 215 220

Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala
225 230 235 240

Met Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

_SL

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

_SL

Gln Ala Leu Pro Pro Arg
485

<210> 316

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 316

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu
20 25 30

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

_SL

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

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

Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly
180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile
210 215 220

Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala
225 230 235 240

Met Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser
260

<210> 317

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 317

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
 50 55 60

Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr
 65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95

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

Val Ser Ser
 115

<210> 318

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 318

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

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp

_SL

20

25

30

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

Tyr Ser Gly Ser Thr 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 Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 319

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 319

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgaagtgg tgctgaccca gtcgcccga accctctctc tgcgcccggg agaacgcgcc 120

actctttcct gtcgggcgct caagagcatc tcaaaggacc tcgcctggta ccagcagaag 180

cctgggtcaag ccccgcggt gctgatctac tccggctcca cgctgcaatc aggaatccca 240

gccagatttt ccggttcggg gtcggggact gacttcacct tgaccattag ctcgctggaa 300

cctgaggact tcgccgtgta ttactgccag cagcacaaca agtaccgta caccttcgga 360

ggcgggtacta aggtcgagat caaggggggt ggcggtagcg gaggaggggg ctccggcggc 420

_SL

ggcggctcag ggggcggagg aagcgaggtg cagctggtgc agagcggagc cgaggtcaag	480
aagcctggag aatccctgag gatcagctgc aaaggcagcg ggtatacctt cacctcctac	540
tggatgaatt ggggtccgcca gatgcccgga aaaggcctgg agtggatggg acggattgac	600
ccctacgact cggaaaccca ttacaaccag aagttcaagg atcacgtgac catctccgtg	660
gacaagtcca tttccactgc gtacctccag tggtaagcc tgaaggcctc cgacactgct	720
atgtactact gcgcacgcgg aaactgggat gattactggg gacagggaac aaccgtgact	780
gtgtcctcca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggctttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 320

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 320

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5				10		SL				15	
His	Ala	Ala	Arg	Pro	Glu	Val	Val	Leu	Thr	Gln	Ser	Pro	Ala	Thr	Leu
			20					25					30		
Ser	Leu	Ser	Pro	Gly	Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Lys
		35					40					45			
Ser	Ile	Ser	Lys	Asp	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala
	50					55					60				
Pro	Arg	Leu	Leu	Ile	Tyr	Ser	Gly	Ser	Thr	Leu	Gln	Ser	Gly	Ile	Pro
65				70						75					80
Ala	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile
				85					90					95	
Ser	Ser	Leu	Glu	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	His
			100					105					110		
Asn	Lys	Tyr	Pro	Tyr	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys
		115					120					125			
Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly
		130				135					140				
Gly	Gly	Gly	Ser	Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys
145					150					155					160
Lys	Pro	Gly	Glu	Ser	Leu	Arg	Ile	Ser	Cys	Lys	Gly	Ser	Gly	Tyr	Thr
				165					170					175	
Phe	Thr	Ser	Tyr	Trp	Met	Asn	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly
			180					185					190		

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr ^{SL}Asp Ser Glu Thr His Tyr
 195 200 205

Asn Gln Lys Phe Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile
 210 215 220

Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala
 225 230 235 240

Met Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
 245 250 255

Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu ^{_SL}Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 321
 <211> 263
 <212> PRT
 <213> Artificial Sequence

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

<400> 321
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu
 20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys

_SL

Val Ser Ser
115

<210> 323

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 323

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 324

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 324

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgacgtcg tgatgaccca gtcaccggca ttctgttccg tgactcccgg agaaaaggctc	120
acgattactt gccgggcgtc caagagcatc tccaaggacc tcgcctggta ccaacagaag	180
ccggaccagg cccctaagct gttgatctac tcggggtcca cccttcaatc gggagtgcc	240
tcgcggttta gcggttcggg ttctgggacc gacttcactt tcaccatctc ctactggaa	300
gccgaggatg ccgccactta ctactgtcag cagcacaaca agtatccgta caccttcgga	360
ggcggtagca aagtggagat caaggggggt ggcggtagcg gaggaggggg ctccggcggc	420
ggcggctcag ggggcggagg aagcgagggt cagctgggtg agagcggagc cgagggtcaag	480
aagcctggag aatccctgag gatcagctgc aaaggcagcg ggtatacctt cacctcctac	540
tggatgaatt ggggtccgca gatgcccga aaaggcctgg agtggatggg acggattgac	600
ccctacgact cggaaaccca ttacaaccag aagttcaagg atcacgtgac catctccgtg	660
gacaagtcca tttccactgc gtacctccag tgggtcaagcc tgaaggcctc cgacactgct	720
atgtactact gcgcacgcgg aaactgggat gattactggg gacagggaaac aaccgtgact	780
gtgtcctcca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgccgctgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200

_SL

ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggccgtgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattgggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 325
 <211> 486
 <212> PRT
 <213> Artificial Sequence

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

<400> 325
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu
 20 25 30

Ser Val Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys
 35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
 65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile
 85 90 95

Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His
 100 105 110

_SL

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

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

Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly
180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile
210 215 220

Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala
225 230 235 240

Met Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

_SL

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

_SL

<210> 326

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 326

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu
20 25 30

Ser Val Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile
85 90 95

Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

_SL

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

Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly
180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile
210 215 220

Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala
225 230 235 240

Met Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser
260

<210> 327

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 327

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

<210> 328
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 328
Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly
1 5 10 15

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

Leu Ala Trp Tyr Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile

35

40

_SL

45

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

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

Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
 85 90 95

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

<210> 329

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 329

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgacgtgg tcatgactca gtccccggac tctctcgctg tgctgcttgg agagagagcg	120
accatcaact gtcgggcctc aaagagcatc agcaaggacc tggcctggta ccagcagaag	180
ccgggacagc cgccaaagct gctgatctac tccgggtcca ctttgcaatc tgggtgtccct	240
gaccggttct ccggttccgg gtcgggtacc gacttcacgc tctattttc gtcgctgcaa	300
gccgaagatg tggccgtgta ctattgcca cagcacaaca agtaccctta cacttttggc	360
ggaggcacca aggtggaaat caaggggggt ggcggtagcg gaggaggggg ctccggcggc	420
ggcggctcag ggggcggagg aagcgagggt cagctgggtgc agagcggagc cgagggtcaag	480
aagcctggag aatccctgag gatcagctgc aaaggcagcg ggtatacctt cacctcctac	540

_SL

tggatgaatt ggggtccgcca gatgcccgga aaaggcctgg agtggatggg acggattgac	600
ccctacgact cggaaaccca ttacaaccag aagttcaagg atcacgtgac catctccgtg	660
gacaagtcca tttccactgc gtacctccag tgggtcaagcc tgaaggcctc cgacactgct	720
atgtactact gcgcacgcgg aaactgggat gattactggg gacagggaac aaccgtgact	780
gtgtcctcca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agacccgcag ctgggtggggc cgtgcatacc	900
cggggctcttg acttcgcctg cgatatctac atttgggccc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 330

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 330

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

1

5

10

15

His Ala Ala Arg Pro Asp Val Val Met Thr ^{SL}Gln Ser Pro Asp Ser Leu
 20 25 30

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys
 35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
 65 70 75 80

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 85 90 95

Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His
 100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140

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

Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr
 165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly
 180 185 190

Leu Glu Trp Met Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
 195 200 205

Asn	Gln	Lys	Phe	Lys	Asp	His	Val	Thr	Ile	^{_SL} Ser	Val	Asp	Lys	Ser	Ile
210						215					220				
Ser	Thr	Ala	Tyr	Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr	Ala
225					230					235					240
Met	Tyr	Tyr	Cys	Ala	Arg	Gly	Asn	Trp	Asp	Asp	Tyr	Trp	Gly	Gln	Gly
				245					250					255	
Thr	Thr	Val	Thr	Val	Ser	Ser	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro
			260						265				270		
Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro	Glu
		275					280					285			
Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp
	290					295					300				
Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly
305					310					315					320
Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg
				325					330					335	
Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln
			340					345					350		
Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu	Glu
		355				360						365			
Glu	Gly	Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg	Ser	Ala	Asp	Ala
	370					375					380				
Pro	Ala	Tyr	Lys	Gln	Gly	Gln	Asn	Gln	Leu	Tyr	Asn	Glu	Leu	Asn	Leu
385					390					395					400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp ^{SL}Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 331
 <211> 263
 <212> PRT
 <213> Artificial Sequence

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

<400> 331
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu
 20 25 30

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys
 35 40 45

Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro

245

250 _SL

255

Thr Thr Val Thr Val Ser Ser
260

<210> 332

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 332

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

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

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

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

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

Val Ser Ser
115

_SL

<210> 333
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 333
Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

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

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 334
<211> 1458
<212> DNA
<213> Artificial Sequence

<220>
<221> source

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

<400> 334

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc agctcgtcga gagcggaggg ggactgggtgc agcccggagg aagcctgagg	120
ctgtcctgcg ctgcctccgg ctacaccttc acctcctact ggatgaactg ggtcagacag	180
gcacctggaa agggactgggt ctgggtgtcg cgattgacc cctacgactc cgaaacccat	240
tacaatcaga aattcaagga ccgcttcacc atctccgtgg acaaagccaa gagcaccgcg	300
tacctcaaaa tgaactccct gcgcgctgag gatacagcag tgtactattg cgccggggga	360
aactgggatg attactgggg ccagggaact actgtgactg tgtcatccgg ggggtggcgg	420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga cgtgcagctc	480
accagtcgc cctcatttct gtcggcctca gtgggagaca gaggaccat tacttgtcgg	540
gcctccaaga gcatctccaa ggacctggcc tggatatcagc agaagccagg aaaggcgcct	600
aagttgctca tctactcggg gtcgaccctg caatctggcg tgccgtcccg gttctccggt	660
tcgggaagcg gtaccgaatt cacccttact atctcctccc tgcaaccgga ggacttcgcc	720
acctactact gccaacagca caacaagtac ccgtacactt tcgggggtgg cacgaaggtc	780
gaaatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctgggtggggc cgtgcatacc	900
cggggctctg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320

_SL

atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accaggggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 335
 <211> 486
 <212> PRT
 <213> Artificial Sequence

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

<400> 335
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr
 35 40 45

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
 65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala
 85 90 95

Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
 115 120 125

_SL

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu
145 150 155 160

Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

_SL

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 336

<211> 263

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 336

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala
85 90 95

Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu
145 150 155 160

_SL

Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys
260

<210> 337

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 337

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 Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly ^{SL}Lys Gly Leu Val Trp Val
 35 40 45

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
 50 55 60

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

Val Ser Ser
 115

<210> 338
 <211> 107
 <212> PRT
 <213> Artificial Sequence

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

<400> 338
 Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
 1 5 10 15

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

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

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly

50

55

_SL

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 Gln Gln His Asn Lys Tyr Pro Tyr
 85 90 95

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

<210> 339

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 339

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccgaagtgc agctcgtcga gagcggaggg ggactgggtgc agcccggagg aagcctgagg 120
 ctgtcctgcg ctgcctccgg ctacaccttc acctcctact ggatgaactg ggtcagacag 180
 gcacctggaa agggactgggt ctgggtgtcg cgcattgacc cctacgactc cgaaacccat 240
 tacaatcaga aattcaagga ccgcttcacc atctccgtgg acaaagccaa gagcaccgcg 300
 tacctccaaa tgaactccct gcgcgctgag gatacagcag tgtactattg cgcccgggga 360
 aactgggatg attactgggg ccagggaact actgtgactg tgtcatccgg gggtggcggt 420
 agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga agtggtgctg 480
 acccagtcgc ccgcaaccct ctctctgtcg ccgggagaac gcgccactct ttcctgtcgg 540
 gcgtccaaga gcatctcaaa ggacctcgcc tgggtaccagc agaagcctgg tcaagccccg 600
 cggctgtgta tctactccgg ctccacgctg caatcaggaa tcccagccag attttccggt 660

_SL

tcggggtcgg ggactgactt caccttgacc attagctcgc tggaacctga ggacttcgcc	720
gtgtattact gccagcagca caacaagtac ccgtacacct tcggaggcgg tactaaggtc	780
gagatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 340

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 340

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5						10					15

His	Ala	Ala	Arg	Pro	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu
			20					25						30	

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser ^{SL}Cys Ala Ala Ser Gly Tyr
 35 40 45
 Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60
 Gly Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
 65 70 75 80
 Tyr Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala
 85 90 95
 Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110
 Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
 115 120 125
 Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 130 135 140
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Val Leu
 145 150 155 160
 Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr
 165 170 175
 Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
 180 185 190
 Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Ser Gly Ser
 195 200 205
 Thr Leu Gln Ser Gly Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
 210 215 220

Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	<u>SL</u> Glu	Pro	Glu	Asp	Phe	Ala
225					230					235					240
Val	Tyr	Tyr	Cys	Gln	Gln	His	Asn	Lys	Tyr	Pro	Tyr	Thr	Phe	Gly	Gly
				245					250					255	
Gly	Thr	Lys	Val	Glu	Ile	Lys	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro
			260					265					270		
Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro	Glu
		275					280					285			
Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp
	290					295					300				
Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly
305					310					315					320
Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg
				325					330					335	
Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln
			340					345					350		
Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu	Glu
		355					360					365			
Glu	Gly	Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg	Ser	Ala	Asp	Ala
	370					375					380				
Pro	Ala	Tyr	Lys	Gln	Gly	Gln	Asn	Gln	Leu	Tyr	Asn	Glu	Leu	Asn	Leu
385					390					395					400
Gly	Arg	Arg	Glu	Glu	Tyr	Asp	Val	Leu	Asp	Lys	Arg	Arg	Gly	Arg	Asp
			405					410						415	

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys ^{_SL}Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 341
<211> 263
<212> PRT
<213> Artificial Sequence

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

<400> 341
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His

65		70								<u>SL</u> 75					80
Tyr	Asn	Gln	Lys	Phe	Lys	Asp	Arg	Phe	Thr	Ile	Ser	Val	Asp	Lys	Ala
				85					90					95	
Lys	Ser	Thr	Ala	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr
			100					105					110		
Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Gly	Asn	Trp	Asp	Asp	Tyr	Trp	Gly	Gln
		115					120					125			
Gly	Thr	Thr	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly
	130					135					140				
Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Glu	Val	Val	Leu
145					150					155					160
Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Leu	Ser	Pro	Gly	Glu	Arg	Ala	Thr
				165					170					175	
Leu	Ser	Cys	Arg	Ala	Ser	Lys	Ser	Ile	Ser	Lys	Asp	Leu	Ala	Trp	Tyr
			180					185					190		
Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Ile	Tyr	Ser	Gly	Ser
		195					200					205			
Thr	Leu	Gln	Ser	Gly	Ile	Pro	Ala	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly
	210					215					220				
Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Glu	Pro	Glu	Asp	Phe	Ala
225					230					235					240
Val	Tyr	Tyr	Cys	Gln	Gln	His	Asn	Lys	Tyr	Pro	Tyr	Thr	Phe	Gly	Gly
				245					250					255	
Gly	Thr	Lys	Val	Glu	Ile	Lys									

<210> 342
<211> 115
<212> PRT
<213> Artificial Sequence

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

<400> 342
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 Tyr Thr Phe Thr Ser Tyr
20 25 30

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

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

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

Val Ser Ser
115

<210> 343
<211> 107

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 343

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

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

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 344

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 344

_SL

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc agctcgtcga gagcggaggg ggactgggtgc agcccggagg aagcctgagg	120
ctgtcctgcg ctgcctccgg ctacaccttc acctcctact ggatgaactg ggtcagacag	180
gcacctggaa agggactggg ctgggtgtcg cgcattgacc cctacgactc cgaaacccat	240
tacaatcaga aattcaagga ccgcttcacc atctccgtgg acaaagccaa gagcaccgcg	300
tacctccaaa tgaactccct gcgcgctgag gatacagcag tgtactattg cgcccgggga	360
aactgggatg attactgggg ccagggaact actgtgactg tgtcatccgg gggtggcggg	420
agcggaggag ggggctccgg cggcggcggc tcagggggcg gaggaagcga cgtcgtgatg	480
accagtcac cggcattcct gtccgtgact cccggagaaa aggtcacgat tacttgccgg	540
gcgtccaaga gcatctcaa ggacctcgcc tggtagcaac agaagccgga ccaggcccct	600
aagctgttga tctactcggg gtccaccctt caatcgggag tgccatcgcg gtttagcggg	660
tcgggttctg ggaccgactt cactttcacc atctcctcac tggaagccga ggatgccgcc	720
acttactact gtcagcagca caacaagtat ccgtacacct tcggaggcgg taccaaagtg	780
gagatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggcttctg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgccgg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggg tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattgggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440

caggccctgc cgcctcgg

1458

<210> 345

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 345

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala
85 90 95

Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

_SL

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
145 150 155 160

Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly Glu Lys Val Thr
165 170 175

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

_SL

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 346

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

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

<400> 346

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala
85 90 95

Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
145 150 155 160

Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly Glu Lys Val Thr
165 170 175

_SL

Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
180 185 190

Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser
195 200 205

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
210 215 220

Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala
225 230 235 240

Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly
245 250 255

Gly Thr Lys Val Glu Ile Lys
260

<210> 347

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 347

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 Tyr Thr Phe Thr Ser Tyr
20 25 30

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

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

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

Val Ser Ser
115

<210> 348
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 348
Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly
1 5 10 15

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

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

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

Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala

65 70 75 80

Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr

85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys

100 105

_SL

gaaatcaaga ccactacccc agcaccgagg ccacccaccc cggtccttac catcgctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggctcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 350

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 350

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5				10					15		

His	Ala	Ala	Arg	Pro	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu
			20					25					30		

Val	Gln	Pro	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Tyr
			35				40					45			

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val ^{_SL}Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
 65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala
 85 90 95

Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln
 115 120 125

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met
 145 150 155 160

Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr
 165 170 175

Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr
 180 185 190

Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Ser Gly Ser
 195 200 205

Thr Leu Gln Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly
 210 215 220

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala
 225 230 235 240

Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr ^{SL}Pro Tyr Thr Phe Gly Gly
 245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala ^{SL}Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 351
<211> 263
<212> PRT
<213> Artificial Sequence

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

<400> 351
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His
65 70 75 80

Tyr Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala

_SL

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 352

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 Tyr Thr Phe Thr Ser Tyr
20 25 30

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

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

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

Val Ser Ser
115

<210> 353

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

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

<400> 353

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

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

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

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

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

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

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

<210> 354

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 354

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cccgacgtgc agctcaccca gtcgccctca tttctgtcgg cctcagtggg agacagagtg 120

_SL

accattactt gtcgggcctc caagagcatc tccaaggacc tggcctggta tcagcagaag	180
ccaggaaagg cgcctaagtt gctcatctac tcggggtcga ccctgcaatc tggcgtgccg	240
tcccggttct cccgttcggg aagcgggtacc gaattcaccc ttactatctc ctccctgcaa	300
ccggaggact tcgccaccta ctactgcaa cagcacaaca agtaccgta cactttcggg	360
ggtggcacga aggtcgaaat caaggggggt ggcggttagcg gaggggggg ctccggcggc	420
ggcggctcag ggggcggagg aagcgaagtg cagctcgtcg agagcggagg gggactggtg	480
cagcccgag gaagcctgag gctgtcctgc gctgcctccg gctacacctt cacctcctac	540
tggatgaact gggtcagaca ggcacctgga aagggactgg tctgggtgtc gcgcattgac	600
ccctacgact ccgaaaccca ttacaatcag aaattcaagg accgcttcac catctccgtg	660
gacaaagcca agagcaccgc gtacctcaa atgaactccc tgcgcgtga ggatacagca	720
gtgtactatt gcgcccgggg aaactgggat gattactggg gccagggaac tactgtgact	780
gtgtcatcca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 355

_SL

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 355

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu
20 25 30

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
145 150 155 160

_SL

Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly
180 185 190

Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys
210 215 220

Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

_SL

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 356

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

_SL

<400> 356

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu
20 25 30

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

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

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
145 150 155 160

Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly
180 185 190

_SL

Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys
210 215 220

Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser
260

<210> 357

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 357

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 Tyr Thr Phe Thr Ser Tyr
20 25 30

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

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Thr Ile Ser Val Asp Lys SL Ala Lys Ser Thr Ala 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 Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 358

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 358

Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr 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 Gln Gln His Asn Lys Tyr Pro Tyr

85

90

_SL

95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 359

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 359

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actctttcct gtcgggcgtc caagagcatc tcaaaggacc tcgcctggta ccagcagaag      180
cctggtcaag ccccgcggt gctgatctac tccggctcca cgctgcaatc aggaatccca      240
gccagatttt ccggttcggg gtcggggact gacttcacct tgaccattag ctcgctggaa      300
cctgaggact tcgccgtgta ttactgccag cagcacaaca agtaccgta caccttcgga      360
ggcgggtacta aggtcgagat caaggggggt ggcggtagcg gaggaggggg ctccggcggc      420
ggcgggtcag ggggcggagg aagcgaagtg cagctcgtcg agagcggagg gggactggtg      480
cagcccggag gaagcctgag gctgtcctgc gctgcctccg gctacacctt cacctcctac      540
tggatgaact gggtcagaca ggcacctgga aagggactgg tctgggtgtc gcgcattgac      600
ccctacgact ccgaaacca ttacaatcag aaattcaagg accgcttcac catctccgtg      660
gacaaagcca agagcaccgc gtacctcaa atgaactccc tgcgcgctga ggatacagca      720
gtgtactatt gcgcccgggg aaactgggat gattactggg gccagggaac tactgtgact      780
gtgtcatcca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc      840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc      900

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_SL

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tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accaggggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgccctcg	1458

<210> 360

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 360

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5				10					15		

His	Ala	Ala	Arg	Pro	Glu	Val	Val	Leu	Thr	Gln	Ser	Pro	Ala	Thr	Leu
			20					25					30		

Ser	Leu	Ser	Pro	Gly	Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Lys
			35				40					45			

Ser	Ile	Ser	Lys	Asp	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala
	50					55					60				

Pro	Arg	Leu	Leu	Ile	Tyr	Ser	Gly	Ser	Thr	Leu	Gln	Ser	Gly	Ile	Pro
65					70					75					80
Ala	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile
				85					90					95	
Ser	Ser	Leu	Glu	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	His
			100					105					110		
Asn	Lys	Tyr	Pro	Tyr	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys
			115				120					125			
Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly
			130				135					140			
Gly	Gly	Gly	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val
145					150					155					160
Gln	Pro	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Tyr	Thr
				165					170					175	
Phe	Thr	Ser	Tyr	Trp	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly
			180					185					190		
Leu	Val	Trp	Val	Ser	Arg	Ile	Asp	Pro	Tyr	Asp	Ser	Glu	Thr	His	Tyr
			195				200					205			
Asn	Gln	Lys	Phe	Lys	Asp	Arg	Phe	Thr	Ile	Ser	Val	Asp	Lys	Ala	Lys
			210			215					220				
Ser	Thr	Ala	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala
225					230					235					240
Val	Tyr	Tyr	Cys	Ala	Arg	Gly	Asn	Trp	Asp	Asp	Tyr	Trp	Gly	Gln	Gly
				245					250					255	

Thr Thr Val Thr Val Ser Ser Thr Thr Thr ^{SL}Pro Ala Pro Arg Pro Pro
 260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys ^{SL}Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 361
 <211> 263
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 361
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu
 20 25 30

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys
 35 40 45

Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
 50 55 60

Pro Arg Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Ile Pro
 65 70 75 80

Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 85 90 95

Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His

_SL

100	105	110
Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys		
115	120	125
Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly		
130	135	140
Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val		
145	150	155
Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr		
165	170	175
Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly		
180	185	190
Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr		
195	200	205
Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys		
210	215	220
Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala		
225	230	235
Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly		
245	250	255
Thr Thr Val Thr Val Ser Ser		
260		

<210> 362

<211> 115

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 362

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 Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val
35 40 45

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Thr Ala 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 Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 363

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 363

Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 364

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 364

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgacgtcg tgatgacca gtcaccggca ttctgtccg tgactcccgg agaaaaggtc 120

acgattactt gccgggcgtc caagagcatc tccaaggacc tcgcctggta ccaacagaag 180

ccggaccagg cccctaagct gttgatctac tcgggggtcca cccttcaatc gggagtgcca 240

_SL

tcgcggttta gcggttcggg ttctgggacc gacttcactt tcaccatctc ctactggaa	300
gccgaggatg ccgccactta ctactgtcag cagcacaaca agtatccgta caccttcgga	360
ggcgggtacca aagtggagat caaggggggt ggcggtagcg gaggaggggg ctccggcggc	420
ggcggctcag ggggcggagg aagcgaagtg cagctcgtcg agagcggagg gggactgggtg	480
cagcccggag gaagcctgag gctgtcctgc gctgcctccg gctacacctt cacctcctac	540
tggatgaact gggtcagaca ggcacctgga aagggactgg tctgggtgtc gcgcattgac	600
ccctacgact ccgaaacca ttacaatcag aaattcaagg accgcttcac catctccgtg	660
gacaaagcca agagcaccgc gtacctcaa atgaactccc tgcgcgtga ggatacagca	720
gtgtactatt gcgcccgggg aaactgggat gattactggg gccagggaa tactgtgact	780
gtgtcatcca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgctcgg	1458

<210> 365

<211> 486

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 365

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu
20 25 30

Ser Val Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Asp Gln Ala
50 55 60

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile
85 90 95

Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
145 150 155 160

Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr
165 170 175

_SL

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly
180 185 190

Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys
210 215 220

Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

_SL

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 366

<211> 263

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 366

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

_SL

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu
20 25 30

Ser Val Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys
35 40 45

Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Asp Gln Ala
50 55 60

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile
85 90 95

Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His
100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val
145 150 155 160

Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr
165 170 175

Phe Thr Ser Tyr Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly
180 185 190

Leu Val Trp Val Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr
195 200 205

_SL

Asn Gln Lys Phe Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys
210 215 220

Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala
225 230 235 240

Val Tyr Tyr Cys Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly
245 250 255

Thr Thr Val Thr Val Ser Ser
260

<210> 367

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 367

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 Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val
35 40 45

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Thr Ala Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr^{SL} Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 368

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 368

Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly
1 5 10 15

Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala
65 70 75 80

Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys

<210> 369
 <211> 1458
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 369
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccgacgtgg tcatgactca gtccccggac tctctcgctg tgctgcttgg agagagagcg 120
 accatcaact gtcgggcctc aaagagcatc agcaaggacc tggcctggta ccagcagaag 180
 ccgggacagc cgccaaagct gctgatctac tccgggtcca ccttgcaatc tgggtgtcctt 240
 gaccggttct ccggttccgg gtcgggtacc gacttcacgc tctactatttc gtcgctgcaa 300
 gccgaagatg tggccgtgta ctattgccaa cagcacaaca agtaccctta cacttttggc 360
 ggaggcacca aggtggaaat caaggggggt ggcggttagcg gaggaggggg ctccggcggc 420
 ggcggtctcag ggggcggagg aagcgaagtg cagctcgtcg agagcggagg gggactgggtg 480
 cagcccggag gaagcctgag gctgtcctgc gctgcctccg gctacacctt cacctcctac 540
 tggatgaact gggtcagaca ggcacctgga aagggactgg tctgggtgtc gcgcattgac 600
 ccctacgact ccgaaacca ttacaatcag aaattcaagg accgcttcac catctccgtg 660
 gacaaagcca agagcaccgc gtacctcaa atgaactccc tgcgcgctga ggatacagca 720
 gtgtactatt gcgcccgggg aaactgggat gattactggg gccagggaac tactgtgact 780
 gtgtcatcca ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc 840
 cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc 900
 cggggctctg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg 960
 gtcctgtgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg 1020

_SL

tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggcctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 370

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 370

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5					10					15	

His	Ala	Ala	Arg	Pro	Asp	Val	Val	Met	Thr	Gln	Ser	Pro	Asp	Ser	Leu
			20					25					30		

Ala	Val	Ser	Leu	Gly	Glu	Arg	Ala	Thr	Ile	Asn	Cys	Arg	Ala	Ser	Lys
		35					40					45			

Ser	Ile	Ser	Lys	Asp	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro
	50					55					60				

Pro	Lys	Leu	Leu	Ile	Tyr	Ser	Gly	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro
65				70					75					80	

Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	SL Asp	Phe	Thr	Leu	Thr	Ile
				85					90					95	
Ser	Ser	Leu	Gln	Ala	Glu	Asp	Val	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	His
			100					105					110		
Asn	Lys	Tyr	Pro	Tyr	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys
		115					120					125			
Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly
	130					135					140				
Gly	Gly	Gly	Ser	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val
145					150					155					160
Gln	Pro	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Tyr	Thr
				165					170					175	
Phe	Thr	Ser	Tyr	Trp	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly
			180					185					190		
Leu	Val	Trp	Val	Ser	Arg	Ile	Asp	Pro	Tyr	Asp	Ser	Glu	Thr	His	Tyr
		195					200					205			
Asn	Gln	Lys	Phe	Lys	Asp	Arg	Phe	Thr	Ile	Ser	Val	Asp	Lys	Ala	Lys
	210					215					220				
Ser	Thr	Ala	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala
225					230					235					240
Val	Tyr	Tyr	Cys	Ala	Arg	Gly	Asn	Trp	Asp	Asp	Tyr	Trp	Gly	Gln	Gly
				245					250					255	
Thr	Thr	Val	Thr	Val	Ser	Ser	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro
			260					265					270		

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro ^{SL}Leu Ser Leu Arg Pro Glu
 275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
 290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
 305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
 325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
 340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
 355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
 370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
 385 390 395 400

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
 405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
 420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
 435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
 450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr ^{_SL}Tyr Asp Ala Leu His Met
 465 470 475 480

Gln Ala Leu Pro Pro Arg
 485

<210> 371
 <211> 263
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 371
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu
 20 25 30

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys
 35 40 45

Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 50 55 60

Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro
 65 70 75 80

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 85 90 95

Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His
 100 105 110

Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys

_SL

<400> 372

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 Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val
35 40 45

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Thr Ala 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 Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 373

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 373

Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

_SL

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro Asp Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 374

<211> 729

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 374

caagtgaac tcgtccaaag cggagcggaa gtcaagaaac ccggagcgag cgtgaaagtg 60

tcctgcaaag cctccggcta cacctttacg ggctactaca tgcactgggt gcgccaggca 120

ccaggacagg gtcttgaatg gatgggatgg atcaacccta attcgggcgg aactaactac 180

gcacagaagt tccaggggag agtgactctg actcgggata cctccatctc aactgtctac 240

atggaactct cccgcttgcg gtcagatgat acggcagtgt actactgcgc ccgcgacatg 300

aatatacttg ctaccgtgcc gttcgacatc tggggacagg ggactatggg tactgtctca 360

_SL							
tcggg	cggtg	gaggttcagg	aggaggcggc	tcgggaggcg	gaggttcgga	cattcagatg	420
acc	cagtccc	catcctctct	gtcggccagc	gtcggagata	gggtgaccat	tacctgtcgg	480
gcctc	gcaaa	gcatctcctc	gtacctcaac	tggtatcagc	aaaagccggg	aaaggcgcct	540
aagct	gctga	tctacgccgc	ttcgagcttg	caaagcgggg	tgccatccag	attctcggga	600
tcagg	ctcag	gaaccgactt	caccctgacc	gtgaacagcc	tccagccgga	ggactttgcc	660
acttact	act	gccagcaggg	agactccgtg	ccgcttactt	tcggggggggg	tacccgcctg	720
gagat	caag						729

```
<210> 375
<211> 243
<212> PRT
<213> Artificial Sequence
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<220>  
<221> source  
<223> /note="Description of Artificial Sequence: Synthetic  
polypeptide"
```

<400> 375
Gln Val Gln 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 Met 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 Gly Thr Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

_SL

Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro
130 135 140

Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg
145 150 155 160

Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro
165 170 175

Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser
180 185 190

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
195 200 205

Leu Thr Val Asn Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
210 215 220

Gln Gln Gly Asp Ser Val Pro Leu Thr Phe Gly Gly Gly Thr Arg Leu
225 230 235 240

Glu Ile Lys

<210> 376

<211> 1760

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 376

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aactcgtcca aagcggagcg gaagtcaaga aaccggagc gagcgtgaaa	120
gtgtcctgca aagcctccgg ctacacctt acgggctact acatgcactg ggtgcgccag	180
gcaccaggac aggggtcttga atggatggga tggatcaacc ctaattcggg cggaactaac	240
tacgcacaga agttccaggg gagagtgact ctgactcggg atacctccat ctcaactgtc	300
tacatggaac tctcccgtt gcggtcagat gatacggcag tgtactactg cgccgcgac	360
atgaatatcc tggctaccgt gccgttcgac atctggggac aggggactat ggttactgtc	420
tcatcgggcg gtggagggtt aggaggaggc ggctcgggag gcggagggtt ggacattcag	480
atgaccagc ccccatcctc tctgtcggcc agcgtcggag atagggtgac cattacctgt	540
cgggcctcgc aaagcatctc ctcgtacctc aactggtatc agcaaaagcc gggaaaggcg	600
cctaagctgc tgatctacgc cgcttcgagc ttgcaaagcg gggtgccatc cagattctcg	660
ggatcaggct caggaaccga cttcacctg accgtgaaca gcctccagcc ggaggacttt	720
gccacttact actgccagca gggagactcc gtgccgctta ctttcggggg gggtaccgc	780
ctggagatca agaccactac ccagcaccg aggccacca ccccggtcc taccatcgcc	840
tcccagcctc tgtccctgcg tccggaggca tgtagaccg cagctggtgg ggccgtgcat	900
acccggggtc ttgacttcgc ctgcgatatc tacatttggg cccctctggc tggacttgc	960
ggggtcctgc tgctttcact cgtgatcact ctttactgta agcgcggtcg gaagaagctg	1020
ctgtacatct ttaagcaacc cttcatgagg cctgtgcaga ctactcaaga ggaggacggc	1080
tggttcttgcc ggttcccaga ggaggaggaa ggcggctgcg aactgcgct gaaattcagc	1140
cgcagcgag acgctccagc ctacaagcag gggcagaacc agctctacaa cgaactcaat	1200
cttggtcggg gagaggagta cgacgtgctg gacaagcgga gaggacggga cccagaaatg	1260
ggcgggaagc cgcgcagaaa gaatcccaa gagggcctgt acaacgagct ccaaaaggat	1320

_SL

aagatggcag aagcctatag cgagattggg atgaaagggg aacgcagaag aggcaaaggc 1380
cacgacggac tgtaccaggg actcagcacc gccaccaagg acacctatga cgctcttcac 1440
atgcaggccc tgccgcctcg gtaagtcgac agctcgcttt cttgctgtcc aatttctatt 1500
aaaggttcct ttgttccta agtccaacta ctaaactggg ggatattatg aagggccttg 1560
agcatctgga ttctgcctaa taaaaaacat ttattttcat tgctgcgtcg agagctcgct 1620
ttcttgctgt ccaatttcta ttaaagggtt ctttgttccc taagtccaac tactaaactg 1680
ggggatatta tgaagggcct tgagcatctg gattctgcct aataaaaaac atttattttc 1740
attgctgcct cgacgaattc 1760

<210> 377

<211> 729

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 377

caagtccaac tcgttcaatc cggcgcagaa gtcaagaagc caggagcatc agtgaaagtg 60
tcctgcaaag cctcaggcta catcttcacg ggatactaca tccactgggt gcgccaggct 120
ccgggccagg gccttgagtg gatgggctgg atcaacccta actctggggg aaccaactac 180
gctcagaagt tccaggggag ggtcactatg actcgcgata cctccatctc cactgcgtac 240
atggaactct cgggactgag atccgacgat cctgccgtgt actactgcgc ccgggacatg 300
aacatcttgg cgaccgtgcc gtttgacatt tggggacagg gcaccctcgt cactgtgtcg 360
agcgggtggag gaggctcggg ggggtggcga tcaggagggg gaggaagcga catccagctg 420
actcagagcc catcgtcgtt gtccgcgtcg gtgggggata gaggaccat tacttgccgc 480
gccagccaga gcatctcatc atatctgaat tgggtaccagc agaagcccgg aaaggcccca 540
aaactgctga tctacgctgc aagcagcctc caatcgggag tgccgtcacg gttctccggg 600

_SL

tccggttcgg gaactgactt taccctgacc gtgaattcgc tgcaaccgga ggatttcgcc 660
acgtactact gtcagcaagg agactccgtg ccgctgacct tcggtggagg caccaaggtc 720
gaaatcaag 729

<210> 378
<211> 243
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 378
Gln Val Gln 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 Ile 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 Gly Thr Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Gly Leu Arg Ser Asp Asp Pro Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly

_SL

tcatgcaaag cctcgggcta caccttcact gactactata tgcactggct gcggcaggca	120
ccgggacagg gacttgagtg gatgggatgg atcaaccga attcagggga cactaactac	180
gcgcagaagt tccaggggag agtgaccctg acgagggaca cctcaatttc gaccgtctac	240
atggaattgt cgcgcctgag atcggacgat actgctgtgt actactgtgc ccgcgacatg	300
aacatcctcg cgactgtgcc ttttgatatc tggggacagg ggactatggc caccgtttcc	360
tccgcttccg gtggcggagg ctcgggaggc cgggcctccg gtggaggagg cagcgacatc	420
cagatgactc agagcccttc ctgctgagc gcctcagtgg gagatcgcgt gaccatcact	480
tgccgggcca gccagtccat ttcgtcctac ctcaattggc accagcagaa gccgggaaag	540
gcgcccgaagc tcttgatcta cgctgcgagc tccctgcaaa gcgggggtgcc gagccgattc	600
tcgggttccg gctcgggaac cgacttcact ctgaccatct catccctgca accagaggac	660
tttgccacct actactgcca acaaggagat tctgtccac tgacgttcgg cggaggaacc	720
aaggtcgaaa tcaag	735

<210> 380

<211> 245

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 380

Gln	Val	Gln	Leu	Gln	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Ser	Gly	Ala
1			5					10						15	

Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Asp	Tyr
			20					25					30		

Tyr	Met	His	Trp	Leu	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met
		35					40					45			

Gly Trp Ile Asn Pro Asn Ser Gly Asp Thr ^{SL}Asn Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Val Tyr
 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro Phe Asp Ile Trp Gly
 100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser
 115 120 125

Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln
 130 135 140

Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr
 145 150 155 160

Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln
 165 170 175

Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu
 180 185 190

Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
 195 200 205

Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr
 210 215 220

Tyr Cys Gln Gln Gly Asp Ser Val Pro Leu Thr Phe Gly Gly Gly Thr
 225 230 235 240

_SL

Lys Val Glu Ile Lys
245

<210> 381

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 381

Gln Val Gln 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 Met 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 Gly Thr Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Met Asn Ile Leu Ala Thr Val Pro Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro

130

135

_SL

140

Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg
 145 150 155 160

Ala Ser Gln Ser Ile Ser Thr Tyr Leu Asn Trp Tyr Gln Gln Lys Pro
 165 170 175

Gly Lys Ala Pro Asn Leu Leu Ile Tyr Ala Ala Phe Ser Leu Gln Ser
 180 185 190

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 195 200 205

Leu Thr Ile Asn Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
 210 215 220

Gln Gln Gly Asp Ser Val Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu
 225 230 235 240

Glu Ile Lys

<210> 382

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 382

Gln Val Gln 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 Ser Tyr
 20 25 30

_SL

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu Thr Gln Ser Pro Ser
130 135 140

Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly
180 185 190

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
210 215 220

_SL

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 383

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 383

Gln Val Gln 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 Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

_SL

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Val Val Leu Thr Gln Ser Pro Ala
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Ala Pro Arg Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly
180 185 190

Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
195 200 205

Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln
210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 384

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 384

Gln Val Gln 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 Ser Tyr
 20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
 50 55 60

Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
 100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser Pro Ala
 130 135 140

Phe Leu Ser Val Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Arg Ala
 145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Asp
 165 170 175

Gln Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly
 180 185 190

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser ^{_SL}Gly Thr Asp Phe Thr Phe
 195 200 205

Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln
 210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
 225 230 235 240

Ile Lys

<210> 385

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 385

Gln Val Gln 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 Ser Tyr
 20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
 50 55 60

Lys Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 386

Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr 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 Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser
130 135 140

Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
145 150 155 160

Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
165 170 175

_SL

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
180 185 190

Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met
195 200 205

Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala
210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
225 230 235 240

Ser Ser

<210> 387

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 387

Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

_SL

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser
130 135 140

Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
145 150 155 160

Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
180 185 190

Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met
195 200 205

Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala
210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
225 230 235 240

Ser Ser

_SL

<210> 388

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 388

Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly
1 5 10 15

Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala
65 70 75 80

Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser
130 135 140

Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
 145 150 155 160

Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
 165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
 180 185 190

Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met
 195 200 205

Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
 225 230 235 240

Ser Ser

<210> 389

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 389

Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile

35 40 45

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser
130 135 140

Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr	Trp
145					150					155					160

Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
180 185 190

Asp Arg Val Thr Met Thr Val Asp Lys Ser Thr Ser Thr Ala Tyr Met
195 200 205

Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala
210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val

225 230 $\frac{\text{SL}}{235}$ 240

Ser Ser

<210> 390

<211> 242

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 390

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly
		115					120					125			

_SL

Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu Thr Gln Ser Pro Ser
130 135 140

Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly
180 185 190

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 391

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 391

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala
1 5 10 15

_SL

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Val Val Leu Thr Gln Ser Pro Ala
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Ala Pro Arg Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly
180 185 190

Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
195 200 205

_SL

Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln
210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 392

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 392

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly ^{SL}Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser Pro Ala
130 135 140

Phe Leu Ser Val Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Asp
165 170 175

Gln Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly
180 185 190

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe
195 200 205

Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln
210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 393

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

polypeptide" _SL

<400> 393

Gln Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser Pro Asp
130 135 140

Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Pro Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly

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180

185

190

Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln
210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 394

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 394

Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr 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

_SL

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala Ser
130 135 140

Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
145 150 155 160

Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
180 185 190

Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr Leu
195 200 205

Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
225 230 235 240

Ser Ser

<210> 395

<211> 242

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 395

Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala Ser
130 135 140

Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
145 150 155 160

_SL

Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
180 185 190

Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr Leu
195 200 205

Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
225 230 235 240

Ser Ser

<210> 396

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 396

Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly
1 5 10 15

Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val ^{SL}Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala
 65 70 75 80

Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
 100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
 115 120 125

Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala Ser
 130 135 140

Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
 145 150 155 160

Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
 165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
 180 185 190

Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr Leu
 195 200 205

Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
 225 230 235 240

_SL

Ser Ser

<210> 397

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 397

Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro Asp Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
115 120 125

Val Gln Leu Val Gln Ser Gly Ser Glu Leu Lys Lys Pro Gly Ala Ser

130

135

_SL

140

Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
 145 150 155 160

Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly
 165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
 180 185 190

Asp Arg Phe Val Phe Ser Val Asp Lys Ser Val Ser Thr Ala Tyr Leu
 195 200 205

Gln Ile Ser Ser Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
 225 230 235 240

Ser Ser

<210> 398

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 398

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15

Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30

_SL

Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu Thr Gln Ser Pro Ser
130 135 140

Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly
180 185 190

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
210 215 220

_SL

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 399

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 399

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

_SL

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Val Val Leu Thr Gln Ser Pro Ala
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Ala Pro Arg Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly
180 185 190

Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
195 200 205

Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln
210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 400

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 400

Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	^{SL} Val	Lys	Lys	Pro	Gly	Glu
1				5					10					15	
Ser	Leu	Arg	Ile	Ser	Cys	Lys	Gly	Ser	Gly	Tyr	Thr	Phe	Thr	Ser	Tyr
			20					25					30		
Trp	Met	Asn	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
		35					40					45			
Gly	Arg	Ile	Asp	Pro	Tyr	Asp	Ser	Glu	Thr	His	Tyr	Asn	Gln	Lys	Phe
	50					55					60				
Lys	Asp	His	Val	Thr	Ile	Ser	Val	Asp	Lys	Ser	Ile	Ser	Thr	Ala	Tyr
65					70					75					80
Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr	Ala	Met	Tyr	Tyr	Cys
				85					90					95	
Ala	Arg	Gly	Asn	Trp	Asp	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr
			100					105						110	
Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly
		115					120					125			
Gly	Ser	Gly	Gly	Gly	Gly	Ser	Asp	Val	Val	Met	Thr	Gln	Ser	Pro	Ala
	130					135					140				
Phe	Leu	Ser	Val	Thr	Pro	Gly	Glu	Lys	Val	Thr	Ile	Thr	Cys	Arg	Ala
145					150					155					160
Ser	Lys	Ser	Ile	Ser	Lys	Asp	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Asp
				165					170					175	
Gln	Ala	Pro	Lys	Leu	Leu	Ile	Tyr	Ser	Gly	Ser	Thr	Leu	Gln	Ser	Gly
			180					185					190		

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser ^{SL}Gly Thr Asp Phe Thr Phe
 195 200 205

Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln
 210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
 225 230 235 240

Ile Lys

<210> 401

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 401

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15

Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Ser Tyr
 20 25 30

Trp Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45

Gly Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
 50 55 60

Lys Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr
 65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 402

Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr 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 Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
115 120 125

Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu Ser
130 135 140

Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
145 150 155 160

Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met Gly
165 170 175

_SL

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
180 185 190

Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr Leu
195 200 205

Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala
210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
225 230 235 240

Ser Ser

<210> 403

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 403

Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

_SL

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
115 120 125

Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu Ser
130 135 140

Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
145 150 155 160

Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met Gly
165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
180 185 190

Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr Leu
195 200 205

Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala
210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
225 230 235 240

Ser Ser

_SL

<210> 404

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 404

Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly
1 5 10 15

Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala
65 70 75 80

Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
115 120 125

Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu Ser
130 135 140

Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
 145 150 155 160

Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met Gly
 165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
 180 185 190

Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr Leu
 195 200 205

Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala
 210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
 225 230 235 240

Ser Ser

<210> 405

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 405

Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile

35 40 45

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
115 120 125

Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu Ser
130 135 140

Leu Arg Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
145 150 155 160

Met Asn Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met Gly
165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
180 185 190

Asp His Val Thr Ile Ser Val Asp Lys Ser Ile Ser Thr Ala Tyr Leu
195 200 205

Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala
210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val

225 230 $\frac{\text{SL}}{235}$ 240

Ser Ser

<210>	406
<211>	242
<212>	PRT
<213>	Artificial Sequence

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<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"
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<400> 406
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 Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val
35 40 45

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Thr Ala 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 Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly
		115					120					125			

_SL

Gly Ser Gly Gly Gly Gly Ser Asp Val Gln Leu Thr Gln Ser Pro Ser
130 135 140

Phe Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Lys Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly
180 185 190

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 407

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 407

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

_SL

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val
35 40 45

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Thr Ala 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 Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Val Val Leu Thr Gln Ser Pro Ala
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Ala Pro Arg Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly
180 185 190

Ile Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
195 200 205

_SL

Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln
210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 408

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 408

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 Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val
35 40 45

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Thr Ala 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 Asn Trp Asp Asp Tyr Trp Gly ^{SL}Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser Pro Ala
130 135 140

Phe Leu Ser Val Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Asp
165 170 175

Gln Ala Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly
180 185 190

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe
195 200 205

Thr Ile Ser Ser Leu Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln
210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 409

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

_SL

polypeptide"

<400> 409

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 Tyr Thr Phe Thr Ser Tyr
20 25 30

Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val
35 40 45

Ser Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe
50 55 60

Lys Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Thr Ala 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 Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser Pro Asp
130 135 140

Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala
145 150 155 160

Ser Lys Ser Ile Ser Lys Asp Leu Ala Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Gln Pro Pro Lys Leu Leu Ile Tyr Ser Gly Ser Thr Leu Gln Ser Gly

_SL

180

185

190

Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln
210 215 220

Gln His Asn Lys Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 410

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 410

Asp Val Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr 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

_SL

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
115 120 125

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser
130 135 140

Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
145 150 155 160

Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val Ser
165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
180 185 190

Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Thr Ala Tyr Leu
195 200 205

Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
225 230 235 240

Ser Ser

<210> 411

<211> 242

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 411

Glu Val Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Ile Pro Ala Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
115 120 125

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser
130 135 140

Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
145 150 155 160

_SL

Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val Ser
165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
180 185 190

Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Thr Ala Tyr Leu
195 200 205

Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
225 230 235 240

Ser Ser

<210> 412

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 412

Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu Ser Val Thr Pro Gly
1 5 10 15

Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Asp Gln Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val ^{SL}Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Glu Ala
 65 70 75 80

Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
 100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
 115 120 125

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser
 130 135 140

Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
 145 150 155 160

Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val Ser
 165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
 180 185 190

Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Thr Ala Tyr Leu
 195 200 205

Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
 225 230 235 240

_SL

Ser Ser

<210> 413

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 413

Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Lys Ser Ile Ser Lys Asp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile
35 40 45

Tyr Ser Gly Ser Thr Leu Gln Ser Gly Val Pro Asp Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Lys Tyr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Gly Gly Gly Ser
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
115 120 125

Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser

130

135

_SL

140

Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Trp
 145 150 155 160

Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Val Trp Val Ser
 165 170 175

Arg Ile Asp Pro Tyr Asp Ser Glu Thr His Tyr Asn Gln Lys Phe Lys
 180 185 190

Asp Arg Phe Thr Ile Ser Val Asp Lys Ala Lys Ser Thr Ala Tyr Leu
 195 200 205

Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 210 215 220

Arg Gly Asn Trp Asp Asp Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
 225 230 235 240

Ser Ser

<210> 414

<211> 491

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 414

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gly Ser Glu Ile Gln Leu Gln Gln Ser Gly Ala
 20 25 30

_SL

Glu Leu Val Lys Pro Gly Ala Ser Val Lys Leu Ser Cys Thr Gly Ser
35 40 45

Gly Phe Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Lys Gln Arg Thr
50 55 60

Glu Gln Gly Leu Glu Trp Ile Gly Arg Ile Asp Pro Glu Asn Asp Glu
65 70 75 80

Thr Lys Tyr Gly Pro Ile Phe Gln Gly Arg Ala Thr Ile Thr Ala Asp
85 90 95

Thr Ser Ser Asn Thr Val Tyr Leu Gln Leu Ser Ser Leu Thr Ser Glu
100 105 110

Asp Thr Ala Val Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly
115 120 125

Pro Gly Thr Thr Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser His Met Asp Val Val Met Thr Gln
145 150 155 160

Ser Pro Leu Thr Leu Ser Val Ala Ile Gly Gln Ser Ala Ser Ile Ser
165 170 175

Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu
180 185 190

Asn Trp Leu Leu Gln Arg Pro Gly Gln Ser Pro Lys Arg Leu Ile Ser
195 200 205

Leu Val Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Thr Gly Ser
210 215 220

_SL

Gly Ser Gly Thr Asp Phe Thr Leu Arg Ile Ser Arg Val Glu Ala Glu
225 230 235 240

Asp Leu Gly Ile Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr
245 250 255

Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Ala Ser Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
275 280 285

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
355 360 365

Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
405 410 415

_SL

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 415
<211> 246
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 415
Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Gly Ser Gly Phe Asn Ile Glu Asp Tyr
20 25 30

Tyr Ile His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys Tyr Gly Pro Ile Phe
50 55 60

_SL

Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Asn Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
100 105 110

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser Pro Asp Ser
130 135 140

Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser
145 150 155 160

Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln
165 170 175

Gln Lys Pro Gly Gln Pro Pro Lys Arg Leu Ile Ser Leu Val Ser Lys
180 185 190

Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
195 200 205

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val
210 215 220

Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly Gly Gly
225 230 235 240

Thr Lys Val Glu Ile Lys
245

_SL

<210> 416
<211> 738
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 416
gaaatccagc tgggtccaatc gggagctgag gtcaagaagc cgggagccac cgtcaagatc 60
tcatgcaagg ggtcgggatt caacatcgag gactactaca ttactgggt gcagcaagct 120
ccgggaaaag gcctggaatg gatgggcaga atcgaccag aaaacgacga aactaagtac 180
ggaccgattt tccaaggaag agtgactatc accgccgata cttcaaccaa taccgtctac 240
atggaactga gctcgtccg gtccgaagat actgcagtgt attactgtgc ctttcgcgga 300
ggggtgtact ggggccaagg aactactgtc actgtctcgt caggaggcgg agggtcggga 360
ggaggcggga gcgaggcgg tggctcgggt ggcggaggaa gcgacgtggt gatgaccag 420
tccccggact ccctcgccgt gagcctcgga gagaggcgga ctatcaattg caagtcgtcc 480
cagtcacttc tggattccga tggtaaaacg tacctcaact ggctgcagca aaagccaggg 540
cagccaccca aacggttgat ctcccttggt tccaaactgg atagcggagt gcctgaccgc 600
ttctcgggtt ccggtagcgg gaccgacttc accctgacga tcagctcact gcaggcggag 660
gacgtggcag tgtactactg ctggcaggga acccacttcc ctggcacctt tggaggtggc 720
accaaggtgg agatcaag 738

<210> 417
<211> 831
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

_SL

<400> 417
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgaaatcc agctgggtcca atcgggagct gaggtcaaga agccgggagc caccgtcaag 120
atctcatgca aggggtcggg attcaacatc gaggactact acattcactg ggtgcagcaa 180
gctccgggaa aaggcctgga atggatgggc agaatcgacc cagaaaacga cgaaactaag 240
tacggaccga ttttccaagg aagagtgact atcaccgccg atacttcaac caataccgtc 300
tacatggaac tgagctcgct ccggtccgaa gatactgcag tgtattactg tgcctttcgc 360
ggaggggtgt actggggcca aggaactact gtcactgtct cgtcaggagg cggagggctg 420
ggaggaggcg ggagcggagg cggtggctcg ggtggcggag gaagcgacgt ggtgatgacc 480
cagtcctcgg actccctcgc cgtgagcctc ggagagaggg cgactatcaa ttgcaagtcg 540
tcccagtcac ttctggattc cgatggtaaa acgtacctca actggctgca gcaaaagcca 600
gggcagccac ccaaacggtt gatctccctt gtgtccaaac tggatagcgg agtgcctgac 660
cgcttctcgg gttccggtag cgggaccgac ttcaccctga cgatcagctc actgcaggcg 720
gaggacgtgg cagtgtacta ctgctggcag ggaaccact tccctggcac ctttggaggt 780
ggcaccaagg tggagatcaa gggatcgac caccatcacc atcatcatca c 831

<210> 418

<211> 277

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 418

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

_SL

Lys Lys Pro Gly Ala Thr Val Lys Ile Ser Cys Lys Gly Ser Gly Phe
35 40 45

Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Gln Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys
65 70 75 80

Tyr Gly Pro Ile Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser
85 90 95

Thr Asn Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly
115 120 125

Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr
145 150 155 160

Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile
165 170 175

Asn Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr
180 185 190

Leu Asn Trp Leu Gln Gln Lys Pro Gly Gln Pro Pro Lys Arg Leu Ile
195 200 205

Ser Leu Val Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly
210 215 220

_SL

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
225 230 235 240

Glu Asp Val Ala Val Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly
245 250 255

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Ser His His His
260 265 270

His His His His His
275

<210> 419
<211> 1470
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 419
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgagatcc agctggtgca gtcgggagct gaagtcaaaa agcctggcgc aaccgtcaag 120
atctcgtgca aaggatcagg gttcaacatc gaggactact acatccattg ggtgcaacag 180
gcacccggaa aaggcctgga gtggatgggg aggattgacc cagaaaatga cgaaaccaag 240
tacggaccga tcttccaagg acgggtgacc atcacggctg acatttcac taacaccgtc 300
tacatggaac tctcgagcct tcgctcggaa gataccgcgg tgtactactg cgcctttaga 360
ggtggagtct actggggaca agggactacc gtcaccgtgt cgtcagggtgg cggaggatca 420
ggcggaggcg gctccggtgg aggaggaagc ggaggagggtg gctccgacgt ggtgatgacg 480
cagtcaccgg actccttggc ggtgagcctg ggtgaacgcg ccactatcaa ctgcaagagc 540
tcccagagct tgctggactc cgatggaaaag acttatctca attggctgca acagaagcct 600

_SL

ggccagccgc caaagagact catctcactg gtgagcaagc tggatagcgg agtgccagat 660
cggtttttcgg gatcgggctc aggcaccgac ttcaccctga ctatttcctc cctccaagcc 720
gaggatgtgg ccgtctacta ctgttggcag gggactcact tcccggggac cttcgggtgga 780
ggcactaagg tggagatcaa aaccactacc ccagcaccga ggccaccac cccggctcct 840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctgggtggg 900
gccgtgcata cccggggctc tgacttcgcc tgcgatatct acatttgggc ccctctggct 960
ggactttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggctcgg 1020
aagaagctgc tgtacatctt taagcaaccc ttcatgaggc ctgtgcagac tactcaagag 1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg 1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac 1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac 1260
ccagaaatgg gcgggaagcc gcgcagaaaag aatccccaag agggcctgta caacgagctc 1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga 1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac 1440
gctcttcaca tgcaggccct gccgcctcgg 1470

<210> 420

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 420

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val

_SL

20

25

30

Lys Lys Pro Gly Ala Thr Val Lys Ile Ser Cys Lys Gly Ser Gly Phe
35 40 45

Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Gln Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys
65 70 75 80

Tyr Gly Pro Ile Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser
85 90 95

Thr Asn Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly
115 120 125

Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr
145 150 155 160

Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile
165 170 175

Asn Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr
180 185 190

Leu Asn Trp Leu Gln Gln Lys Pro Gly Gln Pro Pro Lys Arg Leu Ile
195 200 205

Ser Leu Val Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly

_SL

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
65 70 75 80

Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Trp Gln Gly
85 90 95

Thr His Phe Pro Gly Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val Lys
130 135 140

Lys Pro Gly Ala Thr Val Lys Ile Ser Cys Lys Gly Ser Gly Phe Asn
145 150 155 160

Ile Glu Asp Tyr Tyr Ile His Trp Val Gln Gln Ala Pro Gly Lys Gly
165 170 175

Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys Tyr
180 185 190

Gly Pro Ile Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr
195 200 205

Asn Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala
210 215 220

Val Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly Thr
225 230 235 240

Thr Val Thr Val Ser Ser
245

_SL

<210> 422
<211> 738
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 422
gatgtcgtga tgaccagtc cccagactcc ctcgcagtgt ccttgggaga acgggccacc 60
atcaactgca aatcgagcca gtcactgctg gactcagacg gaaagaccta cctcaactgg 120
ctgcagcaga agcctggcca gccaccgaag cgctgatct ccttgggtgtc caagctggac 180
tcgggcgtcc cggacagggt tagcggtagc ggctcgggaa ccgacttcac tctgaccatt 240
agctcgctcc aagctgaaga tgtggcggtc tactactgct ggcaggggac ccacttcccc 300
gggacctttg gcggaggaac taaagtcgaa atcaaaggag gaggcggatc aggtggagga 360
ggcagcggag gaggagggag cggcgggtggc ggctccgaaa ttcaacttgt gcaatccggt 420
gccgagggtga agaaacctgg tgccactgtc aagatctcgt gtaagggatc gggattcaat 480
atcgaggact actacatcca ctgggtgcaa caggcgccag gaaagggatt ggagtggatg 540
ggtcgcatcg acccggaata cgatgagact aagtacggac cgatcttcca aggccgggtc 600
acgatcactg cggatacctc cactaatacc gtgtatatgg agctctcgtc actgagaagc 660
gaagatacgg ccgtgtacta ctgcgcattc agaggagggtg tgtactgggg ccagggaact 720
actgtgaccg tgcgtcgc 738

<210> 423
<211> 831
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

_SL

polynucleotide"

<400> 423

```
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
cccgatgtcg tgatgacca gtccccagac tccctcgcag tgtccttggg agaacggggcc      120
accatcaact gcaaatcgag ccagtcactg ctggactcag acggaaagac ctacctcaac      180
tggctgcagc agaagcctgg ccagccaccg aagcgcctga tctccctggg gtccaagctg      240
gactcggggcg tcccggacag gtttagcggg agcggctcgg gaaccgactt cactctgacc      300
attagctcgc tccaagctga agatgtggcg gtctactact gctggcaggg gaccacttc      360
cccgggacct ttggcggagg aactaaagtc gaaatcaaag gaggaggcgg atcagggtgga      420
ggaggcagcg gaggaggagg gagcggcggg ggcggtccg aaattcaact tgtgcaatcc      480
ggtgccgagg tgaagaaacc tggtgccact gtcaagatct cgtgtaaggg atcgggattc      540
aatatcgagg actactacat ccactgggtg caacaggcgc caggaaaggg attggagtgg      600
atgggtcgca tcgaccgga aaacgatgag actaagtacg gaccgatctt ccaaggccgg      660
gtcacgatca ctgcggatac ctccactaat accgtgtata tggagctctc gtcactgaga      720
agcgaagata cggccgtgta ctactgcgca ttcagaggag gtgtgtactg gggccaggga      780
actactgtga ccgtgtcgtc ggggtcacat caccaccatc atcatcacca c              831
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<210> 424

<211> 277

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 424

```
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1           5           10          15
```

```
His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu
```

_SL

20	25	30
Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln		
35	40	45
Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln Gln		
50	55	60
Lys Pro Gly Gln Pro Pro Lys Arg Leu Ile Ser Leu Val Ser Lys Leu		
65	70	75
Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp		
85	90	95
Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr		
100	105	110
Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly Gly Gly Thr		
115	120	125
Lys Val Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly		
130	135	140
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Gln Leu Val Gln Ser		
145	150	155
Gly Ala Glu Val Lys Lys Pro Gly Ala Thr Val Lys Ile Ser Cys Lys		
165	170	175
Gly Ser Gly Phe Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Gln Gln		
180	185	190
Ala Pro Gly Lys Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn		
195	200	205
Asp Glu Thr Lys Tyr Gly Pro Ile Phe Gln Gly Arg Val Thr Ile Thr		

210

215

_SL

220

Ala Asp Thr Ser Thr Asn Thr Val Tyr Met Glu Leu Ser Ser Leu Arg
 225 230 235 240

Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr
 245 250 255

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Ser His His His
 260 265 270

His His His His His
 275

<210> 425

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 425

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgacgtgg tcatgactca aagcccagat tccttggctg tctcccttgg agaaagagca	120
acgatcaatt gcaaaagctc gcagtccttg ttggactccg atggaaaaac ctacctcaac	180
tggctgcagc agaagccggg acaaccacca aagcggctga tttccctcgt gtccaagctg	240
gacagcggcg tgccggatcg cttctcgggc agcggctcgg gaaccgattt tactctcact	300
atttcgtcac tgcaagcgga ggacgtggcg gtgtattact gctggcaggg cactcacttc	360
ccgggtactt ttggtggagg taccaaagtc gaaatcaagg gtggaggcgg gagcggagga	420
ggcgggtcgg gaggaggagg atcgggtggc ggaggctcag aaatccagct ggtgcagtca	480
ggtgccgaag tgaagaagcc tggggccacg gtgaagatct cgtgcaaggg gagcggattc	540

_SL

aacatcgagg attactacat ccattgggtg caacaggccc ctggcaaagg gctggaatgg	600
atgggaagga tcgaccccga gaatgacgag actaagtacg gcccgatctt ccaaggacgg	660
gtgaccatca ctgcagacac ttcaaccaac accgtctaca tggaactctc ctcgctgcgc	720
tccgaggaca ccgccgtgta ctactgtgct ttcagaggag gagtctactg gggacaggga	780
acgaccgtga ccgtcagctc aaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctgggtggg	900
gccgtgcata cccgggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaaccc ttcattgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggagggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 426

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 426

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5						10					15

His Ala Ala Arg Pro Asp Val Val Met Thr ^{SL}Gln Ser Pro Asp Ser Leu
 20 25 30

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln
 35 40 45

Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln Gln
 50 55 60

Lys Pro Gly Gln Pro Pro Lys Arg Leu Ile Ser Leu Val Ser Lys Leu
 65 70 75 80

Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
 85 90 95

Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr
 100 105 110

Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly Gly Gly Thr
 115 120 125

Lys Val Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Gln Leu Val Gln Ser
 145 150 155 160

Gly Ala Glu Val Lys Lys Pro Gly Ala Thr Val Lys Ile Ser Cys Lys
 165 170 175

Gly Ser Gly Phe Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Gln Gln
 180 185 190

Ala Pro Gly Lys Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn
 195 200 205

Asp Glu Thr Lys Tyr Gly Pro Ile Phe Gln ^{SL}Gly Arg Val Thr Ile Thr
 210 215 220

Ala Asp Thr Ser Thr Asn Thr Val Tyr Met Glu Leu Ser Ser Leu Arg
 225 230 235 240

Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr
 245 250 255

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala
 260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
 275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
 290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
 305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
 325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
 340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
 355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
 370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
 385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr ^{_SL}Asp Val Leu Asp Lys Arg
 405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
 420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
 435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
 450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
 465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 427
 <211> 246
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 427
 Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15

Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Phe Asn Ile Glu Asp Tyr
 20 25 30

Tyr Ile His Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
 35 40 45

Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys Tyr Gly Pro Ile Phe

<210> 428
 <211> 738
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 428
 gagattcagc tgggtccaaag cggcgcagaa gtgaaaaagc caggggaatc gttgcgcatc 60
 agctgtaaaag gttccggctt caacatcgag gactattaca tccattgggt gcggcagatg 120
 ccaggaaagg ggctggaatg gatgggacgg attgaccgga agaacgacga aaccaagtac 180
 ggaccgatct ttcaaggaca cgtgactatc tccgccgaca ccagcatcaa tacggtgtac 240
 ctccaatggg cctcactcaa ggcctcggat accgcgatgt actactgcgc gttcagagga 300
 ggcgtctact ggggacaagg gactactgtg actgtctcat caggagggtg aggaagcgga 360
 ggagggtggct cgggcggagg tggatcggga ggaggagggt ccgatgtggg gatgaccag 420
 tccccactgt cgctcccggg gaccctcgga cagcctgcta gcatctcgtg caaatcctcg 480
 caatccctgc tggactcgga cggaacaaacg tacctcaatt ggctgcagca gcgccctggc 540
 cagagcccga gaaggcttat ctcgctgggtg tcaaagctgg atagcgggtg gcccgaaccg 600
 ttcagcggct cagggtcagg aaccgatttc acctgaaga tctcccgct ggaagccgaa 660
 gatgtcggag tctactactg ctggcagggt actcacttcc cggggacctt tgggtggcggc 720
 actaaggctc agattaag 738

<210> 429
 <211> 831
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source

_SL

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 429

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgagattc agctgggtcca aagcggcgca gaagtgaata agccagggga atcgttgcgc	120
atcagctgta aaggttccgg cttcaacatc gaggactatt acatccattg ggtgcggcag	180
atgccaggaa aggggctgga atggatggga cggattgacc cggagaacga cgaaaccaag	240
tacggaccga tctttcaagg acacgtgact atctccgccg acaccagcat caatacgggtg	300
tacctccaat ggtcctcact caaggcctcg gataccgcga tgtactactg cgcgttcaga	360
ggaggcgtct actggggaca agggactact gtgactgtct catcaggagg tggaggaagc	420
ggaggagggtg gctcgggcgg aggtggatcg ggaggaggag ggtccgatgt ggtgatgacc	480
cagtccccac tgtcgtccc ggtgaccctc ggacagcctg ctagcatctc gtgcaaatcc	540
tcgcaatccc tgctggactc ggacggaaaa acgtacctca attggctgca gcagcgcctt	600
ggccagagcc cgagaaggct tatctcgctg gtgtcaaagc tggatagcgg tgtgcccgc	660
cggttcagcg gctcagggtc aggaaccgat ttcaccttga agatctcccg cgtggaagcc	720
gaagatgtcg gagtctacta ctgctggcag ggtactcact tcccggggac ctttggtggc	780
ggcactaagg tcgagattaa gggctcacac catcatcacc atcaccacca c	831

<210> 430

<211> 277

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 430

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5				10					15		

His Ala Ala Arg Pro Glu Ile Gln Leu Val ^{SL}Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Phe
 35 40 45

Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Arg Gln Met Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys
 65 70 75 80

Tyr Gly Pro Ile Phe Gln Gly His Val Thr Ile Ser Ala Asp Thr Ser
 85 90 95

Ile Asn Thr Val Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
 100 105 110

Ala Met Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly
 115 120 125

Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr
 145 150 155 160

Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly Gln Pro Ala Ser Ile
 165 170 175

Ser Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr
 180 185 190

Leu Asn Trp Leu Gln Gln Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile
 195 200 205

Ser Leu Val Ser Lys Leu Asp Ser Gly Val ^{_SL}Pro Asp Arg Phe Ser Gly
 210 215 220

Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala
 225 230 235 240

Glu Asp Val Gly Val Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly
 245 250 255

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Ser His His His
 260 265 270

His His His His His
 275

<210> 431
 <211> 1470
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 431
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccgaaatcc agctggtgca aagcggagcc gaggtgaaga agcccggaga atccctgcgc 120
 atctcgtgta agggttccgg cttaacatc gaggattact acatccactg ggtgagacag 180
 atgccgggca aaggtctgga atggatgggc cgcacgcacc cggagaacga cgaaacaaaa 240
 tacggaccaa tcttccaagg acatgtgact atttccgcgg atacctccat caacactgtc 300
 tacttgcaat ggagctcgct caaggcgtcg gataccgcca tgtactactg cgcattcaga 360
 ggaggtgtgt actggggcca gggcactacg gtcaccgtgt cctcgggagg tggagggtca 420
 ggaggcggag gctcgggcgg tggaggatca ggcggaggag gaagcgatgt ggcatgact 480
 caatccccac tgtcactgcc tgtcactctg gggcaaccgg cttccatctc atgcaagtca 540

_SL

agccaatcgc tgctcgactc cgacggaaaa acctacctca attggcttca gcagcgccca 600
ggccagtcgc ctcggaggct gatctcactc gtgtcgaagc ttgactccgg ggtgccggat 660
cggtttagcg gaagcggatc ggggaccgac ttcacgttga agattagccg ggtggaagcc 720
gaggacgtgg gagtctatta ctgctggcag gggacccact tcccggggac tttcggagga 780
ggcaccaaag tcgagattaa gaccactacc ccagcaccga ggccaccac cccggctcct 840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctgggtggg 900
gccgtgcata cccggggctt tgacttcgcc tgcgatatct acatttgggc ccctctggct 960
ggtacttgcg gggctctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg 1020
aagaagctgc tgtacatctt taagcaaccc ttcattgaggc ctgtgcagac tactcaagag 1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg 1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac 1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac 1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc 1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga 1380
ggcaaaggcc acgacggact gtaccaggga ctcagaccg ccaccaagga cacctatgac 1440
gctcttcaca tgcaggccct gccgcctcgg 1470

<210> 432

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 432

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

_SL

His Ala Ala Arg Pro Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Phe
35 40 45

Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Arg Gln Met Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys
65 70 75 80

Tyr Gly Pro Ile Phe Gln Gly His Val Thr Ile Ser Ala Asp Thr Ser
85 90 95

Ile Asn Thr Val Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
100 105 110

Ala Met Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly
115 120 125

Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr
145 150 155 160

Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly Gln Pro Ala Ser Ile
165 170 175

Ser Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr
180 185 190

Leu Asn Trp Leu Gln Gln Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile
195 200 205

_SL

Ser Leu Val Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly
210 215 220

Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala
225 230 235 240

Glu Asp Val Gly Val Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly
245 250 255

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

_SL

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 433

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 433

Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser
20 25 30

Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln Gln Arg Pro Gly Gln Ser
35 40 45

Pro Arg Arg Leu Ile Ser Leu Val Ser Lys ^{SL}Leu Asp Ser Gly Val Pro
 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Trp Gln Gly
 85 90 95

Thr His Phe Pro Gly Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 115 120 125

Gly Gly Gly Ser Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val Lys
 130 135 140

Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Phe Asn
 145 150 155 160

Ile Glu Asp Tyr Tyr Ile His Trp Val Arg Gln Met Pro Gly Lys Gly
 165 170 175

Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys Tyr
 180 185 190

Gly Pro Ile Phe Gln Gly His Val Thr Ile Ser Ala Asp Thr Ser Ile
 195 200 205

Asn Thr Val Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala
 210 215 220

Met Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly Thr
 225 230 235 240

_SL

Thr Val Thr Val Ser Ser
245

<210> 434
<211> 738
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 434
gacgtcgtca tgacccagag cccgctgtca ctgcctgtga ccctgggccca gccggcgtcc 60
attagctgca aatcctcgca atccctgctc gactcagacg gaaaaacgta cttgaactgg 120
ctccaacagc gccctgggca atccccaagg cggttatct cactcgtcag caagctcgat 180
agcgggtgtcc cagacagatt ttcgggctcg ggatcgggca ctgatttcac tctgaagatc 240
tcgcgggttg aagccgagga tgtgggagtg tactattgct ggcagggcac tcacttcccc 300
gggacgtttg gcggaggaac taaggctcag atcaaaggag gaggtggatc aggcggaggt 360
gggagcggag gaggaggaag cgggtgggga gggtccgaaa tccagctggt gcaatcagga 420
gccgaggtga agaagccggg agaatccctg cgcattctgt gcaagggtc gggcttcaac 480
atcgaggatt actacatcca ctgggtgcgg cagatgccgg gaaaggggtt ggaatggatg 540
ggacgcattg acccggaata tgatgaaacc aaatacgggc caatcttcca aggccacgtg 600
accattagcg ctgacattc catcaacacc gtgtacctc agtggtcctc actgaaggcg 660
tcggacactg ccatgtacta ctgtgcattc agaggagggg tctactgggg acagggcacc 720
accgtgaccg tgagctcc 738

<210> 435
<211> 831
<212> DNA
<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 435

```
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
cccgacgtcg tcatgacca gagcccgctg tactgcctg tgaccctggg ccagccggcg      120
tccattagct gcaaatactc gcaatccctg ctgactcag acggaaaaac gtacttgaac      180
tggctccaac agcgccctgg gcaatcccca aggcggctta tctcactcgt cagcaagctc      240
gatagcggtg tcccagacag attttcgggc tcgggatcgg gcactgattt cactctgaag      300
atctcgcggg tggaagccga ggatgtggga gtgtactatt gctggcaggg cactcattc      360
cccgggacgt ttggcggagg aactaaggctc gagatcaaag gaggagggtg atcaggcgga      420
ggtagggagcg gaggaggagg aagcgggtgg ggaggttccg aaatccagct ggtgcaatca      480
ggagccgagg tgaagaagcc gggagaatcc ctgcgcatct cgtgcaaggg ctgaggcttc      540
aacatcgagg attactacat cactgggtg cggcagatgc cgggaaaggg gttggaatgg      600
atgggacgca ttgaccgga aaatgatgaa accaaatacg ggccaatctt ccaaggccac      660
gtgaccatta gcgtgacac ttccatcaac accgtgtacc ttcagtggtc ctactgaag      720
gcgtcggaca ctgccatgta ctactgtgca ttcagaggag gggctactg gggacagggc      780
accaccgtga ccgtgagctc cggctcgcat caccatcatc accaccatca c          831
```

<210> 436

<211> 277

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 436

```
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1           5           10          15
```

_SL

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu
20 25 30

Pro Val Thr Leu Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln
35 40 45

Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln Gln
50 55 60

Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile Ser Leu Val Ser Lys Leu
65 70 75 80

Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
85 90 95

Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr
100 105 110

Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly Gly Gly Thr
115 120 125

Lys Val Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Gln Leu Val Gln Ser
145 150 155 160

Gly Ala Glu Val Lys Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys
165 170 175

Gly Ser Gly Phe Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Arg Gln
180 185 190

Met Pro Gly Lys Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn
195 200 205

_SL

Asp Glu Thr Lys Tyr Gly Pro Ile Phe Gln Gly His Val Thr Ile Ser
210 215 220

Ala Asp Thr Ser Ile Asn Thr Val Tyr Leu Gln Trp Ser Ser Leu Lys
225 230 235 240

Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr
245 250 255

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Ser His His His
260 265 270

His His His His His
275

<210> 437
<211> 1470
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 437
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgacgtcg tcatgacca atcccctctc tccctgccgg tcaccctggg tcagccggcg 120
tcgatctcat gcaaaaagctc acagtccctg ctggattcgg acggaaaaac ctacttgaac 180
tggctccaac agaggccggg tcagtcccct cgcagactga tctcgctggg gagcaagctc 240
gactcgggtg tgccggatcg gttctccggg tcaggatcgg gcaccgactt tacgctcaag 300
atttcgagag tggaggccga ggatgtggga gtgtactatt gctggcaggg cacgcatttc 360
cccgggacct ttggaggcgg gactaagggtg gaaatcaagg gaggtggcgg atcaggcggg 420
ggaggcagcg gcggagggtg atcaggaggc ggagggtcag agatccagct ggtccaaagc 480

_SL

```

ggagcagagg tgaagaagcc aggcgagtcc cttcgcatTT cgtgcaaagg gagcggcttc      540
aacattgaag attactacat cacttgggtg cggcaaatgc caggaaaggg tctggaatgg      600
atgggacgga tcgacccaga aaatgatgaa actaagtacg gaccgatctt ccaaggacac      660
gtcactatct ccgcggacac ttcgatcaac accgtgtacc tccagtggag cagcttgaaa      720
gcctccgaca ccgctatgta ctactgtgcc ttccgcggag gagtctactg gggacagggg      780
actactgtga ccgtgtcgtc caccactacc ccagcaccga ggccaccac cccggctcct      840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg      900
gccgtgcata cccggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct      960
ggTacttgCg gggTcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg     1020
aagaagctgc tgtacatctt taagcaaccc ttcatgaggc ctgtgcagac tactcaagag     1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg     1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac     1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac     1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc     1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga     1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac     1440
gctcttcaca tgcaggccct gccgcctcgg                                     1470

```

<210> 438

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 438

```

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1           5           10          15

```


_SL

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu
20 25 30

Pro Val Thr Leu Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln
35 40 45

Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln Gln
50 55 60

Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile Ser Leu Val Ser Lys Leu
65 70 75 80

Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
85 90 95

Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr
100 105 110

Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly Gly Gly Thr
115 120 125

Lys Val Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Gln Leu Val Gln Ser
145 150 155 160

Gly Ala Glu Val Lys Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys
165 170 175

Gly Ser Gly Phe Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Arg Gln
180 185 190

Met Pro Gly Lys Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn
195 200 205

_SL

Asp Glu Thr Lys Tyr Gly Pro Ile Phe Gln Gly His Val Thr Ile Ser
210 215 220

Ala Asp Thr Ser Ile Asn Thr Val Tyr Leu Gln Trp Ser Ser Leu Lys
225 230 235 240

Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr
245 250 255

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

_SL

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 439

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 439

Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Gly Ser Gly Phe Asn Ile Glu Asp Tyr
20 25 30

Tyr Ile His Trp Val Gln Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

_SL

Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys Tyr Gly Pro Ile Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Asn Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
100 105 110

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser Pro Leu Ser
130 135 140

Leu Pro Val Thr Leu Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser
145 150 155 160

Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln
165 170 175

Gln Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile Ser Leu Val Ser Lys
180 185 190

Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
195 200 205

Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val
210 215 220

Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly Gly Gly
225 230 235 240

_SL

Thr Lys Val Glu Ile Lys
245

<210> 440
<211> 738
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 440
gaaatccagc tcgtgcagag cggagccgag gtcaagaaac cgggtgctac cgtgaagatt 60
tcatgcaagg gatcgggctt caacatcgag gattactaca tccactgggt gcagcaggca 120
ccaggaaaag gacttgaatg gatgggccgg atcgacccgg aaaatgacga gactaagtac 180
ggccctatct tccaaggacg ggtgacgac accgcagaca ctagcaccaa caccgtctat 240
atggaactct cgtccctgag gtccgaagat actgccgtgt actactgtgc gtttcgcgga 300
ggtgtgtact ggggacaggg taccaccgtc accgtgtcat cgggcgggtgg aggctccggt 360
ggaggagggt caggaggcgg tggaagcggg ggaggcggca gcgacgtggt catgactcaa 420
tcgccgtgt cgctgcccgt cactctggga caaccgcgt ccatcagctg caaatcctcg 480
cagtcactgc ttgactccga tggaaagacc tacctcaact ggctgcagca acgcccaggc 540
caatcccaa gacgcctgat ctggttggtg tcaaagctgg actcaggggt gccggaccgg 600
ttctccggga gcgggtcggg cacggatttc actctcaaga tctccagagt ggaagccgag 660
gatgtgggag tctactactg ctggcaggga acccatttcc ctggaacttt tggcggagga 720
actaaggctc agattaata 738

<210> 441
<211> 831
<212> DNA
<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 441

```
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
cccgaaatcc agctcgtgca gagcggagcc gaggtcaaga aaccgggtgc taccgtgaag      120
atttcatgca agggatcggg cttcaacatc gaggattact acatccactg ggtgcagcag      180
gcaccaggaa aaggacttga atggatgggc cggatcgacc cggaaaatga cgagactaag      240
tacggcccta tcttccaagg acgggtgacg atcaccgcag aactagcac caacaccgtc      300
tatatggaac tctcgtccct gaggtccgaa gatactgccg tgtactactg tgcgtttcgc      360
ggaggtgtgt actggggaca ggggtaccacc gtcaccgtgt catcgggcgg tggaggctcc      420
gggtggaggag ggtcaggagg cgggtggaagc ggaggaggcg gcagcgacgt ggtcatgact      480
caatcgccgc tgtcgtgcc cgtcactctg ggacaacccg cgtccatcag ctgcaaatcc      540
tcgcagtcac tgcttgactc cgatggaaag acctacctca actggctgca gcaacgcccc      600
ggccaatccc caagacgcct gatctcgttg gtgtcaaagc tggactcagg ggtgccggac      660
cggttctccg ggagcgggtc gggcacggat ttcacttca agatctccag agtggaagcc      720
gaggatgtgg gagtctacta ctgctggcag ggaacccatt tccctggaac ttttggcgga      780
ggaactaagg tcgagattaa agggagccac catcatcatc accaccacca c              831
```

<210> 442

<211> 277

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 442

```
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1           5           10          15
```

_SL

His Ala Ala Arg Pro Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Thr Val Lys Ile Ser Cys Lys Gly Ser Gly Phe
35 40 45

Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Gln Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys
65 70 75 80

Tyr Gly Pro Ile Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser
85 90 95

Thr Asn Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly
115 120 125

Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr
145 150 155 160

Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly Gln Pro Ala Ser Ile
165 170 175

Ser Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr
180 185 190

Leu Asn Trp Leu Gln Gln Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile
195 200 205

_SL

Ser Leu Val Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly
210 215 220

Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala
225 230 235 240

Glu Asp Val Gly Val Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly
245 250 255

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Ser His His His
260 265 270

His His His His His
275

<210> 443
<211> 1470
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 443
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgaaatcc agctcgtgca gagcggagcc gaggtcaaga aaccgggtgc taccgtgaag 120
atttcatgca agggatcggg cttcaacatc gaggattact acatccactg ggtgcagcag 180
gcaccaggaa aaggacttga atggatgggc cggatcgacc cggaaaatga cgagactaag 240
tacggcccta tcttccaagg acgggtgacg atcaccgcag acactagcac caacaccgtc 300
tatatggaac tctcgtccct gaggtccgaa gatactgccg tgtactactg tgcgtttcgc 360
ggaggtgtgt actggggaca ggggtaccacc gtcaccgtgt catcgggcgg tggaggctcc 420
ggtggaggag ggtcaggagg cggtggaagc ggaggaggcg gcagcgacgt ggatcatgact 480

_SL

caatcgccgc tgtcgtgcc cgtcactctg ggacaacccg cgtccatcag ctgcaaatcc 540
tcgcagtcac tgcttgactc cgatggaaag acctacctca actggctgca gcaacgcca 600
ggccaatccc caagacgcct gatctcgttg gtgtcaaagc tggactcagg ggtgccggac 660
cggttctccg ggagcgggtc gggcacggat ttcactctca agatctccag agtggaagcc 720
gaggatgtgg gagtctacta ctgctggcag ggaacccatt tccctggaac ttttggcgga 780
ggaactaagg tcgagattaa aaccactacc ccagcaccga ggccaccac cccggctcct 840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg 900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct 960
ggactttgct gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg 1020
aagaagctgc tgtacatctt taagcaaccc ttcatgaggc ctgtgcagac tactcaagag 1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg 1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac 1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac 1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc 1320
caaaaggata agatggcaga agcctatagc gagattgta tgaaagggga acgcagaaga 1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac 1440
gctcttcaca tgcaggccct gccgcctcgg 1470

<210> 444

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 444

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

_SL

195	200	205
Ser 210	Leu Val Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly 215 220	
Ser 225	Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala 230 235 240	
Glu 245	Asp Val Gly Val Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly 250 255	
Thr 260	Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala 265 270	
Pro 275	Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser 280 285	
Leu 290	Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr 295 300	
Arg 305	Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala 310 315 320	
Gly 325	Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys 330 335	
Lys 340	Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met 345 350	
Arg 355	Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe 360 365	
Pro 370	Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg 375 380	
Ser 385	Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn 390 395	

_SL

Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys Tyr Gly Pro Ile Phe
50 55 60

Gln Gly His Val Thr Ile Ser Ala Asp Thr Ser Ile Asn Thr Val Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly Thr Thr Val Thr Val
100 105 110

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser Pro Asp Ser
130 135 140

Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser
145 150 155 160

Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln
165 170 175

Gln Lys Pro Gly Gln Pro Pro Lys Arg Leu Ile Ser Leu Val Ser Lys
180 185 190

Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
195 200 205

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val
210 215 220

Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly Gly Gly
225 230 235 240

_SL

Thr Lys Val Glu Ile Lys
245

<210> 446

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 446

gaaatccagc tgggtgcagtc aggcgccgag gtcaagaagc cgggagagtc gctgagaatc	60
tcgtgcaagg gctcgggggtt caacatcgag gactactaca ttcactgggt caggcagatg	120
ccgggaaagg gactggaatg gatgggccgg atcgaccag aaaatgacga aaccaaatac	180
gggccgattt ttcaaggcca cgtgactatc agcgagaca cgagcatcaa cactgtctac	240
ctccagtggc cctcgcttaa ggccagcgat accgctatgt actactgagc attcagaggc	300
gggggtgtact ggggacaagg aaccactgtg accgtgagca gcggagggtg cggctcggga	360
ggaggtggga gcggaggagg aggttccggc ggtggaggat cagatgtcgt gatgaccag	420
tccccggact ccctcgctgt ctactgggc gagcgcgca ccatcaactg caaatcgagc	480
cagtcgctgt tggactccga tggaaagact tatctgaatt ggctgcaaca gaaaccagga	540
caacctccca agcggctcat ctgcttgtg tcaaaactcg attcgggagt gccagaccgc	600
ttctcggggc ccgggagcgg aactgacttt actttgacca tttcctcact gcaagcggag	660
gatgtggccg tgtattactg ttggcagggc acgcatttcc ctggaacctt cgggtggcga	720
actaagggtg aaatcaag	738

<210> 447

<211> 834

<212> DNA

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 447

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atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
cccgaaatcc agctggtgca gtcaggcgcc gaggtcaaga agccgggaga gtcgctgaga      120
atctcgtgca agggctcggg gttcaacatc gaggactact acattcactg ggtcaggcag      180
atgccgggaa agggactgga atggatgggc cggatcgacc cagaaaatga cgaaacaaaa      240
tacgggccga tttttcaagg ccacgtgact atcagcgcag acacgagcat caacactgtc      300
tacctccagt ggtcctcgct taaggccagc gataccgcta tgtactactg cgcattcaga      360
ggcgggggtgt actggggaca aggaaccact gtgaccgtga gcagcggagg tggcggctcg      420
ggaggaggtg ggagcggagg aggaggttcc ggcggtggag gatcagatgt cgtgatgacc      480
cagtccccgg actccctcgc tgtctcactg ggcgagcgcg cgaccatcaa ctgcaaatcg      540
agccagtcgc tgttggactc cgatggaaag acttatctga attggctgca acagaaacca      600
ggacaacctc ccaagcggct catctcgctt gtgtcaaaac tcgattcggg agtgccagac      660
cgcttctcgg ggtccgggag cggaactgac ttactttga ccatttcctc actgcaagcg      720
gaggatgtgg ccgtgtatta ctgttggcag ggcacgcatt tccctggaac cttcgggtggc      780
ggaactaagg tggaatcaa gggatcacac caccatcatc accatcacca ccat          834
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<210> 448

<211> 278

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 448

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

1 5 10 _SL 15

 His Ala Ala Arg Pro Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

 Lys Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Phe
 35 40 45

 Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Arg Gln Met Pro Gly Lys
 50 55 60

 Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys
 65 70 75 80

 Tyr Gly Pro Ile Phe Gln Gly His Val Thr Ile Ser Ala Asp Thr Ser
 85 90 95

 Ile Asn Thr Val Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
 100 105 110

 Ala Met Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly
 115 120 125

 Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 130 135 140

 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr
 145 150 155 160

 Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile
 165 170 175

 Asn Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr
 180 185 190

 Leu Asn Trp Leu Gln Gln Lys Pro Gly Gln Pro Pro Lys Arg Leu Ile

_SL

195	200	205	
Ser Leu Val Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly			
210	215	220	
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala			
225	230	235	240
Glu Asp Val Ala Val Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly			
	245	250	255
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Gly Ser His His His			
	260	265	270
His His His His His His			
	275		

<210> 449
 <211> 1470
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 449	
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgagattc agctcgtgca atcgggagcg gaagtcaaga agccaggaga gtccttgctg	120
atctcatgca agggtagcgg cttaacatc gaggattact acatccactg ggtgaggcag	180
atgccgggga agggactcga atggatggga cggatcgacc cagaaaacga cgaaactaag	240
tacggtccga tcttccaagg ccatgtgact attagcgccg atacttcaat caataccgtg	300
tatctgcaat ggtcctcatt gaaagcctca gataccgcga tgtactactg tgctttcaga	360
ggaggggtct actggggaca gggaactacc gtgactgtct cgtccggcgg aggcgggtca	420

_SL

ggaggtggcg gcagcggagg aggaggggtcc ggcgagggtg ggtccgacgt cgtgatgacc	480
cagagccctg acagcctggc agtgagcctg ggcgaaagag ctaccattaa ctgcaaatcg	540
tcgcagagcc tgctggactc ggacggaaaa acgtacctca attggctgca gcaaaagcct	600
ggccagccac cgaagcgcct tatctcactg gtgtcgaagc tggattcggg agtgcccgat	660
cgcttctccg gctcgggatc gggactgac ttcaccctca ctatctcctc gcttcaagca	720
gaggacgtgg ccgtctacta ctgctggcag ggaacccact ttccgggaac cttcggcgga	780
gggacgaaag tggagatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggctctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaaccc ttcattgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctacgaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 450

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 450

Met Ala Leu Pro Val Thr Ala Leu Leu Leu ^{SL}Pro Leu Ala Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys Gly Ser Gly Phe
35 40 45

Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Arg Gln Met Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys
65 70 75 80

Tyr Gly Pro Ile Phe Gln Gly His Val Thr Ile Ser Ala Asp Thr Ser
85 90 95

Ile Asn Thr Val Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
100 105 110

Ala Met Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly
115 120 125

Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr
145 150 155 160

Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile
165 170 175

Asn Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr
180 185 190

Leu Asn Trp Leu Gln Gln Lys Pro Gly Gln ^{SL}Pro Pro Lys Arg Leu Ile
 195 200 205

Ser Leu Val Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Ser Gly
 210 215 220

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
 225 230 235 240

Glu Asp Val Ala Val Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly
 245 250 255

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala
 260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
 275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
 290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
 305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
 325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
 340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
 355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
 370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly SL Gln Asn Gln Leu Tyr Asn
 385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
 405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
 420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
 435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
 450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
 465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 451
 <211> 246
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 451
 Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
 1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser
 20 25 30

Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln Gln Lys Pro Gly Gln Pro

35 40 — 45

Met Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Gln Gly Thr

225	230	<u>SL</u> 235	240
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Thr Val Thr Val Ser Ser
245

<210> 452
<211> 738
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 452
gacgtggtga tgacccaatc gccagattcc ctggcagtgt ccctgggcga acgcgccact 60
attaactgca aatcgtcaca gtccttgctt gattccgacg gaaagaccta cctcaattgg 120
ctccagcaga agccaggaca accgccaaag agactgatct ccctggtgtc aaagctggac 180
tcgggagtgct ctgatcgggtt ctcgggtagc gggagcggca ccgacttcac tctgaccatc 240
tcgtcactcc aggctgagga cgtggccgtg tattactgtt ggcagggtac tcactttccg 300
ggcacttttcg gaggcggcac caaggtggag attaaaggag gaggcggaag cggaggtgga 360
ggatcggggag gtggtgggag cggcggagga gggagcgaga tccagctcgt ccaatcggga 420
gcggaagtga agaagcccgg agagtcactt agaatctcat gcaaggggtc gggcttcaac 480
atcgaggatt actacatcca ttgggtccgc cagatgcctg gtaaaggact ggaatggatg 540
gggaggattg acccggaaaa cgacgaaact aagtacggac cgatctttca agggcacgtg 600
actatctccg ctgatacctc aatcaatact gtctacctcc agtggtcctc gctgaaagca 660
agcgacaccg cgatgtacta ctgcgccttc cggggaggag tgtactgggg ccaaggcacc 720
acggtcacgg tcagctcc 738

<210> 453
<211> 834
<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 453

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgacgtgg tgatgacca atcgccagat tccctggcag tgtccctggg cgaacgcgcc	120
actattaact gcaaatcgtc acagtccttg cttgattccg acggaaagac ctacctcaat	180
tggctccagc agaagccagg acaaccgcca aagagactga tctccctggg gtcaaagctg	240
gactcgggag tgcctgatcg gttctcgggt agcgggagcg gcaccgactt cactctgacc	300
atctcgtcac tccaggctga ggacgtggcc gtgtattact gttggcaggg tactcacttt	360
ccgggcactt tcggaggcgg caccaagggtg gagattaaag gaggaggcgg aagcggaggt	420
ggaggatcgg gaggtggtgg gagcggcgga ggaggagcg agatccagct cgtccaatcg	480
ggagcggaag tgaagaagcc cggagagtca cttagaatct catgcaaggg gtcgggcttc	540
aacatcgagg attactacat ccattgggtc cgccagatgc ctggtaaagg actggaatgg	600
atggggagga ttgaccgga aaacgacgaa actaagtacg gaccgatctt tcaagggcac	660
gtgactatct ccgctgatac ctcaatcaat actgtctacc tccagtgggtc ctcgctgaaa	720
gcaagcgaca ccgcgatgta ctactgcgcc ttccggggag gagtgtactg gggccaaggc	780
accacggtca cggtcagctc cggctcccat caccaccacc atcaccatca tcac	834

<210> 454

<211> 278

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 454

Met Ala Leu Pro Val Thr Ala Leu Leu Leu ^{SL}Pro Leu Ala Leu Leu
1 5 10 15
His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu
20 25 30
Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln
35 40 45
Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln Gln
50 55 60
Lys Pro Gly Gln Pro Pro Lys Arg Leu Ile Ser Leu Val Ser Lys Leu
65 70 75 80
Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
85 90 95
Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr
100 105 110
Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly Gly Gly Thr
115 120 125
Lys Val Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140
Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Gln Leu Val Gln Ser
145 150 155 160
Gly Ala Glu Val Lys Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys
165 170 175
Gly Ser Gly Phe Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Arg Gln
180 185 190

Met Pro Gly Lys Gly Leu Glu Trp Met Gly SL Arg Ile Asp Pro Glu Asn
 195 200 205

Asp Glu Thr Lys Tyr Gly Pro Ile Phe Gln Gly His Val Thr Ile Ser
 210 215 220

Ala Asp Thr Ser Ile Asn Thr Val Tyr Leu Gln Trp Ser Ser Leu Lys
 225 230 235 240

Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr
 245 250 255

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Ser His His His
 260 265 270

His His His His His His
 275

<210> 455
 <211> 1470
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 455
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccgacgtgg tgatgactca gtcgcctgac tcgctggctg tgtcccttgg agagcggggcc 120
 actatcaatt gcaagtcatc ccagtcgctg ctggattccg acgggaaaac ctacctcaat 180
 tggctgcagc aaaaaccggg acagcctcca aagcggctca tcagcctggt gtccaagttg 240
 gacagcggcg tgccagaccg cttctccggt tcgggaagcg gtactgattt cacgctgacc 300
 atctcatccc tccaagcgga ggatgtggca gtctactact gttggcaggg cacgcatttt 360
 ccgggcactt ttggaggagg gaccaaggtc gaaatcaagg gaggaggtgg ctcgggcgga 420

_SL

ggaggctcgg gaggaggagg atcaggaggc ggtggaagcg agattcaact ggtccagagc 480
ggcgcagaag tcaagaagcc ggggtgaatcg ctcagaatct cgtgcaaagg atcgggattc 540
aacatcgagg actactacat tctctgggtc agacaaatgc cgggcaaagg gctggaatgg 600
atggggagga tcgaccccgaa aaacgatgaa accaagtacg gaccaatctt ccaagggcac 660
gtgaccattt cggcgggacac ctcaatcaac actgtgtacc tccagtggag ctcacttaag 720
gccagcgata ccgcatgta ctattgcgct ttccgcggag ggggtgtactg gggacagggc 780
actactgtga ccgtgtcatc caccactacc ccagcaccga ggccaccac cccggctcct 840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctgggtgg 900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct 960
gggtacttgcg ggggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg 1020
aagaagctgc tgtacatctt taagcaaccc ttcatgaggc ctgtgcagac tactcaagag 1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg 1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac 1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac 1260
ccagaaatgg gcgggaagcc gcgcagaaaag aatccccaag agggcctgta caacgagctc 1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga 1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac 1440
gctcttcaca tgcaggccct gccgcctcgg 1470

<210> 456

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 456

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Asp Ser Leu
20 25 30

Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln
35 40 45

Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln Gln
50 55 60

Lys Pro Gly Gln Pro Pro Lys Arg Leu Ile Ser Leu Val Ser Lys Leu
65 70 75 80

Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
85 90 95

Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr
100 105 110

Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly Gly Gly Thr
115 120 125

Lys Val Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Gln Leu Val Gln Ser
145 150 155 160

Gly Ala Glu Val Lys Lys Pro Gly Glu Ser Leu Arg Ile Ser Cys Lys
165 170 175

Gly Ser Gly Phe Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Arg Gln
180 185 190

_SL

Met Pro Gly Lys Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn
195 200 205

Asp Glu Thr Lys Tyr Gly Pro Ile Phe Gln Gly His Val Thr Ile Ser
210 215 220

Ala Asp Thr Ser Ile Asn Thr Val Tyr Leu Gln Trp Ser Ser Leu Lys
225 230 235 240

Ala Ser Asp Thr Ala Met Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr
245 250 255

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

_SL

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 457

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 457

Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu Asp Ser
20 25 30

Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln ^{SL}Gln Arg Pro Gly Gln Ser
 35 40 45

Pro Arg Arg Leu Ile Ser Leu Val Ser Lys Leu Asp Ser Gly Val Pro
 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Trp Gln Gly
 85 90 95

Thr His Phe Pro Gly Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105 110

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 115 120 125

Gly Gly Gly Ser Glu Ile Gln Leu Val Gln Ser Gly Ala Glu Val Lys
 130 135 140

Lys Pro Gly Ala Thr Val Lys Ile Ser Cys Lys Gly Ser Gly Phe Asn
 145 150 155 160

Ile Glu Asp Tyr Tyr Ile His Trp Val Gln Gln Ala Pro Gly Lys Gly
 165 170 175

Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys Tyr
 180 185 190

Gly Pro Ile Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr
 195 200 205

Asn Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala
 210 215 220

Val	Tyr	Tyr	Cys	Ala	Phe	Arg	Gly	Gly	Val	^{_SL} Tyr	Trp	Gly	Gln	Gly	Thr
225					230					235					240

Thr	Val	Thr	Val	Ser	Ser
				245	

<210> 458
 <211> 738
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 458	
gatgtggtca tgacgcagtc accactgtcc ctccccgtga cccttggaca gccagcgtcg	60
attagctgca agtcatccca atccctgctc gattcggatg gaaagaccta tctcaactgg	120
ctgcagcaaaa gacccgggtca gagccctagg agactcatct cgttggtgtc aaagctggac	180
agcggagtg cggaccgggtt ttccgggttcg ggatcgggga cggacttcac tctgaagatt	240
tcacgggtgg aagctgagga tgtgggagtg tactactgct ggcaggggaac ccatttcct	300
ggcacttttg gcggaggaac taaggtcgaa atcaaggag gaggtggctc gggaggaggc	360
ggatcggg cggaggaggag cggcggagga ggggtccgaaa tccaacttgt ccagtcagga	420
gccgaagtga agaaaccggg agccaccgtc aaaatcagct gtaagggatc gggattcaat	480
atcgaggact actacatcca ctgggtgcag caagctccgg gcaaaggact ggagtggatg	540
gggcgcatcg acccagagaa cgacgaaacc aaatacggcc cgatcttcca agggcgggtg	600
accatcaccg cggacacctc aactaacact gtgtacatgg agctgagctc cctgcgctcc	660
gaagatactg cagtctacta ctgcgccttc cgcggtggtg tgtactgggg acagggcacc	720
actgtgactg tcagctcg	738

<210> 459
 <211> 831

_SL

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 459

```
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
cccgatgtgg tcatgacgca gtcaccactg tccctccccg tgacccttgg acagccagcg      120
tcgattagct gcaagtcata ccaatccctg ctcgattcgg atggaaagac ctatctcaac      180
tggctgcagc aaagacccgg tcagagccct aggagactca tctcgttggg gtcaaagctg      240
gacagcggag tgccggaccg gttttccggt tcgggatcgg ggacggactt cactctgaag      300
atttcacggg tggaagctga ggatgtggga gtgtactact gctggcaggg aacccatttc      360
cctggcactt ttggcggagg aactaaggct gaaatcaagg gaggaggtgg ctcgggagga      420
ggcggatcgg gcgaggcgga gagcggcgga ggagggtccg aaatccaact tgtccagtca      480
ggagccgaag tgaagaaacc gggagccacc gtcaaaatca gctgtaaggg atcgggattc      540
aatatcgagg actactacat ccactgggtg cagcaagctc cgggcaaagg actggagtgg      600
atggggcgca tcgaccaga gaacgacgaa accaaatacg gcccgatctt ccaagggcgg      660
gtgaccatca ccgcgacac ctcaactaac actgtgtaca tggagctgag ctccctgcgc      720
tccgaagata ctgcagtcta ctactgcgc ttccgcggtg gtgtgtactg gggacagggc      780
accactgtga ctgtcagctc ggggtccac catcatcacc accaccatca c              831
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<210> 460

<211> 277

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 460

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu
20 25 30

Pro Val Thr Leu Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln
35 40 45

Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln Gln
50 55 60

Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile Ser Leu Val Ser Lys Leu
65 70 75 80

Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
85 90 95

Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr
100 105 110

Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly Gly Gly Thr
115 120 125

Lys Val Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Gln Leu Val Gln Ser
145 150 155 160

Gly Ala Glu Val Lys Lys Pro Gly Ala Thr Val Lys Ile Ser Cys Lys
165 170 175

Gly Ser Gly Phe Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Gln Gln
180 185 190

_SL

Ala Pro Gly Lys Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn
195 200 205

Asp Glu Thr Lys Tyr Gly Pro Ile Phe Gln Gly Arg Val Thr Ile Thr
210 215 220

Ala Asp Thr Ser Thr Asn Thr Val Tyr Met Glu Leu Ser Ser Leu Arg
225 230 235 240

Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr
245 250 255

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Ser His His His
260 265 270

His His His His His
275

<210> 461
<211> 1470
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 461
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgatgtgg tcatgacgca gtcaccactg tccctccccg tgacccttgg acagccagcg 120
tcgattagct gcaagtcac ccaatccctg ctcgattcgg atggaaagac ctatctcaac 180
tggtgcagc aaagaccgg tcagagccct aggagactca tctcgttggt gtcaaagctg 240
gacagcggag tgccggaccg gttttccggt tcgggatcgg ggacggactt cactctgaag 300
atttcacggg tggaagctga ggatgtggga gtgtactact gctggcaggg aaccatttc 360

_SL

cctggcactt ttggcggagg aactaaggtc gaaatcaagg gaggaggtgg ctcgggagga	420
ggcggatcgg gcggaggcgg gagcggcgga ggagggtccg aaatccaact tgtccagtca	480
ggagccgaag tgaagaaacc gggagccacc gtcaaaatca gctgtaaggg atcgggattc	540
aatatcgagg actactacat ccactgggtg cagcaagctc cgggcaaagg actggagtgg	600
atggggcgca tcgaccaga gaacgacgaa accaaatacg gcccgatctt ccaaggcg	660
gtgaccatca ccgcggacac ctcaactaac actgtgtaca tggagctgag ctccctgcgc	720
tccgaagata ctgcagtcta ctactgcgc ttccgcggtg gtgtgtactg gggacagggc	780
accactgtga ctgtcagctc gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggctctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaacc ttcatgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 462

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 462

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu
20 25 30

Pro Val Thr Leu Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln
35 40 45

Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Gln Gln
50 55 60

Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile Ser Leu Val Ser Lys Leu
65 70 75 80

Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
85 90 95

Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr
100 105 110

Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly Gly Gly Thr
115 120 125

Lys Val Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Gln Leu Val Gln Ser
145 150 155 160

Gly Ala Glu Val Lys Lys Pro Gly Ala Thr Val Lys Ile Ser Cys Lys
165 170 175

Gly Ser Gly Phe Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Gln Gln
180 185 190

_SL

Ala Pro Gly Lys Gly Leu Glu Trp Met Gly Arg Ile Asp Pro Glu Asn
195 200 205

Asp Glu Thr Lys Tyr Gly Pro Ile Phe Gln Gly Arg Val Thr Ile Thr
210 215 220

Ala Asp Thr Ser Thr Asn Thr Val Tyr Met Glu Leu Ser Ser Leu Arg
225 230 235 240

Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr
245 250 255

Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

_SL

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 463

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 463

Glu Ile Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Leu Ser Cys Thr Gly Ser Gly Phe Asn Ile Glu Asp Tyr
20 25 30

_SL

Tyr Ile His Trp Val Lys Gln Arg Thr Glu Gln Gly Leu Glu Trp Ile
35 40 45

Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys Tyr Gly Pro Ile Phe
50 55 60

Gln Gly Arg Ala Thr Ile Thr Ala Asp Thr Ser Ser Asn Thr Val Tyr
65 70 75 80

Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Phe Arg Gly Gly Val Tyr Trp Gly Pro Gly Thr Thr Leu Thr Val
100 105 110

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

Ser His Met Asp Val Val Met Thr Gln Ser Pro Leu Thr Leu Ser Val
130 135 140

Ala Ile Gly Gln Ser Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu
145 150 155 160

Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Leu Gln Arg Pro
165 170 175

Gly Gln Ser Pro Lys Arg Leu Ile Ser Leu Val Ser Lys Leu Asp Ser
180 185 190

Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr
195 200 205

Leu Arg Ile Ser Arg Val Glu Ala Glu Asp Leu Gly Ile Tyr Tyr Cys
210 215 220

_SL

Trp	Gln	Gly	Thr	His	Phe	Pro	Gly	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Leu
225					230					235					240

Glu Ile Lys

<210> 464
<211> 729
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 464
gagatccagc tccaacagag cggagccgaa ctggtcaaac cgggagcgtc ggtgaagttg 60
tcatgcactg gatcgggctt caacatcgag gattactaca tccactgggt caagcaacgc 120
accgagcagg ggctggaatg gatcggacgg atcgaccccg aaaacgatga aaccaagtac 180
gggcctatct tccaaggacg ggccaccatt acggctgaca cgtcaagcaa taccgtctac 240
ctccagcttt ccagcctgac ctccgaggac actgccgtgt actactgcgc cttcagagga 300
ggcgtgtact ggggaccagg aaccactttg accgtgtcca gcggaggcgg tggatcagga 360
ggaggaggct caggcgggtgg cggctcgcac atggacgtgg tcatgactca gtccccgctg 420
accctgtcgg tggcaattgg acagagcgca tccatctcgt gcaagagctc acagtcgctg 480
ctggattccg acggaaaagac ttatctgaac tggctgctcc aaagaccagg gcaatcaccg 540
aaacgcctta tctccctggt gtcgaaactc gactcgggtg tgccggatcg gtttaccggt 600
agcgggtccg gcacggactt cactctccgc atttcgaggg tggaagcgga ggatctcggg 660
atctactact gttggcaggg aaccacttc cctgggactt ttggaggcgg aactaagctg 720
gaaatcaag 729

<210> 465

_SL

<211> 822

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 465

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgagatcc agctccaaca gagcggagcc gaactgggtca aaccgggagc gtcgggtgaag	120
ttgtcatgca ctggatcggg cttcaacatc gaggattact acatccactg ggtcaagcaa	180
cgcaccgagc aggggctgga atggatcgga cggatcgacc ccgaaaacga tgaaaccaag	240
tacgggccta tcttccaagg acgggccacc attacggctg acacgtcaag caataccgtc	300
tacctccagc tttccagcct gacctccgag gacactgccg tgtactactg cgccttcaga	360
ggaggcgtgt actggggacc aggaaccact ttgaccgtgt ccagcggagg cgggtggatca	420
ggaggaggag gctcaggcgg tggcggctcg cacatggacg tggtcatgac tcagtccccg	480
ctgaccctgt cgggtggcaat tggacagagc gcatccatct cgtgcaagag ctcacagtcg	540
ctgctggatt ccgacggaaa gacttatctg aactggctgc tccaaagacc agggcaatca	600
ccgaaacgcc ttatctccct ggtgtcgaaa ctcgactcgg gtgtgccgga tcggtttacc	660
ggtagcgggt ccggcacgga cttcactctc cgcatttcga ggggtggaagc ggaggatctc	720
gggatctact actgttggca gggaaccac ttccctggga cttttggagg cggaactaag	780
ctggaaatca agggtagcca tcaccatcac caccaccatc at	822

<210> 466

<211> 274

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 466

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Gln Leu Gln Gln Ser Gly Ala Glu Leu
20 25 30

Val Lys Pro Gly Ala Ser Val Lys Leu Ser Cys Thr Gly Ser Gly Phe
35 40 45

Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Lys Gln Arg Thr Glu Gln
50 55 60

Gly Leu Glu Trp Ile Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys
65 70 75 80

Tyr Gly Pro Ile Phe Gln Gly Arg Ala Thr Ile Thr Ala Asp Thr Ser
85 90 95

Ser Asn Thr Val Tyr Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Pro Gly
115 120 125

Thr Thr Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser His Met Asp Val Val Met Thr Gln Ser Pro
145 150 155 160

Leu Thr Leu Ser Val Ala Ile Gly Gln Ser Ala Ser Ile Ser Cys Lys
165 170 175

Ser Ser Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp
180 185 190

_SL

Leu Leu Gln Arg Pro Gly Gln Ser Pro Lys Arg Leu Ile Ser Leu Val
195 200 205

Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser
210 215 220

Gly Thr Asp Phe Thr Leu Arg Ile Ser Arg Val Glu Ala Glu Asp Leu
225 230 235 240

Gly Ile Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly
245 250 255

Gly Gly Thr Lys Leu Glu Ile Lys Gly Ser His His His His His His
260 265 270

His His

<210> 467

<211> 1461

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 467

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgagatcc agctccaaca gagcgggagcc gaactgggtca aaccgggagc gtcgggtgaag 120

ttgtcatgca ctggatcggg cttcaacatc gaggattact acatccactg ggtcaagcaa 180

cgcaccgagc aggggctgga atggatcgga cggatcgacc ccgaaaacga tgaaaccaag 240

tacgggccta tcttccaagg acgggccacc attacggctg acacgtcaag caataccgtc 300

tacctccagc tttccagcct gacctccgag gacactgccg tgtactactg cgccttcaga 360

_SL

ggaggcgtgt actggggacc aggaaccact ttgaccgtgt ccagcggagg cggtgatca 420
ggaggaggag gctcaggcgg tggcggctcg cacatggacg tggatcatgac tcagtccccg 480
ctgaccctgt cgggtggcaat tggacagagc gcatccatct cgtgcaagag ctcacagtcg 540
ctgctggatt ccgacggaaa gacttatctg aactggctgc tccaaagacc agggcaatca 600
ccgaaacgcc ttatctccct ggtgtcgaaa ctgactcgg gtgtgccgga tcggtttacc 660
ggtagcgggt ccggcacgga cttcactctc cgcatttcga ggggtggaagc ggaggatctc 720
gggatctact actgttggca gggaaccac ttccctggga cttttggagg cggaactaag 780
ctggaaatca agaccactac cccagcaccg aggccacca ccccggtcc taccatcgcc 840
tcccagcctc tgtccctgcg tccggaggca tgtagaccg cagctggtgg ggccgtgcat 900
acccggggtc ttgacttcgc ctgcgatatc tacatttggg cccctctggc tggacttgc 960
ggggtcctgc tgctttcact cgtgatcact ctttactgta agcgcggtcg gaagaagctg 1020
ctgtacatct ttaagcaacc cttcatgagg cctgtgcaga ctactcaaga ggaggacggc 1080
tgttcatgcc ggttcccaga ggaggaggaa ggcggtcgcg aactgcgcgt gaaattcagc 1140
cgcagcgcag atgctccagc ctacaagcag gggcagaacc agctctacaa cgaactcaat 1200
cttggtcgga gagaggagta cgacgtgctg gacaagcggg gaggacggga cccagaaatg 1260
ggcgggaagc cgcgcagaaa gaatcccaa gagggcctgt acaacgagct ccaaaaggat 1320
aagatggcag aagcctatag cgagattggt atgaaagggg aacgcagaag aggcaaaggc 1380
cacgacggac tgtaccaggg actcagcacc gccaccaagg acacctatga cgctttcac 1440
atgcaggccc tgccgcctcg g 1461

<210> 468

<211> 487

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

_SL

polypeptide"

<400> 468

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Ile Gln Leu Gln Gln Ser Gly Ala Glu Leu
20 25 30

Val Lys Pro Gly Ala Ser Val Lys Leu Ser Cys Thr Gly Ser Gly Phe
35 40 45

Asn Ile Glu Asp Tyr Tyr Ile His Trp Val Lys Gln Arg Thr Glu Gln
50 55 60

Gly Leu Glu Trp Ile Gly Arg Ile Asp Pro Glu Asn Asp Glu Thr Lys
65 70 75 80

Tyr Gly Pro Ile Phe Gln Gly Arg Ala Thr Ile Thr Ala Asp Thr Ser
85 90 95

Ser Asn Thr Val Tyr Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Phe Arg Gly Gly Val Tyr Trp Gly Pro Gly
115 120 125

Thr Thr Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser His Met Asp Val Val Met Thr Gln Ser Pro
145 150 155 160

Leu Thr Leu Ser Val Ala Ile Gly Gln Ser Ala Ser Ile Ser Cys Lys
165 170 175

Ser Ser Gln Ser Leu Leu Asp Ser Asp Gly Lys Thr Tyr Leu Asn Trp

_SL

180

185

190

Leu Leu Gln Arg Pro Gly Gln Ser Pro Lys Arg Leu Ile Ser Leu Val
195 200 205

Ser Lys Leu Asp Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser
210 215 220

Gly Thr Asp Phe Thr Leu Arg Ile Ser Arg Val Glu Ala Glu Asp Leu
225 230 235 240

Gly Ile Tyr Tyr Cys Trp Gln Gly Thr His Phe Pro Gly Thr Phe Gly
245 250 255

Gly Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro
260 265 270

Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro
275 280 285

Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu
290 295 300

Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys
305 310 315 320

Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly
325 330 335

Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val
340 345 350

Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu
355 360 365

Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp

370

375

_SL

380

Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn
 385 390 395 400

Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg
 405 410 415

Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly
 420 425 430

Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu
 435 440 445

Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu
 450 455 460

Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His
 465 470 475 480

Met Gln Ala Leu Pro Pro Arg
 485

<210> 469

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 469

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 Asn
 20 25 30

_SL

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
35 40 45

Tyr Ala Ala Ser Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Thr Gly
50 55 60

Ser Gly Ser Gly Thr Glu Phe Thr Leu Ile Val Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His His Ser Tyr Pro Leu
85 90 95

Thr Ser Gly Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Gly Ser Thr
100 105 110

Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly Ser Glu Val Gln Val
115 120 125

Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu
130 135 140

Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Ala Met Ser Trp
145 150 155 160

Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ala Ile Ser
165 170 175

Gly Ser Gly Gly Ser Thr Asn Tyr Ala Asp Ser Val Lys Gly Arg Phe
180 185 190

Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn
195 200 205

Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Gly Ser Ser
210 215 220

_SL

Gly Trp Ser Glu Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
225 230 235 240

<210> 470

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 470

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gatatccaaa tgactcagag cccttcatcc ctgagcgcca gcgtcggaga cagggtgacc      60
atcacgtgcc gggcatccca aggcattaga aataacttgg cgtggtatca gcaaaaacca      120
ggaaaggccc cgaagcgctt gatctacgcg gcctccaacc ttcagtcagg agtgcctctg      180
cgcttcaccg ggagcggtag cggaactgag tttaccctta tcgtgtcgtc cctgcagcca      240
gaggacttct cgacctacta ctgcctccag catcactcgt acccgttgac ttcgggaggc      300
ggaaccaagg tcgaaatcaa acgcactggc tcgacgtcag ggtccggtaa accgggatcg      360
ggagaaggat cggaagtcca agtgctggag agcggaggcg gactcgtgca acctggcggg      420
tcgctgcggc tcagctgtgc cgcgtcgggt ttacttttca gctcgtacgc tatgtcatgg      480
gtgcggcagg ctccgggaaa ggggctggaa tgggtgtccg ctatttccgg ctcgggtgga      540
agcaccaatt acgccgactc cgtgaaggga cgcttcacca tctcacggga taactccaag      600
aatactctgt acctccagat gaactcgctg agagccgagg acaccgcagt gtactactgc      660
gcagggtcaa gcggctggtc cgaatactgg ggacagggca ccctcgtcac tgtcagctcc      720
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<210> 471

<211> 807

<212> DNA

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 471

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atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
cccgatatcc aaatgactca gagcccttca tccctgagcg ccagcgtcgg agacagggtg      120
accatcacgt gccgggcatc ccaaggcatt agaaataact tggcgtggta tcagcaaaaa      180
ccaggaaagg ccccgaagcg cctgatctac gcggcctcca accttcagtc aggagtgtccc      240
tcgcgcttca ccgggagcgg tagcgggaact gagtttacct ttatcgtgtc gtccctgcag      300
ccagaggact tcgcgaccta ctactgcctc cagcatcact cgtacccgtt gacttcggga      360
ggcggaacca aggtcgaaat caaacgcact ggctcgacgt cagggtccgg taaaccggga      420
tcgggagaag gatcgggaagt ccaagtgtcg gagagcggag gcggactcgt gcaacctggc      480
gggtcgctgc ggctcagctg tgccgcgtcg ggttttactt tcagctcgta cgctatgtca      540
tgggtgcggc aggctccggg aaaggggctg gaatgggtgt ccgctatttc cggctcgggt      600
ggaagcacca attacgccga ctccgtgaag ggacgcttca ccatctcacg ggataactcc      660
aagaatactc tgtacctcca gatgaactcg ctgagagccg aggacaccgc agtgtactac      720
tgcgagggt caagcggctg gtccgaatac tggggacagg gcaccctcgt cactgtcagc      780
tcccatcacc atcaccacca ccatcac                                           807
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<210> 472

<211> 269

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 472

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Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1           5           10          15
```

_SL

His Ala Ala Arg Pro Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu
20 25 30

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln
35 40 45

Gly Ile Arg Asn Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala
50 55 60

Pro Lys Arg Leu Ile Tyr Ala Ala Ser Asn Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Thr Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Ile Val
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His
100 105 110

His Ser Tyr Pro Leu Thr Ser Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Arg Thr Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly
130 135 140

Ser Glu Val Gln Val Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
145 150 155 160

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser
165 170 175

Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
180 185 190

Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Asn Tyr Ala Asp Ser
195 200 205

_SL

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu
210 215 220

Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr
225 230 235 240

Cys Ala Gly Ser Ser Gly Trp Ser Glu Tyr Trp Gly Gln Gly Thr Leu
245 250 255

Val Thr Val Ser Ser His His His His His His His His
260 265

<210> 473

<211> 1452

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 473

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgatatcc aaatgactca gagcccttca tccctgagcg ccagcgtcgg agacaggggtg	120
accatcacgt gccgggcatc ccaaggcatt agaaataact tggcgtggta tcagcaaaaa	180
ccaggaaagg ccccgaagcg cctgatctac gcggcctcca accttcagtc aggagtgccc	240
tcgcgcttca ccgggagcgg tagcgggaact gagtttacct ttatcgtgtc gtccctgcag	300
ccagaggact tcgcgacctt ctactgcctc cagcatcact cgtacccggt gacttcggga	360
ggcggaacca aggtcgaaat caaacgcact ggctcgacgt cagggtccgg taaaccggga	420
tcgggagaag gatcggaagt ccaagtgctg gagagcggag gcggactcgt gcaacctggc	480
gggtcgctgc ggctcagctg tgccgcgtcg ggttttactt tcagctcgta cgctatgtca	540
tgggtgcggc aggtccggg aaaggggctg gaatgggtgt ccgctatttc cggctcgggt	600

_SL

ggaagcacca attacgccga ctccgtgaag ggacgcttca ccatctcacg ggataactcc	660
aagaatactc tgtacctcca gatgaactcg ctgagagccg aggacaccgc agtgtactac	720
tgcgcaggggt caagcggctg gtccgaatac tggggacagg gcaccctcgt cactgtcagc	780
tccaccacta ccccgaccaggaggccaccc acccggctc ctaccatcgc ctcccagcct	840
ctgtccctgc gtccggaggc atgtagaccc gcagctgggtg gggccgtgca taccgggggt	900
cttgacttcg cctgcgatat ctacatttgg gcccctctgg ctggtacttg cggggtcctg	960
ctgctttcac tcgtgatcac tctttactgt aagcgcggtc ggaagaagct gctgtacatc	1020
tttaagcaac ccttcatgag gcctgtgcag actactcaag aggaggacgg ctgttcatgc	1080
cggttcccag aggaggagga aggcggctgc gaactgcgcg tgaaattcag ccgcagcgca	1140
gatgctccag cctacaagca ggggcagaac cagctctaca acgaactcaa tcttggtcgg	1200
agagaggagt acgacgtgct ggacaagcgg agaggacggg acccagaaat gggcgggaag	1260
ccgcgcagaa agaatcccca agagggcctg tacaacgagc tccaaaagga taagatggca	1320
gaagcctata gcgagattgg tatgaaaggg gaacgcagaa gaggcaaagg ccacgacgga	1380
ctgtaccagg gactcagcac cgccaccaag gacacctatg acgctcttca catgcaggcc	1440
ctgccgcctc gg	1452

<210> 474

<211> 484

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 474

Met	Ala	Leu	Pro	Val	Thr	Ala	Leu	Leu	Leu	Pro	Leu	Ala	Leu	Leu	Leu
1				5						10					15

His	Ala	Ala	Arg	Pro	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu
			20					25					30		

_SL

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln
35 40 45

Gly Ile Arg Asn Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala
50 55 60

Pro Lys Arg Leu Ile Tyr Ala Ala Ser Asn Leu Gln Ser Gly Val Pro
65 70 75 80

Ser Arg Phe Thr Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Ile Val
85 90 95

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His
100 105 110

His Ser Tyr Pro Leu Thr Ser Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

Arg Thr Gly Ser Thr Ser Gly Ser Gly Lys Pro Gly Ser Gly Glu Gly
130 135 140

Ser Glu Val Gln Val Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
145 150 155 160

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser
165 170 175

Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp
180 185 190

Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Asn Tyr Ala Asp Ser
195 200 205

Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu
210 215 220

_SL

Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr
225 230 235 240

Cys Ala Gly Ser Ser Gly Trp Ser Glu Tyr Trp Gly Gln Gly Thr Leu
245 250 255

Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro
260 265 270

Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys
275 280 285

Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala
290 295 300

Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu
305 310 315 320

Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys
325 330 335

Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr
340 345 350

Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Gly
355 360 365

Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala
370 375 380

Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg
385 390 395 400

Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu
405 410 415

_SL

Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn
420 425 430

Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met
435 440 445

Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly
450 455 460

Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala
465 470 475 480

Leu Pro Pro Arg

<210> 475
<211> 1482
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 475
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtgc aactcgtcca gtccggtgca gaagtcaaga agccaggaga atcactcaag 120
attagctgca aaggcagcgg ctactccttc acttcctact ggatcggctg ggtgcgccag 180
atgcccggaa agggactgga gtggatggga atcatctacc ctggcgatag cgacaccaga 240
tactccccga gctttcaagg ccaagtgacc atttcggccg acaagtcgat ctccaccgcg 300
tatctgcagt ggagctcact gaaggcttcg gacaccgcca tgtactactg tgcccggctg 360
gggggaagcc tgcccgatta cggaatggac gtgtggggcc aggggaaccat ggtcactgtg 420
tcctccgcct ccgggggtgg aggctccggt ggaggggggt ccggtggtgg aggatcagaa 480

_SL

attgtgctga cccagtctcc gctgtccttg cctgtgaccc cgggcgaacc cgcaagcatc 540
tcctgccggt cgtcgcagtc cctgcttcac tccaacggct acaactacct cgattggtac 600
ctccagaagc ctggacagag cccacagctg ttgatctacc tgggctcgaa ccgggcctca 660
ggagtgccgg acaggttctc cggctccggg tcgggaaccg acttcacgct gaagatctcc 720
cgcgtggagg ccgaggacgt gggcgtgtac tattgcatgc aggcgctgca gacccttatt 780
acattcggac aggggactaa ggtcgatatc aagaccacta cccagcacc gaggccaccc 840
accccggtc ctaccatcgc ctccagcct ctgtccctgc gtccggaggc atgtagaccc 900
gcagctgggtg gggccgtgca taccgggggt cttgacttcg cctgcatat ctacatttgg 960
gccccctctgg ctggtacttg cggggtcctg ctgctttcac tcgtgatcac tctttactgt 1020
aagcgcggtc ggaagaagct gctgtacatc ttttaagcaac ctttcatgag gcctgtgcag 1080
actactcaag aggaggacgg ctgttcatgc cggttcccag aggaggagga aggcggctgc 1140
gaactgcgcg tgaaattcag ccgcagcgca gatgctccag cctacaagca ggggcagaac 1200
cagctctaca acgaactcaa tcttggtcgg agagaggagt acgacgtgct ggacaagcgg 1260
agaggacggg acccagaaat gggcgggaag ccgcgcagaa agaatcccca agagggcctg 1320
tacaacgagc tcaaaaagga taagatggca gaagcctata gcgagattgg tatgaaaggg 1380
gaacgcagaa gaggcaaagg ccacgacgga ctgtaccagg gactcagcac cgccaccaag 1440
gacacctatg acgctcttca catgcaggcc ctgccgcctc gg 1482

<210> 476

<211> 494

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 476

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

_SL

195

200

205

Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro Asp
210 215 220

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser
225 230 235 240

Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala Leu
245 250 255

Gln Thr Leu Ile Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys Thr
260 265 270

Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser
275 280 285

Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly
290 295 300

Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp
305 310 315 320

Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile
325 330 335

Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys
340 345 350

Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys
355 360 365

Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val
370 375 380

Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn

_SL

Ser Phe Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg
65 70 75 80

Tyr Ser Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser
85 90 95

Ile Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
100 105 110

Ala Met Tyr Tyr Cys Ala Arg Leu Gly Gly Ser Leu Pro Asp Tyr Gly
115 120 125

Met Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
145 150 155 160

Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly Glu
165 170 175

Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser Asn
180 185 190

Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro
195 200 205

Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro Asp
210 215 220

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser
225 230 235 240

_SL

Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala Leu
245 250 255

Gln Thr Leu Ile Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
260 265 270

<210> 478

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 478

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
20 25 30

Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
50 55 60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg Leu Gly Gly Ser Leu Pro Asp Tyr Gly Met Asp Val Trp Gly
100 105 110

_SL

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 479

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 479

Glu Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

Leu Gln Thr Leu Ile Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105 110

<210> 480

<211> 1485

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 480

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaaagtcc aactcgtcca atcaggagct gaagtcaaga agcctggagc atccgtgaga	120
gtgtcctgta aagcctccgg ctacatcttc accaactact acgtgcactg ggtcagacag	180
gccccgggccc agggactgga atggatggga atcattttccc cgtccggcgg atcgcctact	240
tacgcgcaac ggctgcaggg ccgcgtgacc atgactcggg atctctccac ttcaaccgtg	300
tacatggaac tgtccagcct tacatcggag gatactgccg tgtacttctg cgcgagggag	360
tcccggctga ggggcaaccg cctcgggctg cagtcaagca tcttcgatca ctggggccag	420
ggcaccctcg tgaccgtgtc cagcgcctcg gggggaggag gctccggggg cggaggttcg	480
ggcggtggtg gatctgacat tcgcatgact cagtccccac cttcactgtc cgctagcgtg	540
ggggaccgcg tgacgattcc gtgccaagcc agccaggaca tcaacaacca tctgaactgg	600
tatcagcaga agccccgaaa ggccccgcag ctgctgatct acgacacctc gaatctggag	660
atcggcgtgc catccccggtt ctccggttcg ggaagcggaa ccgactttac cctgactatc	720
tcctccttgc aacccgagga cattgccacc tactactgcc agcagtacga aaacctttcc	780
ctgaccttcg ggggtggaac caaagtggag atcaagacca ctaccccagc accgaggcca	840
cccaccccgg ctctaccat cgcctcccag cctctgtccc tgcgtccgga ggcatgtaga	900
cccgagctg gtggggccgt gcatacccgg ggtcttgact tcgcctgcga tatctacatt	960
tgggcccctc tggctggtac ttgcggggtc ctgctgcttt cactcgtgat cactctttac	1020
tgtaagcgcg gtcggaagaa gctgctgtac atctttaagc aacccttcat gaggcctgtg	1080
cagactactc aagaggagga cggctgttca tgccggttcc cagaggagga ggaaggcggc	1140
tgcgaactgc gcgtgaaatt cagccgcagc gcagatgctc cagcctacaa gcaggggcag	1200
aaccagctct acaacgaact caatcttggg cggagagagg agtacgacgt gctggacaag	1260

_SL

cggagaggac gggacccaga aatgggcggg aagccgcgca gaaagaatcc ccaagagggc 1320
ctgtacaacg agctccaaaa ggataagatg gcagaagcct atagcgagat tggatatgaaa 1380
ggggaacgca gaagaggcaa aggccacgac ggactgtacc agggactcag caccgccacc 1440
aaggacacct atgacgctct tcacatgcag gccctgccgc ctcgg 1485

<210> 481

<211> 495

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 481

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Thr Asn Tyr Tyr Val His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Ile Ile Ser Pro Ser Gly Gly Ser Pro Thr
65 70 75 80

Tyr Ala Gln Arg Leu Gln Gly Arg Val Thr Met Thr Arg Asp Leu Ser
85 90 95

Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr
100 105 110

_SL

Ala Val Tyr Phe Cys Ala Arg Glu Ser Arg Leu Arg Gly Asn Arg Leu
115 120 125

Gly Leu Gln Ser Ser Ile Phe Asp His Trp Gly Gln Gly Thr Leu Val
130 135 140

Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Gly Gly Gly Gly Ser Asp Ile Arg Met Thr Gln Ser Pro Pro Ser Leu
165 170 175

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Pro Cys Gln Ala Ser Gln
180 185 190

Asp Ile Asn Asn His Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala
195 200 205

Pro Gln Leu Leu Ile Tyr Asp Thr Ser Asn Leu Glu Ile Gly Val Pro
210 215 220

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
225 230 235 240

Ser Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr
245 250 255

Glu Asn Leu Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
260 265 270

Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala
275 280 285

Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly
290 295 300

_SL

Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile
305 310 315 320

Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val
325 330 335

Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe
340 345 350

Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly
355 360 365

Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg
370 375 380

Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln
385 390 395 400

Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp
405 410 415

Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro
420 425 430

Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp
435 440 445

Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg
450 455 460

Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr
465 470 475 480

Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490 495

_SL

<210> 482

<211> 272

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 482

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Thr Asn Tyr Tyr Val His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Ile Ile Ser Pro Ser Gly Gly Ser Pro Thr
65 70 75 80

Tyr Ala Gln Arg Leu Gln Gly Arg Val Thr Met Thr Arg Asp Leu Ser
85 90 95

Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr
100 105 110

Ala Val Tyr Phe Cys Ala Arg Glu Ser Arg Leu Arg Gly Asn Arg Leu
115 120 125

Gly Leu Gln Ser Ser Ile Phe Asp His Trp Gly Gln Gly Thr Leu Val
130 135 140

Thr Val Ser Ser Ala Ser Gly Gly Gly Gly ^{_SL} Ser Gly Gly Gly Gly Ser
 145 150 155 160

Gly Gly Gly Gly Ser Asp Ile Arg Met Thr Gln Ser Pro Pro Ser Leu
 165 170 175

Ser Ala Ser Val Gly Asp Arg Val Thr Ile Pro Cys Gln Ala Ser Gln
 180 185 190

Asp Ile Asn Asn His Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala
 195 200 205

Pro Gln Leu Leu Ile Tyr Asp Thr Ser Asn Leu Glu Ile Gly Val Pro
 210 215 220

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 225 230 235 240

Ser Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr
 245 250 255

Glu Asn Leu Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 260 265 270

<210> 483

<211> 127

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 483

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Thr Asn Tyr

_SL

20

25

30

Tyr Val His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Ser Pro Ser Gly Gly Ser Pro Thr Tyr Ala Gln Arg Leu
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Leu Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Phe Cys
85 90 95

Ala Arg Glu Ser Arg Leu Arg Gly Asn Arg Leu Gly Leu Gln Ser Ser
100 105 110

Ile Phe Asp His Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 484

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 484

Asp Ile Arg Met Thr Gln Ser Pro Pro Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Pro Cys Gln Ala Ser Gln Asp Ile Asn Asn His
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Gln Leu Leu Ile
35 40 45

_SL

Tyr Asp Thr Ser Asn Leu Glu Ile 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 Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Glu Asn Leu Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 485

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 485

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aattggtgca gtcaggagga ggattggtgc aaccggagg atcgctgaga	120
ctgtcatgtg ctgccagcgg gttcacattc tcctcctacg caatgtcctg ggtccgccag	180
gcgccgggca aaggactgga atgggtgtcc gccatctcgg ggtcgggcgg ctccacctat	240
tacgtgact ccgtgaaggg acgcttcacc attagcagag ataactccaa gaacaccctc	300
tacctcaaaa tgaacagcct tagggctgag gacaccgccg tctattactg cgccaaggag	360
gacacgatcc ggggacctaa ctactattac tacggaatgg atgtctgggg ccagggtacc	420
actgtgaccg tgtcctcggc ctcgggaggc ggaggatcag ggggtggtgg ctctgggggg	480
ggtggcagcg aaactactct gaccagtc ccctcatccg tgtcagcgtc cgtgggcgat	540
cgggtgtcga tcacttgccg ggcctcccaa gacatcgaca cctggctcgc gtggtaccag	600

_SL

ctgaagccag gaaaggcccc taagctgctg atgtacgcag cctccaatct gcaaggaggg 660
gtgccctccc gcttttccgg gtccggcagc ggaaccgact tcattctgac tatctcgagc 720
ctccagccgg aggatttcgc cacctactac tgccagcagg cctccatctt cccgccgact 780
ttcggtgggc gaaccaaggt cgacattaag accactaccc cagcaccgag gccacccacc 840
ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagacccgca 900
gctggtgggg ccgtgcatac ccggggctct gacttcgcct gcgatatcta catttggggc 960
cctctggctg gtacttgagg ggtcctgctg ctttcactcg tgatcactct ttactgtaag 1020
cgcggtcggg agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact 1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa 1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag 1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga 1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac 1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa 1380
cgcagaagag gcaaaggcca cgacggactg taccagggaac tcagcaccgc caccaaggac 1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg 1479

<210> 486

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 486

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu

_SL

20	25	30
Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe		
35	40	45
Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys		
50	55	60
Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr		
65	70	75
Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser		
85	90	95
Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr		
100	105	110
Ala Val Tyr Tyr Cys Ala Lys Glu Asp Thr Ile Arg Gly Pro Asn Tyr		
115	120	125
Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val		
130	135	140
Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly		
145	150	155
Gly Gly Ser Glu Thr Thr Leu Thr Gln Ser Pro Ser Ser Val Ser Ala		
165	170	175
Ser Val Gly Asp Arg Val Ser Ile Thr Cys Arg Ala Ser Gln Asp Ile		
180	185	190
Asp Thr Trp Leu Ala Trp Tyr Gln Leu Lys Pro Gly Lys Ala Pro Lys		
195	200	205
Leu Leu Met Tyr Ala Ala Ser Asn Leu Gln Gly Gly Val Pro Ser Arg		

_SL

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Glu Asp Thr Ile Arg Gly Pro Asn Tyr
115 120 125

Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val
130 135 140

Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Glu Thr Thr Leu Thr Gln Ser Pro Ser Ser Val Ser Ala
165 170 175

Ser Val Gly Asp Arg Val Ser Ile Thr Cys Arg Ala Ser Gln Asp Ile
180 185 190

Asp Thr Trp Leu Ala Trp Tyr Gln Leu Lys Pro Gly Lys Ala Pro Lys
195 200 205

Leu Leu Met Tyr Ala Ala Ser Asn Leu Gln Gly Gly Val Pro Ser Arg
210 215 220

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Ile Leu Thr Ile Ser Ser
225 230 235 240

Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Ser Ile
245 250 255

_SL

Phe Pro Pro Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys
260 265 270

<210> 488

<211> 125

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 488

Gln Val Gln Leu Val Gln 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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Glu Asp Thr Ile Arg Gly Pro Asn Tyr Tyr Tyr Tyr Gly Met
100 105 110

Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120 125

_SL

<210> 489

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 489

Glu Thr Thr Leu Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Ser Ile Thr Cys Arg Ala Ser Gln Asp Ile Asp Thr Trp
20 25 30

Leu Ala Trp Tyr Gln Leu Lys Pro Gly Lys Ala Pro Lys Leu Leu Met
35 40 45

Tyr Ala Ala Ser Asn Leu Gln Gly Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Ile Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Ser Ile Phe Pro Pro
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys
100 105

<210> 490

<211> 1482

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 490

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc agctcgtcca atccggtgca gaagtgaaga agcctggcga atccctgaag	120
atctcatgca aaggctcggg atacagcttc acctcatatt ggattggatg ggtcagacag	180
atgccaggaa agggctctgga gtggatggga atcatctacc cgggagacag cgatacccgg	240
tactccccga gcttccaggg acaggtcacc atctcggccg acaagtccat tactactgcc	300
tacttgcaat ggtcctcgct gcgcgcctcc gatagcgcca tgtactactg cgcgagaggc	360
ggctactccg actacgacta ctacttcgat ttctggggac aggggacact cgtgactgtg	420
tcctccgcgt cgggtggcgg cggctcgggt ggaggaggaa gcggaggggg aggctccgaa	480
attgtgatga ccagtcacc cctgtcgctc cctgtgactc ctggggaacc ggccctccatc	540
tcctgccgga gctcacagag cctgctgcac tccaacggat acaactacct cgattggtac	600
cttcagaagc ccggccagtc gccccagctg ctgatctacc tgggggtccaa ccgggctagc	660
ggcgtgccgg accgcttctc cggttccggg tctggaaccg acttcacgct gaaaatctcc	720
aggggtggagg ccgaggacgt gggagtgtat tactgtatgc aggccctgca aacccccctt	780
acctttggcg ggggcaccaa ggtcgagatt aagaccacta cccagcacc gaggccaccc	840
accccggtc ctaccatcgc ctcccagcct ctgtccctgc gtccggaggc atgtagaccc	900
gcagctgggtg gggccgtgca taccgggggt cttgacttcg cctgcgatat ctacatttgg	960
gcccctctgg ctggtacttg cggggtcctg ctgctttcac tcgtgatcac tctttactgt	1020
aagcgcggtc ggaagaagct gctgtacatc tttaagcaac ctttcatgag gcctgtgcag	1080
actactcaag aggaggacgg ctgttcatgc cggttcccag aggaggagga aggcggctgc	1140
gaactgcgcg tgaaattcag ccgcagcgca gatgctccag cctacaagca ggggcagaac	1200
cagctctaca acgaactcaa tcttggtcgg agagaggagt acgacgtgct ggacaagcgg	1260
agaggacggg acccagaaat gggcgggaag ccgcgcagaa agaatcccca agagggcctg	1320
tacaacgagc tccaaaagga taagatggca gaagcctata gcgagattgg tatgaaaggg	1380

_SL

gaacgcagaa gaggcaaagg ccacgacgga ctgtaccagg gactcagcac cgccaccaag 1440

gacacctatg acgctcttca catgcaggcc ctgccgcctc gg 1482

<210> 491

<211> 494

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 491

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr
35 40 45

Ser Phe Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg
65 70 75 80

Tyr Ser Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser
85 90 95

Ile Thr Thr Ala Tyr Leu Gln Trp Ser Ser Leu Arg Ala Ser Asp Ser
100 105 110

Ala Met Tyr Tyr Cys Ala Arg Gly Gly Tyr Ser Asp Tyr Asp Tyr Tyr
115 120 125

_SL

Phe Asp Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
145 150 155 160

Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly Glu
165 170 175

Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser Asn
180 185 190

Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro
195 200 205

Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro Asp
210 215 220

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser
225 230 235 240

Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala Leu
245 250 255

Gln Thr Pro Phe Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Thr
260 265 270

Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser
275 280 285

Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly
290 295 300

Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp
305 310 315 320

_SL

Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile
325 330 335

Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys
340 345 350

Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys
355 360 365

Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val
370 375 380

Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn
385 390 395 400

Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val
405 410 415

Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg
420 425 430

Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys
435 440 445

Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg
450 455 460

Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys
465 470 475 480

Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 492

<211> 271

<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 492

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr
35 40 45

Ser Phe Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg
65 70 75 80

Tyr Ser Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser
85 90 95

Ile Thr Thr Ala Tyr Leu Gln Trp Ser Ser Leu Arg Ala Ser Asp Ser
100 105 110

Ala Met Tyr Tyr Cys Ala Arg Gly Gly Tyr Ser Asp Tyr Asp Tyr Tyr
115 120 125

Phe Asp Phe Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
145 150 155 160

Ile Val Met Thr Gln Ser Pro Leu Ser Leu ^{SL}Pro Val Thr Pro Gly Glu
165 170 175

Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser Asn
180 185 190

Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro
195 200 205

Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro Asp
210 215 220

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser
225 230 235 240

Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala Leu
245 250 255

Gln Thr Pro Phe Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
260 265 270

<210> 493

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 493

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
20 25 30

Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met

35

40

_SL

45

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
 50 55 60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Thr Thr Ala Tyr
 65 70 75 80

Leu Gln Trp Ser Ser Leu Arg Ala Ser Asp Ser Ala Met Tyr Tyr Cys
 85 90 95

Ala Arg Gly Gly Tyr Ser Asp Tyr Asp Tyr Tyr Phe Asp Phe Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
 115 120

<210> 494

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 494

Glu Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
 1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
 20 25 30

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
 35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
 50 55 60

_SL

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

Leu Gln Thr Pro Phe Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 495

<211> 1452

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 495

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ccccaagtgc aactcgtcca aagcgggtgga gatctcgccc agcccggaag atcccttaga      120
ctctcatgtg ccgccagcgg gttcaccttc gacgactacg ctatgcattg ggtgcgccag      180
gccccggggga agggactgga atgggtggcc gtgatttggc cggacggcgg acagaagtac      240
tacggagaca gcgtgaaagg gcggttcacc gtgtcgaggg acaacccgaa gaataccctc      300
taccttcaaa tgaactccct gcgcgccgag gacaccgca tctactactg cgtgcgccac      360
ttaacgcat gggattactg gggacagggg actctgggtca ctgtgtcctc cgcctctggc      420
ggcggagggtt ccggcgggtgg tggctccggt ggaggaggat cggacatcca gctgaccag      480
tccccttcct cactgtcggc gtacgtggga ggccgggtca ctatcacgtg ccaggcatcc      540
cagggcatth cccagttcct gaactggttc cagcagaagc ccggaaggc ccctaagctg      600
ttgatttccg atgctagcaa cctggaaccc ggcgtgccgt cacggttcag cggctccggg      660
tcgggcaccg acttcacctt caccatcact aacctccaac cggaggacat cgccacctat      720
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_SL

tactgccagc agtacgatga tctgccactg acttttcggcg gcggaaccaa ggtcgaaatc 780
aagaccacta ccccagcacc gaggccaccc accccggctc ctaccatcgc ctcccagcct 840
ctgtccctgc gtccggaggc atgtagaccc gcagctgggtg gggccgtgca tacccggggt 900
cttgacttcg cctgcgatat ctacatttgg gcccctctgg ctggtacttg cggggtcctg 960
ctgctttcac tcgtgatcac tctttactgt aagcgcggtc ggaagaagct gctgtacatc 1020
tttaagcaac ctttcatgag gcctgtgcag actactcaag aggaggacgg ctgttcatgc 1080
cggttcccag aggaggagga aggcggctgc gaactgcgcg tgaaattcag ccgcagcgca 1140
gatgctccag cctacaagca ggggcagaac cagctctaca acgaactcaa tcttggtcgg 1200
agagaggagt acgacgtgct ggacaagcgg agaggacggg acccagaaat gggcgggaag 1260
ccgcgcagaa agaatcccca agagggcctg tacaacgagc tccaaaagga taagatggca 1320
gaagcctata gcgagattgg tatgaaaggg gaacgcagaa gaggcaaagg ccacgacgga 1380
ctgtaccagg gactcagcac cgccaccaag gacacctatg acgctcttca catgcaggcc 1440
ctgccgcctc gg 1452

<210> 496

<211> 484

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 496

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Asp Leu
20 25 30

Ala Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe

_SL

420

425

430

Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met
435 440 445

Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly
450 455 460

Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala
465 470 475 480

Leu Pro Pro Arg

<210> 497

<211> 261

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 497

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Asp Leu
20 25 30

Ala Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Asp Asp Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ala Val Ile Trp Pro Asp Gly Gly Gln Lys Tyr
65 70 75 80

_SL

Tyr Gly Asp Ser Val Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Pro
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Ile Tyr Tyr Cys Val Arg His Phe Asn Ala Trp Asp Tyr Trp Gly
115 120 125

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Leu Thr Gln
145 150 155 160

Ser Pro Ser Ser Leu Ser Ala Tyr Val Gly Gly Arg Val Thr Ile Thr
165 170 175

Cys Gln Ala Ser Gln Gly Ile Ser Gln Phe Leu Asn Trp Phe Gln Gln
180 185 190

Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Ser Asp Ala Ser Asn Leu
195 200 205

Glu Pro Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
210 215 220

Phe Thr Phe Thr Ile Thr Asn Leu Gln Pro Glu Asp Ile Ala Thr Tyr
225 230 235 240

Tyr Cys Gln Gln Tyr Asp Asp Leu Pro Leu Thr Phe Gly Gly Gly Thr
245 250 255

Lys Val Glu Ile Lys
260

_SL

<210> 498
<211> 116
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 498
Gln Val Gln Leu Val Gln Ser Gly Gly Asp Leu Ala 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 Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Trp Pro Asp Gly Gly Gln Lys Tyr Tyr Gly Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Pro Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Ile Tyr Tyr Cys
85 90 95

Val Arg His Phe Asn Ala Trp Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser
115

<210> 499
<211> 107
<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 499

Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Tyr Val Gly
1 5 10 15

Gly Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Gly Ile Ser Gln Phe
20 25 30

Leu Asn Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Ser Asp Ala Ser Asn Leu Glu Pro Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Thr Asn Leu Gln Pro
65 70 75 80

Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Asp Leu Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 500

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 500

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg

60

_SL

ccccaagtgc aactcgtcca atccggtggt ggtgtcgtgc aaccaggaaa gtctcttcgc	120
ctctcatgcg ctgccagcgg attcacgttt tccatcttcg ctatgcactg ggtgcggcag	180
gccccgggaa agggactgga atgggtggca accatttcat acgatggatc aaacgcgttc	240
tacgccgact ccgtggaagg aaggttcacc atctcgagag acaactccaa ggactcgctg	300
tatctgcaaa tggactccct gcgccctgag gataccgccg tctactactg cgtgaaggcc	360
ggcgacgggg gatacgacgt gttcgattcg tggggccagg gaactctggt caccgtgtcc	420
agcgcgagcg ggggaggcgg atcgggtggt ggagggtccg ggggaggagg ctccgagatc	480
gtgatgactc agtcgccgct ctccctcccc gtgacccccg gagagccagc tagcatttca	540
tgtcggagct cccagtccct gctgcactcc aacggctaca attacctgga ttggtacttg	600
cagaagcctg ggcagagccc tcagctgctg atctacctcg gctcgaacag agcctccggc	660
gtgccggacc ggttttccgg gagcggcagc ggcaccgatt tcaccttgaa aatctccgc	720
gtggaagccg aggacgtggg cgtgtactat tgcattgcagg ccctgcagac tcccaccttc	780
ggccccgggaa ctaaggctga catcaagacc actaccccag caccgaggcc acccaccg	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcatgtag acccgagct	900
ggtggggccg tgcatacccg gggctttgac ttcgcctgcg atatctacat ttggggccct	960
ctggctggta cttgcgggggt cctgctgctt tctctcgtga tctctcttta ctgtaagcgc	1020
ggtcgggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctaca agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

_SL

<210> 501

<211> 492

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 501

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val
20 25 30

Val Gln Pro Gly Lys Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ile Phe Ala Met His Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ala Thr Ile Ser Tyr Asp Gly Ser Asn Ala Phe
65 70 75 80

Tyr Ala Asp Ser Val Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asp Ser Leu Tyr Leu Gln Met Asp Ser Leu Arg Pro Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Val Lys Ala Gly Asp Gly Gly Tyr Asp Val Phe
115 120 125

Asp Ser Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Gly
130 135 140

_SL

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
145 150 155 160

Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro
165 170 175

Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly
180 185 190

Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln
195 200 205

Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg
210 215 220

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg
225 230 235 240

Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln
245 250 255

Thr Pro Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

_SL

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu
385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 502

<211> 269

<212> PRT

<213> Artificial Sequence

<220>

<221> source

_SL

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 502

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val
20 25 30

Val Gln Pro Gly Lys Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ile Phe Ala Met His Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ala Thr Ile Ser Tyr Asp Gly Ser Asn Ala Phe
65 70 75 80

Tyr Ala Asp Ser Val Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asp Ser Leu Tyr Leu Gln Met Asp Ser Leu Arg Pro Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Val Lys Ala Gly Asp Gly Gly Tyr Asp Val Phe
115 120 125

Asp Ser Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
145 150 155 160

Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro
165 170 175

Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser ^{SL}Leu Leu His Ser Asn Gly
 180 185 190

Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln
 195 200 205

Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg
 210 215 220

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg
 225 230 235 240

Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln
 245 250 255

Thr Pro Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
 260 265

<210> 503
 <211> 120
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 503
 Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Lys
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ile Phe
 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ala Thr Ile Ser Tyr Asp Gly Ser Asn Ala Phe Tyr Ala Asp Ser Val

50

55

_SL

60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asp Ser Leu Tyr
65 70 75 80

Leu Gln Met Asp Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Val Lys Ala Gly Asp Gly Gly Tyr Asp Val Phe Asp Ser Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 504

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 504

Glu Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

_SL

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

Leu Gln Thr Pro Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
100 105 110

<210> 505
<211> 1467
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 505
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cccgaagtgc aattggtgga atctggagga ggattggtgc aacctggagg atctctgaga 120
ctgtcatgtg ccgccagcgg cttcacattt tcctcctacg cgatgtcatg ggtccgccag 180
gcaccgggga aaggactgga atgggtgtcc gccatttcgg gatcgggagg ctcgacctac 240
tacgccgaca gcgtgaaggg aagattcact atctcccggg ataactcaa gaataactctg 300
tatctccaaa tgaactccct gagggccgag gatactgccg tgtactactg cgctaaggaa 360
accgactact acggctcagg aaccttcgac tactggggcc agggcaccct cgtgaccgtg 420
tcctcggcct ccggcggcgg aggttcgggg gggggcggtt ccgggggagg gggcagcgac 480
atccagatga ccagtcccc aagctccctt tccgcgtccg tgggagatcg cgtgaccatt 540
tcgtgccggg ctagccaggg catcgggtatc tatcttgctg ggtaccagca gcggagcgga 600
aagccgcccc agctgctgat ccacggcgcc tcaactctgc aatccgggggt cccagccgg 660
ttcagcggtg gcgggtcggg taccgacttt accctgacta tctcctccct ccaaccggag 720
gacttcgcct cctactggtg ccagcagtcc aacaacttcc ctcccacctt cggccaggga 780
acgaaggtcg agattaagac cactacccca gcaccgaggc caccaccccc ggctcctacc 840

_SL

atcgctccc agcctctgtc cctgcgtccg gaggcattga gacccgcagc tggtagggcc 900
gtgcataccc ggggtcttga cttgcctgc gatattaca tttgggcccc tctggctggt 960
acttgcgggg tcctgctgct ttcactcgtg atcactcttt actgtaagcg cggtcggaag 1020
aagctgctgt acatctttaa gcaacccttc atgaggcctg tgcagactac tcaagaggag 1080
gacggctgtt catgccggtt cccagaggag gaggaaggcg gctgcgaact gcgcgtgaaa 1140
ttcagccgca gcgcagatgc tccagcctac aagcaggggc agaaccagct ctacaacgaa 1200
ctcaatcttg gtcggagaga ggagtacgac gtgctggaca agcggagagg acgggaccca 1260
gaaatgggcg ggaagccgag cagaaagaat cccaagagg gcctgtacaa cgagctccaa 1320
aaggataaga tggcagaagc ctatagcgag attggtatga aaggggaacg cagaagaggc 1380
aaaggccacg acggactgta ccagggactc agcaccgcca ccaaggacac ctatgacgct 1440
cttcacatgc aggcctgcc gcctcgg 1467

<210> 506

<211> 489

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 506

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys

50					55					_SL 60					
Gly 65	Leu	Glu	Trp	Val	Ser 70	Ala	Ile	Ser	Gly	Ser 75	Gly	Gly	Ser	Thr	Tyr 80
Tyr	Ala	Asp	Ser	Val 85	Lys	Gly	Arg	Phe	Thr 90	Ile	Ser	Arg	Asp	Asn 95	Ser
Lys	Asn	Thr	Leu 100	Tyr	Leu	Gln	Met	Asn 105	Ser	Leu	Arg	Ala	Glu 110	Asp	Thr
Ala	Val	Tyr 115	Tyr	Cys	Ala	Lys	Glu 120	Thr	Asp	Tyr	Tyr	Gly 125	Ser	Gly	Thr
Phe	Asp 130	Tyr	Trp	Gly	Gln	Gly 135	Thr	Leu	Val	Thr	Val 140	Ser	Ser	Ala	Ser
Gly 145	Gly	Gly	Gly	Ser	Gly 150	Gly	Gly	Gly	Ser	Gly 155	Gly	Gly	Gly	Ser	Asp 160
Ile	Gln	Met	Thr	Gln 165	Ser	Pro	Ser	Ser	Leu 170	Ser	Ala	Ser	Val	Gly 175	Asp
Arg	Val	Thr	Ile 180	Ser	Cys	Arg	Ala	Ser 185	Gln	Gly	Ile	Gly	Ile 190	Tyr	Leu
Ala	Trp	Tyr 195	Gln	Gln	Arg	Ser	Gly 200	Lys	Pro	Pro	Gln	Leu 205	Leu	Ile	His
Gly	Ala 210	Ser	Thr	Leu	Gln	Ser 215	Gly	Val	Pro	Ser	Arg 220	Phe	Ser	Gly	Ser
Gly 225	Ser	Gly	Thr	Asp	Phe 230	Thr	Leu	Thr	Ile	Ser 235	Ser	Leu	Gln	Pro	Glu 240
Asp	Phe	Ala	Ser	Tyr	Trp	Cys	Gln	Gln	Ser	Asn	Asn	Phe	Pro	Pro	Thr

435

440

_SL

445

Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp
 450 455 460

Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala
 465 470 475 480

Leu His Met Gln Ala Leu Pro Pro Arg
 485

<210> 507

<211> 266

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 507

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
 85 90 95

_SL

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Glu Thr Asp Tyr Tyr Gly Ser Gly Thr
115 120 125

Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
145 150 155 160

Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
165 170 175

Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Gly Ile Gly Ile Tyr Leu
180 185 190

Ala Trp Tyr Gln Gln Arg Ser Gly Lys Pro Pro Gln Leu Leu Ile His
195 200 205

Gly Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
210 215 220

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
225 230 235 240

Asp Phe Ala Ser Tyr Trp Cys Gln Gln Ser Asn Asn Phe Pro Pro Thr
245 250 255

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
260 265

<210> 508

<211> 121

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 508

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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Glu Thr Asp Tyr Tyr Gly Ser Gly Thr Phe Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 509

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

_SL

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 509

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 Gly Ile Gly Ile Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Arg Ser Gly Lys Pro Pro Gln Leu Leu Ile
35 40 45

His Gly 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 Phe Ala Ser Tyr Trp Cys Gln Gln Ser Asn Asn Phe Pro Pro
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 510

<211> 1467

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 510

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

ccccaagtcc aactcgtcca gtccggtgca gaagtcaaga agccaggagc ctccgtgaga 120

gtgtcgtgca aagcgtccgg ctacatgttc accgactttt tcattcactg ggtgcgccag 180

_SL

gcgcccggac agggctctgga gtggatgggg tggatcaacc ctaactccgg cgtgactaaa 240
tacgcccaga agttccaggg ccgctgacc atgacccgga acactagcat ctccaccgcc 300
tacatggaac tgtcatccct ccggtccgag gataccgccg tgtactactg cgccacctgg 360
tacagcagcg gttggtacgg catcgcgaac atttggggac aggggactat ggtcaccgtg 420
tcatccgcct ccgggggagg aggggtccggc ggcgagggtt ctggaggagg cggctcggac 480
atccagttga cgcagagccc ctctgcgctg agcgccctccg tgggcgacag agtgaccatt 540
acctgtcaag cttcccatga tatctcgaac tacctccact ggtatcagca gaagccggga 600
aaggctccca agctgctgat ctacgacgcc tccaatctgg aaaccggagt gccgagccgg 660
ttcactggat cagggagcgg cactgacttc accctgacaa ttaggtcgct gcagccggag 720
gatgtggcag cctactactg ccaacagtca gacgaccttc ctcacacttt cggacaaggg 780
actaaggctcg acatcaagac cactacccca gcaccgaggc caccaccccc ggctcctacc 840
atcgccctccc agcctctgtc cctgcgtccg gaggcattgta gacccgcagc tgggtggggcc 900
gtgcataccc ggggtcttga cttcgcctgc gatatctaca tttgggcccc tctggctggt 960
acttgcgggg tcctgctgct ttcactcgtg atcactcttt actgtaagcg cggtcgggaag 1020
aagctgctgt acatctttaa gcaacccttc atgaggcctg tgcagactac tcaagaggag 1080
gacggctgtt catgccggtt cccagaggag gaggaaggcg gctgcgaact gcgctgaaa 1140
ttcagccgca gcgcagatgc tccagcctac aagcaggggc agaaccagct ctacaacgaa 1200
ctcaatcttg gtcggagaga ggagtacgac gtgctggaca agcggagagg acgggaccca 1260
gaaatgggcg ggaagccgcg cagaaaagaat cccaagagg gcctgtacaa cgagctccaa 1320
aaggataaga tggcagaagc ctatagcgag attggtatga aaggggaacg cagaagaggc 1380
aaaggccacg acggactgta ccagggactc agcaccgcca ccaaggacac ctatgacgct 1440
cttcacatgc aggccctgcc gcctcgg 1467

<210> 511

<211> 489

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 511

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Met Phe Thr Asp Phe Phe Ile His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Val Thr Lys
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser
85 90 95

Ile Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Thr Trp Tyr Ser Ser Gly Trp Tyr Gly Ile
115 120 125

Ala Asn Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
145 150 155 160

_SL

Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
165 170 175

Arg Val Thr Ile Thr Cys Gln Ala Ser His Asp Ile Ser Asn Tyr Leu
180 185 190

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
195 200 205

Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Thr Gly Ser
210 215 220

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Arg Ser Leu Gln Pro Glu
225 230 235 240

Asp Val Ala Ala Tyr Tyr Cys Gln Gln Ser Asp Asp Leu Pro His Thr
245 250 255

Phe Gly Gln Gly Thr Lys Val Asp Ile Lys Thr Thr Thr Pro Ala Pro
260 265 270

Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
275 280 285

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
290 295 300

Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
305 310 315 320

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys
325 330 335

Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg
340 345 350

_SL

Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro
355 360 365

Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser
370 375 380

Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu
385 390 395 400

Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg
405 410 415

Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln
420 425 430

Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr
435 440 445

Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp
450 455 460

Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala
465 470 475 480

Leu His Met Gln Ala Leu Pro Pro Arg
485

<210> 512

<211> 266

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 512

Met Ala Leu Pro Val Thr Ala Leu Leu Leu ^{SL}Pro Leu Ala Leu Leu Leu
1 5 10 15
His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30
Lys Lys Pro Gly Ala Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45
Met Phe Thr Asp Phe Phe Ile His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60
Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Val Thr Lys
65 70 75 80
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser
85 90 95
Ile Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110
Ala Val Tyr Tyr Cys Ala Thr Trp Tyr Ser Ser Gly Trp Tyr Gly Ile
115 120 125
Ala Asn Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser
130 135 140
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
145 150 155 160
Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp
165 170 175
Arg Val Thr Ile Thr Cys Gln Ala Ser His Asp Ile Ser Asn Tyr Leu
180 185 190

His Trp Tyr Gln Gln Lys Pro Gly Lys Ala ^{_SL}Pro Lys Leu Leu Ile Tyr
195 200 205

Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Thr Gly Ser
210 215 220

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Arg Ser Leu Gln Pro Glu
225 230 235 240

Asp Val Ala Ala Tyr Tyr Cys Gln Gln Ser Asp Asp Leu Pro His Thr
245 250 255

Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
260 265

<210> 513
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 513
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Met Phe Thr Asp Phe
20 25 30

Phe 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 Val Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr

65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Thr Trp Tyr Ser Ser Gly Trp Tyr Gly Ile Ala Asn Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

_SL

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

<210> 515

<211> 1464

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 515

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ccccaagtgc aactcgtcca gtccggtgca gaagtgaaaa agccaggaga aagcctcaag      120
atcagctgca agggatctgg gtacagcttc accaactact ggatcggctg ggtgcgccag      180
atgcccggaa agggactgga gtggatgggc attatctacc ctggggactc cgacacccgg      240
tattccccga gcttccaagg acaggtcacc atctccgccg ataagtcgat tagcactgcg      300
tacttgcaat ggtcaagcct gaaggcctcg gacaccgcca tgtactactg cgcgagacac      360
gggccctcgt cctggggcga atttgactac tggggccagg gaacgcttgt gaccgtgtcg      420
tccgcgtccg ggggtggagg atcaggagga ggaggctccg gtggtggcgg tagcgacatc      480
cggctgactc agtccccctt ctcactctcc gcctccgtgg gggaccgcgt gaccattacc      540
tgtcgggcat cacagtccat cagctcatac ctgaactggg atcagcagaa gccggggaag      600
gccccgaaac tcctgatcta cgccgcctcc tccctgcaat ccggcgtgcc ctcgagggtc      660
tccggctccg gctcgggaac cgatttcact ctgacaatta gcagcctgca gcctgaggat      720
ttcgtacat actactgcca gcagtcctac tcgactccgc tgactttcgg cgggggaacc      780
aaggctgaca tcaagaccac taccacagca ccgaggccac ccaccccggc tcctaccatc      840
gcctcccagc ctctgtccct gcgtccggag gcatgtagac ccgcagctgg tggggccgtg      900
catacccggg gtcttgactt cgcctgcgat atctacattt gggcccctct ggctggtact      960
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_SL

tgcggggtcc tgctgctttc actcgtgatc actctttact gtaagcgcgg tcggaagaag 1020
ctgctgtaca tctttaagca acccttcatg aggcctgtgc agactactca agaggaggac 1080
ggctgttcat gccggttccc agaggaggag gaaggcggct gcgaactgcg cgtgaaattc 1140
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aatcttggtc ggagagagga gtacgacgtg ctggacaagc ggagaggacg ggacccagaa 1260
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gataagatgg cagaagccta tagcgagatt ggtatgaaag gggaacgcag aagaggcaaa 1380
ggccacgacg gactgtacca gggactcagc accgccacca aggacaccta tgacgtcttt 1440
cacatgcagg ccctgccgcc tcgg 1464

<210> 516

<211> 488

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 516

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr
35 40 45

Ser Phe Thr Asn Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys
50 55 60

Gly Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg

65		70		<u>SL</u> 75		80									
Tyr	Ser	Pro	Ser	Phe	Gln	Gly	Gln	Val	Thr	Ile	Ser	Ala	Asp	Lys	Ser
				85					90					95	
Ile	Ser	Thr	Ala	Tyr	Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr
			100					105						110	
Ala	Met	Tyr	Tyr	Cys	Ala	Arg	His	Gly	Pro	Ser	Ser	Trp	Gly	Glu	Phe
		115					120					125			
Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala	Ser	Gly
	130					135					140				
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Asp	Ile
145					150					155					160
Arg	Leu	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly	Asp	Arg
				165					170					175	
Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Ser	Ile	Ser	Ser	Tyr	Leu	Asn
			180						185					190	
Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile	Tyr	Ala
		195					200					205			
Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly	Ser	Gly
	210					215					220				
Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro	Glu	Asp
225					230					235					240
Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Ser	Tyr	Ser	Thr	Pro	Leu	Thr	Phe
				245					250						255
Gly	Gly	Gly	Thr	Lys	Val	Asp	Ile	Lys	Thr	Thr	Thr	Pro	Ala	Pro	Arg

_SL

260

265

270

Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg
275 280 285

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
290 295 300

Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr
305 310 315 320

Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg
325 330 335

Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro
340 345 350

Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu
355 360 365

Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala
370 375 380

Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
385 390 395 400

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
405 410 415

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
420 425 430

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
435 440 445

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly

450

455

_SL

460

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
 465 470 475 480

His Met Gln Ala Leu Pro Pro Arg
 485

<210> 517

<211> 265

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 517

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr
 35 40 45

Ser Phe Thr Asn Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg
 65 70 75 80

Tyr Ser Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser
 85 90 95

Ile Ser Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr
 100 105 110

_SL

Ala Met Tyr Tyr Cys Ala Arg His Gly Pro Ser Ser Trp Gly Glu Phe
115 120 125

Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
145 150 155 160

Arg Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg
165 170 175

Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn
180 185 190

Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala
195 200 205

Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
210 215 220

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
225 230 235 240

Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Leu Thr Phe
245 250 255

Gly Gly Gly Thr Lys Val Asp Ile Lys
260 265

<210> 518

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 518

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Asn Tyr
20 25 30

Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
50 55 60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg His Gly Pro Ser Ser Trp Gly Glu Phe Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 519

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 519

Asp Ile Arg Leu Thr Gln Ser Pro Ser Ser ^{SL}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 Leu
 85 90 95
 Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys
 100 105

<210> 520

<211> 750

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 520

caagtgaac tcgtccagtc cgggtgcagaa gtcaagaagc caggagaatc actcaagatt 60

agctgcaaag gcagcggcta ctctttcact tcctactgga tcggctgggt gcgccagatg 120

cccggaaaagg gactggagtg gatgggaatc atctaccctg gcgatagcga caccagatac 180

tccccgagct ttcaaggcca agtgaccatt tcggccgaca agtcgatctc caccgcgtat 240

ctgcagtgga gctcactgaa ggcttcggac accgccatgt actactgtgc ccggctgggg 300

_SL

ggaagcctgc ccgattacgg aatggacgtg tggggccagg gaaccatggt cactgtgtcc 360
tccgcctccg ggggtggagg ctccgggtgga ggggggtccg gtggtggagg atcagaaatt 420
gtgctgaccc agtctccgct gtccttgctt gtgaccccg gcgaacccgc aagcatctcc 480
tgccggctgt cgcagtccct gcttactctc aacggctaca actacctcga ttggtacctc 540
cagaagcctg gacagagccc acagctgttg atctacctgg gctcgaaccg ggcctcagga 600
gtgccggaca ggttctccgg ctccgggtcg ggaaccgact tcacgctgaa gatctcccg 660
gtggaggccg aggacgtggg cgtgtactat tgcattgcagg cgctgcagac ccttattaca 720
ttcggacagg ggactaaggt cgatatcaag 750

<210> 521

<211> 250

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 521

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
20 25 30

Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
50 55 60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

_SL

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg Leu Gly Gly Ser Leu Pro Asp Tyr Gly Met Asp Val Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln
130 135 140

Ser Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser
145 150 155 160

Cys Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu
165 170 175

Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr
180 185 190

Leu Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu
210 215 220

Asp Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln Thr Leu Ile Thr
225 230 235 240

Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
245 250

<210> 522

<211> 753

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 522

```
caagtccaac tcgtccaatc aggagctgaa gtcaagaagc ctggagcatc cgtgagagtg      60
tcctgtaaag cctccggcta catcttcacc aactactacg tgcactgggt cagacaggcc      120
ccgggccagg gactggaatg gatgggaatc atttccccgt ccggcggatc gcctacttac      180
gcgcaacggc tgcagggccg cgtgaccatg actcgggatc tctccacttc aaccgtgtac      240
atggaactgt ccagccttac atcggaggat actgccgtgt acttctgcgc gagggagtcc      300
cggctgaggg gcaaccgcct cgggctgcag tcaagcatct tcgatcactg gggccagggc      360
accctcgtga ccgtgtccag cgcctcgggg ggaggaggct ccgggggcgg aggttcgggc      420
ggtggtggat ctgacattcg catgactcag tccccacctt cactgtccgc tagcgtgggg      480
gaccgcgtga cgattccgtg ccaagccagc caggacatca acaaccatct gaactggtat      540
cagcagaagc ccggaaaggc cccgcagctg ctgatctacg acacctcgaa tctggagatc      600
ggcgtgccat cccggttctc cggttcggga agcggaaccg actttaccct gactatctcc      660
tccttgcaac ccgaggacat tgccacctac tactgccagc agtacgaaaa ctttcccctg      720
accttcgggg gtggaaccaa agtggagatc aag                                     753
```

<210> 523

<211> 251

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 523

```
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1           5           10          15
```

_SL

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Thr Asn Tyr
20 25 30

Tyr Val His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Ser Pro Ser Gly Gly Ser Pro Thr Tyr Ala Gln Arg Leu
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Leu Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Phe Cys
85 90 95

Ala Arg Glu Ser Arg Leu Arg Gly Asn Arg Leu Gly Leu Gln Ser Ser
100 105 110

Ile Phe Asp His Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
130 135 140

Asp Ile Arg Met Thr Gln Ser Pro Pro Ser Leu Ser Ala Ser Val Gly
145 150 155 160

Asp Arg Val Thr Ile Pro Cys Gln Ala Ser Gln Asp Ile Asn Asn His
165 170 175

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Gln Leu Leu Ile
180 185 190

Tyr Asp Thr Ser Asn Leu Glu Ile Gly Val Pro Ser Arg Phe Ser Gly
195 200 205

_SL

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
210 215 220

Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Glu Asn Leu Pro Leu
225 230 235 240

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
245 250

<210> 524

<211> 750

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 524

```
caagtgcagc tcgtccaatc cgggtgcagaa gtgaagaagc ctggcgaatc cctgaagatc      60
tcatgcaaag gctcgggata cagcttcacc tcatattgga ttggatgggt cagacagatg      120
ccaggaaagg gtctggagtg gatgggaatc atctaccgga gagacagcga taccgggtac      180
tccccgagct tccagggaca ggtcaccatc tcggccgaca agtccattac tactgcctac      240
ttgcaatggg cctcgctgcg cgcctccgat agcgccatgt actactgctg gagaggcggc      300
tactccgact acgactacta cttcgatttc tggggacagg ggacactcgt gactgtgtcc      360
tccgcgtcgg gtggcggcgg ctcgggtgga ggaggaagcg gagggggagg ctccgaaatt      420
gtgatgaccc agtcacccct gtcgctccct gtgactcctg gggaaccggc ctccatctcc      480
tgccggagct cacagagcct gctgcactcc aacggataca actacctcga ttggtacctt      540
cagaagcccc gccagtcgcc ccagctgctg atctacctgg ggtccaaccg ggctagcggc      600
gtgccggacc gtttctccgg ttccgggtct ggaaccgact tcacgctgaa aatctccagg      660
gtggaggccg aggacgtggg agtgtattac tgtatgcagg ccctgcaaac ccccttcacc      720
```

_SL

tttggcgggg gcaccaaggt cgagattaag

750

<210> 525

<211> 250

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 525

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
20 25 30

Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
50 55 60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Thr Thr Ala Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Arg Ala Ser Asp Ser Ala Met Tyr Tyr Cys
85 90 95

Ala Arg Gly Gly Tyr Ser Asp Tyr Asp Tyr Tyr Phe Asp Phe Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln

130			135			_SL			140						
Ser 145	Pro	Leu	Ser	Leu	Pro 150	Val	Thr	Pro	Gly	Glu 155	Pro	Ala	Ser	Ile	Ser 160
Cys	Arg	Ser	Ser	Gln 165	Ser	Leu	Leu	His	Ser 170	Asn	Gly	Tyr	Asn	Tyr 175	Leu
Asp	Trp	Tyr	Leu 180	Gln	Lys	Pro	Gly	Gln 185	Ser	Pro	Gln	Leu	Leu 190	Ile	Tyr
Leu	Gly	Ser 195	Asn	Arg	Ala	Ser	Gly 200	Val	Pro	Asp	Arg	Phe 205	Ser	Gly	Ser
Gly 210	Ser	Gly	Thr	Asp	Phe	Thr 215	Leu	Lys	Ile	Ser	Arg 220	Val	Glu	Ala	Glu
Asp 225	Val	Gly	Val	Tyr	Tyr 230	Cys	Met	Gln	Ala	Leu 235	Gln	Thr	Pro	Phe	Thr 240
Phe	Gly	Gly	Gly	Thr 245	Lys	Val	Glu	Ile	Lys 250						

_SL

```

ggagacagcg tgaaagggcg gttcaccgtg tcgagggaca acccgaagaa taccctctac      240
cttcaaatga actccctgcg cgccgaggac accgcgatct actactgcgt gcgccacttt      300
aacgcatggg attactgggg acaggggact ctggtcactg tgtcctccgc ctctggcggc      360
ggaggttccg gcggtggtgg ctccggtgga ggaggatcgg acatccagct gacccagtcc      420
ccttcctcac tgtcggcgta cgtgggaggc cgggtcacta tcacgtgcca ggcatcccag      480
ggcattttccc agttcctgaa ctggttccag cagaagcccg gaaaggcccc taagctgttg      540
atttccgatg ctagcaacct ggaacccggc gtgccgtcac gggtcagcgg ctccgggtcg      600
ggcaccgact tcaccttcac catcactaac ctccaaccgg aggacatcgc cacctattac      660
tgccagcagt acgatgatct gccactgact ttcggcggcg gaaccaaggt cgaaatcaag      720

```

<210> 527

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 527

```

Gln Val Gln Leu Val Gln Ser Gly Gly Asp Leu Ala 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 Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35          40          45

```

```

Ala Val Ile Trp Pro Asp Gly Gly Gln Lys Tyr Tyr Gly Asp Ser Val
          50          55          60

```

```

Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Pro Lys Asn Thr Leu Tyr
65          70          75          80

```

_SL

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Ile Tyr Tyr Cys
85 90 95

Val Arg His Phe Asn Ala Trp Asp Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu
130 135 140

Ser Ala Tyr Val Gly Gly Arg Val Thr Ile Thr Cys Gln Ala Ser Gln
145 150 155 160

Gly Ile Ser Gln Phe Leu Asn Trp Phe Gln Gln Lys Pro Gly Lys Ala
165 170 175

Pro Lys Leu Leu Ile Ser Asp Ala Ser Asn Leu Glu Pro Gly Val Pro
180 185 190

Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile
195 200 205

Thr Asn Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr
210 215 220

Asp Asp Leu Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
225 230 235 240

<210> 528

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 528

```
caagtgaac tcgtccaatc cggtaggtggt gtcgtgaac caggaaagtc tcttcgcctc      60
tcattgcgtg ccagcggatt cacgttttcc atcttcgcta tgcactgggt gcggcaggcc      120
ccgggaaaagg gactggaatg ggtggcaacc atttcatacg atggatcaaa cgcgttctac      180
gccgactccg tggaaggaag gttcaccatc tcgagagaca actccaagga ctcgctgtat      240
ctgcaaatgg actccctgcg ccctgaggat accgccgtct actactgcgt gaaggccggc      300
gacgggggat acgacgtgtt cgattcgtgg ggccaggga ctctgggtcac cgtgtccagc      360
gcgagcgggg gaggcggatc gggtaggtga ggggtccgggg gaggaggctc cgagatcgtg      420
atgactcagt cgccgtctc cctccccgtg acccccggag agccagctag catttcatgt      480
cggagctccc agtccctgct gcactccaac ggctacaatt acctggattg gtacttgtag      540
aagcctgggc agagccctca gctgctgac tacctcggct cgaacagagc ctccggcgtg      600
ccggaccggt tttccgggag cggcagcggc accgatttca ccttgaaaat ctcccgcgtg      660
gaagccgagg acgtgggcgt gtactattgc atgcaggccc tgcagactcc caccttcggc      720
ccgggaacta aggtcgacat caag                                         744
```

<210> 529

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 529

```
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Lys
1           5           10          15
```

```
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ile Phe
```

_SL

20

25

30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Thr Ile Ser Tyr Asp Gly Ser Asn Ala Phe Tyr Ala Asp Ser Val
50 55 60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asp Ser Leu Tyr
65 70 75 80

Leu Gln Met Asp Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Val Lys Ala Gly Asp Gly Gly Tyr Asp Val Phe Asp Ser Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser
130 135 140

Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys
145 150 155 160

Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp
165 170 175

Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu
180 185 190

Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp

210

215

_SL

220

Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln Thr Pro Thr Phe Gly
 225 230 235 240

Pro Gly Thr Lys Val Asp Ile Lys
 245

<210> 530

<211> 735

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 530

gaagtgcaat tgggtggaatc tggaggagga ttggtgcaac ctggaggatc tctgagactg	60
tcatgtgccg ccagcggctt cacattttcc tcctacgcga tgtcatgggt ccgccaggca	120
ccgggggaaag gactggaatg ggtgtccgcc atttcgggat cgggaggctc gacctactac	180
gccgacagcg tgaagggaag attcactatc tcccgggata actccaagaa tactctgtat	240
ctccaaatga actccctgag ggccgaggat actgccgtgt actactgcgc taaggaaacc	300
gactactacg gctcaggaac cttcgactac tggggccagg gcaccctcgt gaccgtgtcc	360
tcggcctccg gcggcggagg ttcggggggg ggcggttccg ggggaggggg cagcgacatc	420
cagatgaccc agtccccaag ctccctttcc gcgtccgtgg gagatcgcgt gaccatttcg	480
tgccgggcta gccagggcac cggtatctat cttgcgtgg accagcagcg gagcggaaag	540
ccgccccagc tgctgatcca cggcgctca actctgcaat ccggggtccc cagccggttc	600
agcggtagcg ggtcgggtac cgactttacc ctgactatct cctccctcca accggaggac	660
ttgcctcct actggtgcca gcagtccaac aacttccctc ccaccttcgg ccagggaacg	720
aaggtcgaga ttaag	735

_SL

<210> 531

<211> 245

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 531

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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Glu Thr Asp Tyr Tyr Gly Ser Gly Thr Phe Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln
130 135 140

Ser Pro Ser Ser Leu Ser Ala Ser Val Gly ^{_SL} Asp Arg Val Thr Ile Ser
 145 150 155 160

Cys Arg Ala Ser Gln Gly Ile Gly Ile Tyr Leu Ala Trp Tyr Gln Gln
 165 170 175

Arg Ser Gly Lys Pro Pro Gln Leu Leu Ile His Gly Ala Ser Thr Leu
 180 185 190

Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
 195 200 205

Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Ser Tyr
 210 215 220

Trp Cys Gln Gln Ser Asn Asn Phe Pro Pro Thr Phe Gly Gln Gly Thr
 225 230 235 240

Lys Val Glu Ile Lys
 245

<210> 532
 <211> 732
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 532
 caagtgaac tcgtccagtc cggcgcagaa gtgaaaaagc caggagaaag cctcaagatc 60
 agctgcaagg gatctgggta cagcttcacc aactactgga tcggctgggt gcgccagatg 120
 cccggaaaagg gactggagtg gatgggcatt atctaccctg gggactccga caccggtat 180
 tccccgagct tccaaggaca ggatcaccatc tccgccgata agtcgattag cactgcgtac 240
 ttgcagtggg caagcctgaa ggcctcggac accgccatgt actactgcgc gagacacggg 300

_SL

ccctcgtcct ggggcgaatt tgactactgg ggccagggaa cgcttgtagac cgtgtcgtcc 360
gcgtccgggg gtggaggatc aggaggagga ggctccgggtg gtggcggttag cgacatccgg 420
ctgactcagt ccccttcctc actctccgcc tccgtggggg accgcgtgac cattacctgt 480
cgggcatcac agtccatcag ctcatacctg aactggatc agcagaagcc ggggaaggcc 540
ccgaaactcc tgatctacgc cgcctcctcc ctgcaatccg gcgtgccctc gaggttctcc 600
ggctccggct cgggaaccga tttcactctg acaattagca gcctgcagcc tgaggatttc 660
gctacctact actgccagca gtcctactcg actccgctga ctttcggcgg gggaaccaag 720
gtcgacatca ag 732

<210> 533

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 533

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Asn Tyr
20 25 30

Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
50 55 60

Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
65 70 75 80

_SL

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg His Gly Pro Ser Ser Trp Gly Glu Phe Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Arg Leu Thr Gln Ser
130 135 140

Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
145 150 155 160

Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys
165 170 175

Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln
180 185 190

Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
195 200 205

Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr
210 215 220

Cys Gln Gln Ser Tyr Ser Thr Pro Leu Thr Phe Gly Gly Gly Thr Lys
225 230 235 240

Val Asp Ile Lys

<210> 534

<211> 244

<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 534

Gln Val Gln Leu Gln 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 Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Arg Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Arg Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Met
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser
130 135 140

Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Ile Ser Cys
145 150 155 160

Arg Ala Ser Gln Ser Val Ser Ser Asn Phe ^{_SL}Ala Trp Tyr Gln Gln Arg
165 170 175

Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Asp Ala Ser Asn Arg Ala
180 185 190

Thr Gly Ile Pro Pro Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
195 200 205

Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Ala Tyr Tyr
210 215 220

Cys His Gln Arg Ser Asn Trp Leu Tyr Thr Phe Gly Gln Gly Thr Lys
225 230 235 240

Val Asp Ile Lys

<210> 535

<211> 488

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 535

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln

435

440

_SL

445

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
 450 455 460

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
 465 470 475 480

His Met Gln Ala Leu Pro Pro Arg
 485

<210> 536

<211> 253

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 536

Gln Val Gln 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 Met 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 Gly Thr Asn Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

_SL

Ala Arg Asp Leu Arg Arg Thr Val Val Thr Pro Arg Ala Tyr Tyr Gly
100 105 110

Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser
145 150 155 160

Val Gly Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Ser
165 170 175

Asn Ser Leu Asn Trp Tyr Gln Gln Lys Ala Gly Lys Ala Pro Lys Leu
180 185 190

Leu Ile Tyr Asp Ala Ser Thr Leu Glu Thr Gly Val Pro Ser Arg Phe
195 200 205

Ser Gly Ser Gly Ser Gly Thr Asp Phe Ser Phe Thr Ile Ser Ser Leu
210 215 220

Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln His Asp Asn Leu
225 230 235 240

Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
245 250

<210> 537

<211> 497

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 537

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
85 90 95

Ile Ser Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Leu Arg Arg Thr Val Val Thr Pro
115 120 125

Arg Ala Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
130 135 140

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
145 150 155 160

Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser
165 170 175

_SL

Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Gln Ala
180 185 190

Ser Gln Asp Ile Ser Asn Ser Leu Asn Trp Tyr Gln Gln Lys Ala Gly
195 200 205

Lys Ala Pro Lys Leu Leu Ile Tyr Asp Ala Ser Thr Leu Glu Thr Gly
210 215 220

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Ser Phe
225 230 235 240

Thr Ile Ser Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln
245 250 255

Gln His Asp Asn Leu Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu
260 265 270

Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr
275 280 285

Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala
290 295 300

Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile
305 310 315 320

Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser
325 330 335

Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr
340 345 350

Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu
355 360 365

_SL

Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu
370 375 380

Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln
385 390 395 400

Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu
405 410 415

Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly
420 425 430

Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln
435 440 445

Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu
450 455 460

Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr
465 470 475 480

Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro
485 490 495

Arg

<210> 538

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 538

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Pro Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr
 20 25 30

Tyr Met 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 Gly Thr Asn Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Glu Trp Asp Gly Ser Tyr Tyr Tyr Asp Tyr Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Leu
 130 135 140

Thr Gln Thr Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 145 150 155 160

Ile Thr Cys Arg Ala Ser Gln Ser Ile Asn Thr Tyr Leu Asn Trp Tyr
 165 170 175

Gln His Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser
 180 185 190

Ser Leu Gln Ser Gly Val Pro Ser Arg Phe ^{_SL}Ser Gly Ser Gly Ser Gly
 195 200 205

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 210 215 220

Thr Tyr Tyr Cys Gln Gln Ser Phe Ser Pro Leu Thr Phe Gly Gly Gly
 225 230 235 240

Thr Lys Leu Glu Ile Lys
 245

<210> 539
 <211> 490
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 539
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ala Pro Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln
 50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn
 65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser

_SL

275

280

285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp

465 470 SL 475 480

470

SL
475

480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

490

<210> 540

<211> 242

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 540

Gln 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 Phe Ser Ser Tyr
20 25 30

25

30

Trp Met His Trp Val Arg Gln Val Pro Gly Lys Gly Leu Val Trp Val
35 40 45

40

45

Ser Arg Ile Asn Thr Asp Gly Ser Thr Thr Thr Tyr Ala Asp Ser Val
50 55 60

55

60

Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

70

75

80

Leu Gln Met Asn Ser Leu Arg Asp Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

90

95

Val	Gly	Gly	His	Trp	Ala	Val	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr	Val
			100					105					110		

105

110

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

120

125

_SL

Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Thr
130 135 140

Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser
145 150 155 160

Gln Ser Ile Ser Asp Arg Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys
165 170 175

Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu Glu Ser Gly Val
180 185 190

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr
195 200 205

Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Val Tyr Tyr Cys Gln Gln
210 215 220

Tyr Gly His Leu Pro Met Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu
225 230 235 240

Ile Lys

<210> 541

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 541

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

_SL

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Trp Met His Trp Val Arg Gln Val Pro Gly Lys
50 55 60

Gly Leu Val Trp Val Ser Arg Ile Asn Thr Asp Gly Ser Thr Thr Thr
65 70 75 80

Tyr Ala Asp Ser Val Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Asp Asp Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Val Gly Gly His Trp Ala Val Trp Gly Gln Gly
115 120 125

Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr
145 150 155 160

Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
165 170 175

Thr Cys Arg Ala Ser Gln Ser Ile Ser Asp Arg Leu Ala Trp Tyr Gln
180 185 190

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser
195 200 205

_SL

Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
210 215 220

Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Val
225 230 235 240

Tyr Tyr Cys Gln Gln Tyr Gly His Leu Pro Met Tyr Thr Phe Gly Gln
245 250 255

Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro
260 265 270

Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu
275 280 285

Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp
290 295 300

Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly
305 310 315 320

Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg
325 330 335

Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln
340 345 350

Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu
355 360 365

Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala
370 375 380

Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu
385 390 395 400

_SL

Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp
405 410 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 542

<211> 241

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 542

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 Thr Phe Thr Asp Tyr
20 25 30

Tyr Met 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 Gly Thr ^{SL}Asn Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ser Gly Trp Asp Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
 100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Ser Pro Ser
 130 135 140

Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
 145 150 155 160

Ser Gln Ser Ile Arg Tyr Tyr Leu Ser Trp Tyr Gln Gln Lys Pro Gly
 165 170 175

Lys Ala Pro Lys Leu Leu Ile Tyr Thr Ala Ser Ile Leu Gln Asn Gly
 180 185 190

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
 195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu
 210 215 220

Gln Thr Tyr Thr Thr Pro Asp Phe Gly Pro Gly Thr Lys Val Glu Ile
 225 230 235 240

_SL

Lys

<210> 543

<211> 485

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 543

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Glu Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Asp Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
85 90 95

Ile Ser Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Ser Gly Trp Asp Phe Asp Tyr Trp Gly Gln
115 120 125

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 544

Gln Val Gln 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 Ser Tyr
20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Tyr Arg Leu Ile Ala Val Ala Gly Asp Tyr Tyr Tyr Tyr Gly
100 105 110

Met Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
130 135 140

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser
145 150 155 160

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Val Gly
165 170 175

_SL

Arg Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Thr Ala Pro Lys Leu
180 185 190

Leu Ile Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe
195 200 205

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Asn Leu
210 215 220

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Asn Ser Phe
225 230 235 240

Pro Leu Thr Phe Gly Gly Gly Thr Arg Leu Glu Ile Lys
245 250

<210> 545

<211> 497

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 545

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Ser Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

_SL

Gly Leu Glu Trp Met Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
85 90 95

Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Tyr Arg Leu Ile Ala Val Ala Gly Asp
115 120 125

Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Met Val Thr
130 135 140

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
145 150 155 160

Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser
165 170 175

Ser Val Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
180 185 190

Ser Gln Gly Val Gly Arg Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly
195 200 205

Thr Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Thr Leu Gln Ser Gly
210 215 220

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
225 230 235 240

Thr Ile Asn Asn Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln
245 250 255

_SL

Gln Ala Asn Ser Phe Pro Leu Thr Phe Gly Gly Gly Thr Arg Leu Glu
260 265 270

Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr
275 280 285

Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala
290 295 300

Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile
305 310 315 320

Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser
325 330 335

Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr
340 345 350

Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu
355 360 365

Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu
370 375 380

Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln
385 390 395 400

Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu
405 410 415

Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly
420 425 430

Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln
435 440 445

_SL

Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu
450 455 460

Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr
465 470 475 480

Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro
485 490 495

Arg

<210> 546

<211> 250

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 546

Gln Val Gln Leu Val Gln 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

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Val Ile Ser Tyr Asp Gly Ser 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^{SL} Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Trp Lys Val Ser Ser Ser Ser Pro Ala Phe Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val
130 135 140

Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
145 150 155 160

Ile Leu Ser Cys Arg Ala Ser Gln Ser Val Tyr Thr Lys Tyr Leu Gly
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Asp
180 185 190

Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Arg Leu Glu Pro Glu Asp
210 215 220

Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Gly Ser Pro Leu Ile Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
245 250

<210> 547

<211> 494

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 547

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val
20 25 30

Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Trp Lys Val Ser Ser Ser Ser Pro Ala
115 120 125

Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly
130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
145 150 155 160

Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser

_SL

355

360

365

Ser Cys Arg Phe Pro Glu Glu Glu Gly Gly Cys Glu Leu Arg Val
370 375 380

Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn
385 390 395 400

Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val
405 410 415

Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg
420 425 430

Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys
435 440 445

Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg
450 455 460

Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys
465 470 475 480

Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 548

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 548

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

_SL

Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Pro Phe Thr Gly Tyr
20 25 30

Ser Leu 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 Gly Thr Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Asp His Tyr Gly Gly Asn Ser Leu Phe Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Leu Thr
130 135 140

Gln Ser Pro Ser Ser Ile Ser Ala Ser Val Gly Asp Thr Val Ser Ile
145 150 155 160

Thr Cys Arg Ala Ser Gln Asp Ser Gly Thr Trp Leu Ala Trp Tyr Gln
165 170 175

Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Met Tyr Asp Ala Ser Thr
180 185 190

Leu Glu Asp Gly Val Pro Ser Arg Phe Ser Gly Ser Ala Ser Gly Thr
195 200 205

_SL

Glu Phe Thr Leu Thr Val Asn Arg Leu Gln Pro Glu Asp Ser Ala Thr
210 215 220

Tyr Tyr Cys Gln Gln Tyr Asn Ser Tyr Pro Leu Thr Phe Gly Gly Gly
225 230 235 240

Thr Lys Val Asp Ile Lys
245

<210> 549

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 549

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr
35 40 45

Pro Phe Thr Gly Tyr Ser Leu His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
85 90 95

_SL

Ile Ser Thr Ala Tyr Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp His Tyr Gly Gly Asn Ser Leu Phe
115 120 125

Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Ile Ser Ala Ser Val Gly
165 170 175

Asp Thr Val Ser Ile Thr Cys Arg Ala Ser Gln Asp Ser Gly Thr Trp
180 185 190

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Met
195 200 205

Tyr Asp Ala Ser Thr Leu Glu Asp Gly Val Pro Ser Arg Phe Ser Gly
210 215 220

Ser Ala Ser Gly Thr Glu Phe Thr Leu Thr Val Asn Arg Leu Gln Pro
225 230 235 240

Glu Asp Ser Ala Thr Tyr Tyr Cys Gln Gln Tyr Asn Ser Tyr Pro Leu
245 250 255

Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

_SL

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

_SL

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 550

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 550

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Glu Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Gly Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val His
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Gly Tyr Ser Ser Ser Ser Asp Ala Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly ^{SL}Gly Gly Ser Asp Ile Gln
 130 135 140

Met Thr Gln Ser Pro Pro Ser Leu Ser Ala Ser Val Gly Asp Arg Val
 145 150 155 160

Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Ser Ala Leu Ala Trp
 165 170 175

Tyr Gln Gln Lys Pro Gly Thr Pro Pro Lys Leu Leu Ile Tyr Asp Ala
 180 185 190

Ser Ser Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
 195 200 205

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
 210 215 220

Ala Thr Tyr Tyr Cys Gln Gln Phe Ser Ser Tyr Pro Leu Thr Phe Gly
 225 230 235 240

Gly Gly Thr Arg Leu Glu Ile Lys
 245

<210> 551

<211> 492

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 551

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val

_SL

20	25	30
Lys Lys Pro Gly Ala Ser Val Glu Val Ser Cys Lys Ala Ser Gly Tyr		
35	40	45
Thr Phe Thr Ser Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln		
50	55	60
Gly Leu Glu Trp Met Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Gly		
65	70	75
Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser		
85	90	95
Thr Ser Thr Val His Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr		
100	105	110
Ala Val Tyr Tyr Cys Ala Arg Gly Gly Tyr Ser Ser Ser Ser Asp Ala		
115	120	125
Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly		
130	135	140
Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly		
145	150	155
Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Pro Ser Leu Ser Ala Ser		
165	170	175
Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser		
180	185	190
Ser Ala Leu Ala Trp Tyr Gln Gln Lys Pro Gly Thr Pro Pro Lys Leu		
195	200	205
Leu Ile Tyr Asp Ala Ser Ser Leu Glu Ser Gly Val Pro Ser Arg Phe		

_SL

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Ala Gly Gly Ile Tyr Tyr Tyr Tyr Gly Met Asp Val Trp
100 105 110

Gly Gln Gly Thr Thr Ile Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

Val Met Thr Gln Thr Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg
145 150 155 160

Ala Thr Ile Ser Cys Lys Ser Ser His Ser Val Leu Tyr Asn Arg Asn
165 170 175

Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
180 185 190

Lys Leu Leu Phe Tyr Trp Ala Ser Thr Arg Lys Ser Gly Val Pro Asp
195 200 205

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
210 215 220

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Phe Cys Gln Gln Thr Gln
225 230 235 240

Thr Phe Pro Leu Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Asn
245 250 255

_SL

<210> 553
<211> 499
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 553
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Ser Tyr Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn
65 70 75 80

Tyr Ala Gln Lys Leu Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Val Ala Gly Gly Ile Tyr Tyr Tyr Tyr
115 120 125

Gly Met Asp Val Trp Gly Gln Gly Thr Thr Ile Thr Val Ser Ser Gly
130 135 140

_SL

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Asp Ser Leu Ala Val
165 170 175

Ser Leu Gly Glu Arg Ala Thr Ile Ser Cys Lys Ser Ser His Ser Val
180 185 190

Leu Tyr Asn Arg Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys
195 200 205

Pro Gly Gln Pro Pro Lys Leu Leu Phe Tyr Trp Ala Ser Thr Arg Lys
210 215 220

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
225 230 235 240

Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Phe
245 250 255

Cys Gln Gln Thr Gln Thr Phe Pro Leu Thr Phe Gly Gln Gly Thr Arg
260 265 270

Leu Glu Ile Asn Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
275 280 285

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
290 295 300

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
305 310 315 320

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
325 330 335

_SL

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
340 345 350

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
355 360 365

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
370 375 380

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
385 390 395 400

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
405 410 415

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
420 425 430

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
435 440 445

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
450 455 460

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
465 470 475 480

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
485 490 495

Pro Pro Arg

<210> 554
<211> 241
<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 554

Gln Val Gln Leu Gln 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 Met 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 Gly Thr Asn Tyr Ala Gln Asn Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Arg Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ser Gly Trp Asp Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Asp Ile Arg Met Thr Gln Ser Pro Ser
130 135 140

Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala
145 150 155 160

Ser Gln Ser Ile Arg Tyr Tyr Leu Ser Trp Tyr Gln Gln Lys Pro Gly
165 170 175

Lys Ala Pro Lys Leu Leu Ile Tyr Thr Ala Ser Ile Leu Gln Asn Gly
180 185 190

Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
195 200 205

Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu
210 215 220

Gln Thr Tyr Thr Thr Pro Asp Phe Gly Pro Gly Thr Lys Val Glu Ile
225 230 235 240

Lys

<210> 555

<211> 485

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 555

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln

_SL

Ala Arg Thr Thr Thr Ser Tyr Ala Phe Asp Ile Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Leu Thr Gln
130 135 140

Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr
145 150 155 160

Cys Arg Ala Ser Gln Ser Ile Ser Thr Trp Leu Ala Trp Tyr Gln Gln
165 170 175

Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile Tyr Lys Ala Ser Thr Leu
180 185 190

Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu
195 200 205

Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr
210 215 220

Tyr Cys Gln Gln Tyr Asn Thr Tyr Ser Pro Tyr Thr Phe Gly Gln Gly
225 230 235 240

Thr Lys Leu Glu Ile Lys
245

<210> 557

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 557

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Thr Gly Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Arg Ile Asn Pro Asn Ser Gly Gly Thr Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Thr Thr Thr Ser Tyr Ala Phe Asp Ile
115 120 125

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
145 150 155 160

Ile Gln Leu Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp
165 170 175

_SL

Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Thr Trp Leu
180 185 190

Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile Tyr
195 200 205

Lys Ala Ser Thr Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
210 215 220

Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp
225 230 235 240

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Asn Thr Tyr Ser Pro Tyr
245 250 255

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

_SL

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 558

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 558

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly ^{SL}Phe Ile Phe Ser Asp Tyr
 20 25 30
 Tyr Met Gly Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Gly Arg Ser Gly Ser Ser Met Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Phe 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 Ala Ser Pro Val Val Ala Ala Thr Glu Asp Phe Gln His Trp Gly
 100 105 110
 Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
 115 120 125
 Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val
 130 135 140
 Met Thr Gln Thr Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160
 Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Ser Asn Tyr Leu Ala
 165 170 175
 Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Leu Phe Gly
 180 185 190
 Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn ^{_SL} Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Met Tyr Tyr Cys Gln Gln Tyr Gly Ser Ala Pro Val Thr Phe
 225 230 235 240

Gly Gln Gly Thr Lys Leu Glu Ile Lys
 245

<210> 559
 <211> 493
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 559
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu
 20 25 30

Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Phe
 35 40 45

Ile Phe Ser Asp Tyr Tyr Met Gly Trp Ile Arg Gln Ala Pro Gly Lys
 50 55 60

Gly Leu Glu Trp Val Ser Tyr Ile Gly Arg Ser Gly Ser Ser Met Tyr
 65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Phe Ser Arg Asp Asn Ala
 85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr

_SL

100	105	110
Ala Val Tyr Tyr Cys Ala Ala Ser Pro Val Val Ala Ala Thr Glu Asp		
115	120	125
Phe Gln His Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly		
130	135	140
Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly		
145	150	155
Gly Ser Asp Ile Val Met Thr Gln Thr Pro Ala Thr Leu Ser Leu Ser		
165	170	175
Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr		
180	185	190
Ser Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg		
195	200	205
Leu Leu Leu Phe Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg		
210	215	220
Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Arg		
225	230	235
Leu Glu Pro Glu Asp Phe Ala Met Tyr Tyr Cys Gln Gln Tyr Gly Ser		
245	250	255
Ala Pro Val Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr		
260	265	270
Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln		
275	280	285
Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala		

290

295

_SL

300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
 305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Ser Leu Val Ile Thr
 325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
 340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
 355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
 370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
 385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
 405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
 420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
 435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
 450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
 465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg

485

490 _SL

<210> 560

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 560

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Ala Pro Gly Ala
1 5 10 15

Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Phe Thr Phe Arg 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 Ile Ile Asn Pro Ser Gly Gly Ser Arg Ala Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Asp Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg Thr Ala Ser Cys Gly Gly Asp Cys Tyr Tyr Leu Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

_SL

Gln Met Thr Gln Ser Pro Pro Thr Leu Ser Ala Ser Val Gly Asp Arg
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Val Asn Ile Trp Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Lys
180 185 190

Ser Ser Ser Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Ala Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp
210 215 220

Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Gln Ser Tyr Pro Leu Thr Phe
225 230 235 240

Gly Gly Gly Thr Lys Val Asp Ile Lys
245

<210> 561

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 561

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

_SL

Arg Ala Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Phe
35 40 45

Thr Phe Arg Gly Tyr Tyr Ile His Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Ile Ile Asn Pro Ser Gly Gly Ser Arg Ala
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser
85 90 95

Thr Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Asp Asp Thr
100 105 110

Ala Met Tyr Tyr Cys Ala Arg Thr Ala Ser Cys Gly Gly Asp Cys Tyr
115 120 125

Tyr Leu Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Pro Thr Leu Ser Ala
165 170 175

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Val
180 185 190

Asn Ile Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
195 200 205

Leu Leu Ile Tyr Lys Ser Ser Ser Leu Ala Ser Gly Val Pro Ser Arg
210 215 220

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Phe Ser Gly Ser Gly Ser Gly Ala Glu Phe Thr Leu Thr Ile Ser Ser
225 230 235 240

Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Gln Ser
245 250 255

Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys Thr Thr
260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
405 410 415

_SL

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 562

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 562

Gln Val Gln Leu Val Gln 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 Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
50 55 60

Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	<u>SL</u> 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	Lys	Asp	Gly	Ser	Ser	Ser	Trp	Ser	Trp	Gly	Tyr	Phe	Asp	Tyr	Trp
			100					105					110		
Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly
		115					120					125			
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Ser	Ser	Glu	Leu	Thr	Gln	Asp
	130					135					140				
Pro	Ala	Val	Ser	Val	Ala	Leu	Gly	Gln	Thr	Val	Arg	Thr	Thr	Cys	Gln
145					150					155					160
Gly	Asp	Ala	Leu	Arg	Ser	Tyr	Tyr	Ala	Ser	Trp	Tyr	Gln	Gln	Lys	Pro
				165					170					175	
Gly	Gln	Ala	Pro	Met	Leu	Val	Ile	Tyr	Gly	Lys	Asn	Asn	Arg	Pro	Ser
			180					185					190		
Gly	Ile	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Asp	Ser	Gly	Asp	Thr	Ala	Ser
		195					200					205			
Leu	Thr	Ile	Thr	Gly	Ala	Gln	Ala	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys
	210					215					220				
Asn	Ser	Arg	Asp	Ser	Ser	Gly	Tyr	Pro	Val	Phe	Gly	Thr	Gly	Thr	Lys
225					230					235					240
Val	Thr	Val	Leu												

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<210> 563

<211> 488

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 563

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Asp Asp Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Asp Gly Ser Ser Ser Trp Ser Trp Gly
115 120 125

Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Ser

145		150		<u>SL</u> 155		160									
Glu	Leu	Thr	Gln	Asp	Pro	Ala	Val	Ser	Val	Ala	Leu	Gly	Gln	Thr	Val
			165						170					175	
Arg	Thr	Thr	Cys	Gln	Gly	Asp	Ala	Leu	Arg	Ser	Tyr	Tyr	Ala	Ser	Trp
			180					185					190		
Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Met	Leu	Val	Ile	Tyr	Gly	Lys
		195					200					205			
Asn	Asn	Arg	Pro	Ser	Gly	Ile	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Asp	Ser
	210					215					220				
Gly	Asp	Thr	Ala	Ser	Leu	Thr	Ile	Thr	Gly	Ala	Gln	Ala	Glu	Asp	Glu
225					230					235					240
Ala	Asp	Tyr	Tyr	Cys	Asn	Ser	Arg	Asp	Ser	Ser	Gly	Tyr	Pro	Val	Phe
				245					250					255	
Gly	Thr	Gly	Thr	Lys	Val	Thr	Val	Leu	Thr	Thr	Thr	Pro	Ala	Pro	Arg
			260					265					270		
Pro	Pro	Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg
		275					280					285			
Pro	Glu	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly
	290					295					300				
Leu	Asp	Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr
305					310					315					320
Cys	Gly	Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg
			325						330					335	
Gly	Arg	Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro

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340	345	350
Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu		
355	360	365
Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala		
370	375	380
Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu		
385	390	395
Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly		
405	410	415
Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu		
420	425	430
Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser		
435	440	445
Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly		
450	455	460
Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu		
465	470	475
His Met Gln Ala Leu Pro Pro Arg		
485		

<210> 564

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 564

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 Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Ser Trp Asn Ser Gly 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 Lys Asp Ser Ser Ser Trp Tyr Gly Gly Gly Ser Ala Phe Asp Ile
100 105 110

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Ser Glu Leu Thr Gln
130 135 140

Glu Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys
145 150 155 160

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys
165 170 175

Pro Gly Gln Ala Pro Val Leu Val Ile Phe Gly Arg Ser Arg Arg Pro
180 185 190

_SL

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala
195 200 205

Ser Leu Ile Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr
210 215 220

Cys Asn Ser Arg Asp Asn Thr Ala Asn His Tyr Val Phe Gly Thr Gly
225 230 235 240

Thr Lys Leu Thr Val Leu
245

<210> 565
<211> 490
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 565
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Asp Asp Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Ser Trp Asn Ser Gly Ser Thr Gly
65 70 75 80

_SL

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Leu Tyr Tyr Cys Ala Lys Asp Ser Ser Ser Trp Tyr Gly Gly Gly
115 120 125

Ser Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser
145 150 155 160

Ser Glu Leu Thr Gln Glu Pro Ala Val Ser Val Ala Leu Gly Gln Thr
165 170 175

Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser
180 185 190

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Phe Gly
195 200 205

Arg Ser Arg Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser
210 215 220

Ser Gly Asn Thr Ala Ser Leu Ile Ile Thr Gly Ala Gln Ala Glu Asp
225 230 235 240

Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Asn Thr Ala Asn His Tyr
245 250 255

Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu Thr Thr Thr Pro Ala
260 265 270

_SL

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

_SL

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 566

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 566

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 Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Ser Trp Asn Ser Gly 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 Lys Asp Ser Ser Ser Trp Tyr Gly Gly Gly Ser Ala Phe Asp Ile
100 105 110

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser^{SL} Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Ser Glu Leu Thr Gln
130 135 140

Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile Thr Cys
145 150 155 160

Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln Gln Lys
165 170 175

Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn Arg Pro
180 185 190

Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn Thr Ala
195 200 205

Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr
210 215 220

Cys Asn Ser Arg Gly Ser Ser Gly Asn His Tyr Val Phe Gly Thr Gly
225 230 235 240

Thr Lys Val Thr Val Leu
245

<210> 567
<211> 490
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 567
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

1 5 10 _SL 15
 His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30
 Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45
 Thr Phe Asp Asp Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys
 50 55 60
 Gly Leu Glu Trp Val Ser Gly Ile Ser Trp Asn Ser Gly Ser Thr Gly
 65 70 75 80
 Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
 85 90 95
 Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
 100 105 110
 Ala Leu Tyr Tyr Cys Ala Lys Asp Ser Ser Ser Trp Tyr Gly Gly Gly
 115 120 125
 Ser Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
 130 135 140
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Ser
 145 150 155 160
 Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr
 165 170 175
 Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser
 180 185 190
 Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly

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195		200		205											
Lys	Asn	Asn	Arg	Pro	Ser	Gly	Ile	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Ser
210						215					220				
Ser	Gly	Asn	Thr	Ala	Ser	Leu	Thr	Ile	Thr	Gly	Ala	Gln	Ala	Glu	Asp
225					230					235					240
Glu	Ala	Asp	Tyr	Tyr	Cys	Asn	Ser	Arg	Gly	Ser	Ser	Gly	Asn	His	Tyr
				245					250					255	
Val	Phe	Gly	Thr	Gly	Thr	Lys	Val	Thr	Val	Leu	Thr	Thr	Thr	Pro	Ala
			260					265						270	
Pro	Arg	Pro	Pro	Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser
		275					280					285			
Leu	Arg	Pro	Glu	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr
290						295					300				
Arg	Gly	Leu	Asp	Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala
305					310					315					320
Gly	Thr	Cys	Gly	Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys
				325					330					335	
Lys	Arg	Gly	Arg	Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met
			340					345					350		
Arg	Pro	Val	Gln	Thr	Thr	Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe
		355					360					365			
Pro	Glu	Glu	Glu	Glu	Gly	Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg
370						375					380				
Ser	Ala	Asp	Ala	Pro	Ala	Tyr	Lys	Gln	Gly	Gln	Asn	Gln	Leu	Tyr	Asn

_SL

Ser Arg Ile Asn Ser Asp Gly Ser Ser Thr Ser Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala 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

Val Arg Thr Gly Trp Val Gly Ser Tyr Tyr Tyr Tyr Met Asp Val Trp
100 105 110

Gly Lys Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
130 135 140

Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn Tyr Leu
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Arg Leu Leu Ile Tyr
180 185 190

Asp Val Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly Gly
195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser Asn Trp Pro Pro Trp
225 230 235 240

_SL

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
245 250

<210> 569

<211> 495

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 569

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Val Trp Val Ser Arg Ile Asn Ser Asp Gly Ser Ser Thr Ser
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Val Arg Thr Gly Trp Val Gly Ser Tyr Tyr Tyr
115 120 125

_SL

Tyr Met Asp Val Trp Gly Lys Gly Thr Thr Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu
165 170 175

Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val
180 185 190

Ser Ser Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
195 200 205

Arg Leu Leu Ile Tyr Asp Val Ser Thr Arg Ala Thr Gly Ile Pro Ala
210 215 220

Arg Phe Ser Gly Gly Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
225 230 235 240

Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ser
245 250 255

Asn Trp Pro Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
260 265 270

Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala
275 280 285

Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly
290 295 300

Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile
305 310 315 320

_SL

Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val
325 330 335

Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe
340 345 350

Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly
355 360 365

Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg
370 375 380

Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln
385 390 395 400

Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp
405 410 415

Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro
420 425 430

Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp
435 440 445

Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg
450 455 460

Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr
465 470 475 480

Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490 495

<210> 570

<211> 250

<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 570

Gln Val Gln Leu Val Gln 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

Ala Val Ile Ser Tyr Asp Gly Ser 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 Gly Tyr Ser Arg Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly
100 105 110

Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val
130 135 140

Met Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
145 150 155 160

Ile Leu Ser Cys Arg Ala Ser Gln Ser Val Tyr Thr Lys Tyr Leu Gly
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Asp
180 185 190

Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Arg Leu Glu Pro Glu Asp
210 215 220

Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Gly Ser Pro Leu Ile Thr
225 230 235 240

Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
245 250

<210> 571

<211> 494

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 571

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val
20 25 30

Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys

					50					55					_SL 60				
Gly 65	Leu	Glu	Trp	Val	Ala 70	Val	Ile	Ser	Tyr	Asp 75	Gly	Ser	Asn	Lys	Tyr 80				
Tyr	Ala	Asp	Ser	Val 85	Lys	Gly	Arg	Phe	Thr 90	Ile	Ser	Arg	Asp	Asn 95	Ser				
Lys	Asn	Thr	Leu 100	Tyr	Leu	Gln	Met	Asn 105	Ser	Leu	Arg	Ala	Glu 110	Asp	Thr				
Ala	Val	Tyr 115	Tyr	Cys	Ala	Lys	Gly 120	Tyr	Ser	Arg	Tyr 125	Tyr	Tyr	Tyr	Gly				
Met	Asp 130	Val	Trp	Gly	Gln	Gly 135	Thr	Thr	Val	Thr 140	Val	Ser	Ser	Gly	Gly				
Gly 145	Gly	Ser	Gly	Gly	Gly 150	Gly	Ser	Gly	Gly	Gly 155	Gly	Ser	Gly	Gly	Gly 160				
Gly	Ser	Glu	Ile	Val 165	Met	Thr	Gln	Ser	Pro	Ala 170	Thr	Leu	Ser	Leu 175	Ser				
Pro	Gly	Glu	Arg 180	Ala	Ile	Leu	Ser	Cys 185	Arg	Ala	Ser	Gln	Ser 190	Val	Tyr				
Thr	Lys	Tyr 195	Leu	Gly	Trp	Tyr	Gln 200	Gln	Lys	Pro	Gly	Gln 205	Ala	Pro	Arg				
Leu	Leu 210	Ile	Tyr	Asp	Ala	Ser 215	Thr	Arg	Ala	Thr	Gly 220	Ile	Pro	Asp	Arg				
Phe 225	Ser	Gly	Ser	Gly	Ser 230	Gly	Thr	Asp	Phe	Thr 235	Leu	Thr	Ile	Asn	Arg 240				
Leu	Glu	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	His	Tyr	Gly	Gly				

435

440

_SL

445

Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg
 450 455 460

Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys
 465 470 475 480

Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 572

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 572

Gln Val Gln Leu Val Gln 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 Phe Ser Ser Tyr
 20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

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Ala Lys Arg Glu Ala Ala Ala Gly His Asp Trp Tyr Phe Asp Leu Trp
100 105 110

Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

Arg Val Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg
145 150 155 160

Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala
180 185 190

Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
210 215 220

Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Ile Pro Leu Thr Phe
225 230 235 240

Gly Gln Gly Thr Lys Val Glu Ile Lys
245

<210> 573

<211> 493

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 573

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Arg Glu Ala Ala Ala Gly His Asp Trp
115 120 125

Tyr Phe Asp Leu Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
145 150 155 160

Gly Gly Ser Asp Ile Arg Val Thr Gln Ser Pro Ser Ser Leu Ser Ala
165 170 175

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Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile
180 185 190

Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
195 200 205

Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg
210 215 220

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser
225 230 235 240

Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser
245 250 255

Ile Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr
260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
355 360 365

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Cys Arg Phe Pro Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 574

<211> 239

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 574

Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Glu Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Tyr
 20 25 30

Thr Met Asn Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile
 35 40 45

Gly Leu Ile Thr Pro Tyr Asn Gly Ala Ser Ser Tyr Asn Gln Lys Phe
 50 55 60

Arg Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
 65 70 75 80

Met Asp Leu Leu Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Phe Cys
 85 90 95

Ala Arg Gly Gly Tyr Asp Gly Arg Gly Phe Asp Tyr Trp Gly Gln Gly
 100 105 110

Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile
 130 135 140

Met Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser
 145 150 155 160

Ser Ser Val Ser Tyr Met His Trp Tyr Gln Gln Lys Ser Gly Thr Ser
 165 170 175

Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Ala Ser Gly Val Pro
 180 185 190

Gly Arg Phe Ser Gly Ser Gly Ser Gly Asn Ser Tyr Ser Leu Thr Ile
 195 200 205

Ser Ser Val Glu Ala Glu Asp Asp Ala Thr Tyr Tyr Cys Gln Gln Trp
 210 215 220

Ser Gly Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Ile
 225 230 235

<210> 575
 <211> 383
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 575
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Leu
 20 25 30

Glu Lys Pro Gly Ala Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr
 35 40 45

Ser Phe Thr Gly Tyr Thr Met Asn Trp Val Lys Gln Ser His Gly Lys
 50 55 60

Ser Leu Glu Trp Ile Gly Leu Ile Thr Pro Tyr Asn Gly Ala Ser Ser
 65 70 75 80

Tyr Asn Gln Lys Phe Arg Gly Lys Ala Thr Leu Thr Val Asp Lys Ser
 85 90 95

Ser Ser Thr Ala Tyr Met Asp Leu Leu Ser Leu Thr Ser Glu Asp Ser
 100 105 110

Ala Val Tyr Phe Cys Ala Arg Gly Gly Tyr Asp Gly Arg Gly Phe Asp

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115		120		125											
Tyr	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly
	130						135				140				
Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Asp	Ile	Glu	Leu	Thr
145					150					155					160
Gln	Ser	Pro	Ala	Ile	Met	Ser	Ala	Ser	Pro	Gly	Glu	Lys	Val	Thr	Met
				165					170					175	
Thr	Cys	Ser	Ala	Ser	Ser	Ser	Val	Ser	Tyr	Met	His	Trp	Tyr	Gln	Gln
			180					185					190		
Lys	Ser	Gly	Thr	Ser	Pro	Lys	Arg	Trp	Ile	Tyr	Asp	Thr	Ser	Lys	Leu
		195					200					205			
Ala	Ser	Gly	Val	Pro	Gly	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Asn	Ser
	210					215					220				
Tyr	Ser	Leu	Thr	Ile	Ser	Ser	Val	Glu	Ala	Glu	Asp	Asp	Ala	Thr	Tyr
225					230					235					240
Tyr	Cys	Gln	Gln	Trp	Ser	Gly	Tyr	Pro	Leu	Thr	Phe	Gly	Ala	Gly	Thr
				245					250					255	
Lys	Leu	Glu	Ile	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro	Thr	Pro	Ala
			260					265					270		
Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro	Glu	Ala	Cys	Arg
		275					280					285			
Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp	Phe	Ala	Cys
	290					295					300				
Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly	Val	Leu	Leu

305		310		<u>SL</u> 315		320
Leu Ser Leu Val	Ile Thr Leu Tyr Cys	Lys Arg Gly Arg Lys	Lys Leu			
	325	330	335			
Leu Tyr Ile Phe	Lys Gln Pro Phe Met Arg	Pro Val Gln Thr Thr Gln				
	340	345	350			
Glu Glu Asp Gly	Cys Ser Cys Arg Phe Pro Glu	Glu Glu Glu Gly Gly				
	355	360	365			
Cys Glu Leu Arg	Val Lys Phe Ser Arg Ser Ala	Asp Ala Pro Ala				
	370	375	380			

<210> 576
 <211> 732
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 576	
caagtccaac tgcagcagtc aggagcggaa gtgaagaaac caggagcgtc agtcaaagt	60
tcgtgcaagg ctagcggcta caccttcacc ggctactaca tgcactgggt tcgacaggct	120
ccagggcagg gtctggagtg gatgggccgc atcaaccga attccggtgg gactaactac	180
gcccagaagt tccaggggaag agtgaccatg actagggaca cgtcgatcag cactgcgtac	240
atggaactga gccgcctgcg gtccgaggat actgccgtct actactgcg acgcggaagg	300
tactatggaa tggacgtgtg gggccaaggg actatggtga ctgtgagctc gggaggggga	360
ggctccggtg gcgggggatc aggaggagga ggatcagggg gaggagggtc cgaaattgtc	420
ctcaccaga gcccggaac cctctcactt tccccgggag agcgcgcaac catctcttgc	480
cgggctagcc aatccgtgtc gtccaatttc gcctggtacc agcaacggcc gggacaagcc	540

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cctagactcc tgatctacga cgccagcaac agagcgactg gaattcctcc acgcttttcg	600
ggatcagggt cccgtaccga cttcaccctg actatctcgt cgctcgaacc cgaggatttc	660
gccgcctact actgtcatca gcggtcgaac tggttgtata cgtttggcca gggcaccaag	720
gtggatatca ag	732

<210> 577
 <211> 1464
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 577	
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactgcagca gtcaggagcg gaagtgaaga aaccaggagc gtcagtcaaa	120
gtgtcgtgca aggctagcgg ctacaccttc accggctact acatgcactg ggttcgacag	180
gctccagggc aggggtctgga gtggatgggc cgcatcaacc cgaattccgg tgggactaac	240
tacgcccaga agttccaggg aagagtgacc atgactaggg acacgtcgat cagcactgcg	300
tacatggaac tgagccgcct gcggtccgag gatactgccg tctactactg cgcacgcgga	360
aggctactatg gaatggacgt gtggggccaa gggactatgg tgactgtgag ctccggaggag	420
ggaggctccg gtggcggggg atcaggagga ggaggatcag ggggaggagg ttccgaaatt	480
gtcctcacc cagagcccggc aaccctctca ctttccccgg gagagcgcgc aaccatctct	540
tgccgggcta gccaatccgt gtcgtccaat ttcgcctggg accagcaacg gccgggacaa	600
gcccctagac tcctgatcta cgacgccagc aacagagcga ctggaattcc tccacgcttt	660
tcgggatcag gtcgggtac cgacttcacc ctgactatct cgtcgctcga acccgaggat	720
ttcgccgcct actactgtca tcagcggtcg aactggttgt atacgtttgg ccagggcacc	780
aagggtggata tcaagaccac taccacagca ccgaggccac ccaccccggc tcctaccatc	840

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gcctcccagc ctctgtccct gcgtccggag gcatgtagac ccgcagctgg tggggccgtg	900
catacccggg gtcttgactt cgcctgcgat atctacattt gggcccctct ggctggtact	960
tgcgggggtcc tgctgctttc actcgtgatc actctttact gtaagcgcgg tcggaagaag	1020
ctgctgtaca tctttaagca acccttcatg aggcctgtgc agactactca agaggaggac	1080
ggctgttcat gccggttccc agaggaggag gaaggcggct gcgaactgcg cgtgaaattc	1140
agccgcagcg cagatgctcc agcctacaag caggggcaga accagctcta caacgaactc	1200
aatcttggtc ggagagagga gtacgacgtg ctggacaagc ggagaggacg ggacccagaa	1260
atgggcggga agccgcgcag aaagaatccc caagagggcc tgtacaacga gtcctaaaag	1320
gataagatgg cagaagccta tagcgagatt ggtatgaaag gggaacgcag aagaggcaaa	1380
ggccacgacg gactgtacca gggactcagc accgccacca aggacaccta tgacgctctt	1440
cacatgcagg ccctgccgcc tcgg	1464

<210> 578

<211> 759

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 578

caagtccaac tcgtccagtc aggagcagaa gtcaagaaac caggtgctag cgtgaaagtg	60
tcgtgcaagg cgtcgggata cactttcacc ggatactaca tgcaactgggt ccgccaggcc	120
cccggacaag gactggaatg gatgggctgg atcaaccga atagcggggg aactaattac	180
gccagaagt ttcagggacg agtgaccatg acccgcgata cctctatctc gaccgcctac	240
atggagctct ccagactgcg ctccgacgat actgcagtgt actactgcgc ccgggacctg	300
aggcggactg tggttactcc tcgcgcctat tatggcatgg acgtgtgggg ccaaggaact	360
actgtgactg tgagctcggg aggcgggtggg tcaggcggag gagggtcggg cgggtggtggc	420

tcgggagggg gaggaagcga cattcaactt acgcagagcc cgtcaaccct gtcagcgtca	480
gtgggagatc ggggtgaccat cacgtgtcag gccagccagg atatctccaa ctcgctcaac	540
tggtaccagc aaaaggcggg taaagctccg aagctgctga tctacgacgc ttccaccctc	600
gagactggag tcccatccag attttccggg tcaggaagcg gcaccgattt ctccttcacc	660
atttcgtcct tgcaaccgga ggacatcgca acctactact gccagcagca tgacaacttg	720
cctctgacgt tcgggcaggg caccaagggtg gaaatcaag	759

<210> 579

<211> 1491

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 579

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaaagtcc aactcgtcca gtcaggagca gaagtcaaga aaccagggtgc tagcgtgaaa	120
gtgtcgtgca aggcgtcggg atacactttc accggatact acatgcactg ggtccgccag	180
gcccccggaac aaggactgga atggatgggc tggatcaacc cgaatagcgg ggggaactaat	240
tacgcccaga agtttcaggg acgagtgacc atgacccgcg atacctctat ctcgaccgcc	300
tacatggagc tctccagact gcgctccgac gatactgcag tgtactactg cgcccgggac	360
ctgaggcgga ctgtggttac tcctcgcgcc tattatggca tggacgtgtg gggccaagga	420
actactgtga ctgtgagctc gggaggcggg gggtcaggcg gaggagggtc gggcggtggt	480
ggctcgggag ggggaggaag cgacattcaa cttacgcaga gcccgtaac cctgtcagcg	540
tcagtgggag atcgggtgac catcacgtgt caggccagcc aggatatctc caactcgtc	600
aactgggtacc agcaaaaaggc gggtaaagct ccgaagctgc tgatctacga cgcttcacc	660
ctcgagactg gagtcccatc cagatcttcc gggtcaggaa gcggcaccga tttctccttc	720

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accatttcgt ccttgcaacc ggaggacatc gcaacctact actgccagca gcatgacaac	780
ttgcctctga cgttcgggca gggcaccaag gtggaaatca agaccactac cccagcaccg	840
aggccaccca ccccggtcc taccatcgcc tcccagcctc tgtccctgcg tccggaggca	900
tgtagacccg cagctggtgg ggccgtgcat acccggggtc ttgacttcgc ctgcgatatc	960
tacatttggg cccctctggc tggacttgc ggggtcctgc tgctttcact cgtgatcact	1020
ctttactgta agcgcggtcg gaagaagctg ctgtacatct ttaagcaacc cttcatgagg	1080
cctgtgcaga ctactcaaga ggaggacggc tgttcatgcc ggttcccaga ggaggaggaa	1140
ggcggctgcg aactgcgcgt gaaattcagc cgcagcgcag atgctccagc ctacaagcag	1200
gggcagaacc agctctacaa cgaactcaat cttggtcgga gagaggagta cgacgtgctg	1260
gacaagcgga gaggacggga cccagaaatg ggcggggaagc cgcgcagaaa gaatcccca	1320
gagggcctgt acaacgagct ccaaaaggat aagatggcag aagcctatag cgagattggt	1380
atgaaagggg aacgcagaag aggcaaaggc cacgacggac tgtaccaggg actcagcacc	1440
gccaccaagg acacctatga cgctcttcac atgcaggccc tgccgcctcg g	1491

<210> 580

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 580

caagtccaac tcgtccaatc aggagcggaa gtcaaaaagc ccggagctcc agtgaaagtg	60
tcatgcaagg cctccggcta caccttcacc ggttactata tgcactgggt gcggcaggcc	120
ccgggccagg ggttggaatg gatgggatgg atcaatccaa actcgggtgg gactaactac	180
gcccagaagt tccaaggacg ggtgaccatg actagggaca cctcgatctc caccgcatc	240
atggagctta gcagactccg ctccgacgat accgcagtct actattgcgc gcggggagag	300

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tgggacggat cgtactacta cgattactgg ggccagggaa ctctggtgac tgtttcctcg	360
ggtggaggag gttcaggcgg aggcgggctcg ggcgggggag gatctggagg aggagggtcc	420
gacattgtgc tgacccaaac tccttcgtcc ctgtcggcca gcgtgggcga ccgcgtgacg	480
attacgtgca gagctagcca atccatcaat acttacctca actggtacca gcataagccg	540
gggaaagcac caaagctgct gatctacgcc gcctcatcct tgcagagcgg tgtgccttca	600
cgcttttagcg gatcgggatc gggaacggat ttcaccctga ctatcagctc cctccagccg	660
gaggattttg cgacctacta ctgtcagcag agcttctcac cgctgacttt cggcggcggg	720
accaagctgg aaatcaag	738

<210> 581

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 581

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactcgtcca atcaggagcg gaagtcaaaa agcccggagc tccagtga	120
gtgtcatgca aggcctccgg ctacaccttc accggttact atatgcactg ggtgcggcag	180
gccccgggcc aggggttgga atggatggga tggatcaatc caaactcggg tgggactaac	240
tacgcccaga agttccaagg acgggtgacc atgactaggg acacctgat ctccaccgca	300
tacatggagc ttagcagact ccgctccgac gataccgcag tctactattg cgcgcgggga	360
gagtgggacg gatcgtacta ctacgattac tggggccagg gaactctggt gactgtttcc	420
tcgggtggag gaggttcagg cggaggcggc tcgggcgggg gaggatctgg aggaggagg	480
tccgacattg tgctgaccca aactccttcg tccctgtcgg ccagcgtggg cgaccgcgtg	540
acgattacgt gcagagctag ccaatccatc aatacttacc tcaactggta ccagcataag	600

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ccggggaaaag caccaaagct gctgatctac gccgcctcat ccttgagag cggtgtgcct	660
tcacgcttta gcggatcggg atcgggaacg gatttcaccc tgactatcag ctccctccag	720
ccggaggatt ttgcgaccta ctactgtcag cagagcttct caccgctgac tttcggcggc	780
gggaccaagc tggaaatcaa gaccactacc ccagcaccga ggccacccac cccggctcct	840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctgggtggg	900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaacc ttcatgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggagggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 582

<211> 726

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 582

caagtgaac tcgttgaatc aggtggagggt ttggtgcaac ccggaggatc tctcagactg	60
tcgtgtgcgg cgtccgggtt caccttttcg tcctactgga tgactgggt gcgccagggtg	120
ccgggaaaag gactggtgtg ggtgtccaga atcaacaccg acgggtcaac gactacctac	180

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gcagatagcg tggaaggctg gttcaccatt tcgcgggaca acgctaataaa cactctgtac	240
cttcagatga attcactgcg cgatgacgac accgcagtct actactgcgt cgggtggacac	300
tgggcgggtct ggggacaggg aactacgggtg actgtgtcca gcggcggggg aggaagcggc	360
ggagggggga gcggaggcgg aggatcagga ggaggcggct ccgatatcca gatgaccag	420
tcgccatcga ccctctccgc tagcgtgggg gatagggtca ctatcacttg ccgagccagc	480
caatccatta gcgaccggct tgcctggtac caacagaaac ctggaaaggc cccgaagctg	540
ctcatctaca aggcctcgtc actggagtcg ggagtcccgt cccgcttttc cggctcgggc	600
tcaggcaccg agttcactct gaccatctcg agcctgcagc cggacgattt cgccgtgtat	660
tactgccagc aatacggaca tctcccaatg tacacgttcg gtcagggcac caaggctgaa	720
atcaag	726

<210> 583

<211> 1458

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 583

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aactcgttga atcagggtgga ggtttggtgc aaccggagg atctctcaga	120
ctgtcgtgtg cggcgtccgg gttcaccttt tcgtcctact ggatgcactg ggtgcgccag	180
gtgccgggaa aaggactggt gtgggtgtcc agaatacaaca ccgacgggtc aacgactacc	240
tacgcagata gcgtggaagg tcggttcacc atttcgcggg acaacgctaa aaacactctg	300
taccttcaga tgaattcact gcgcgatgac gacaccgcag tctactactg cgtcgggtgga	360
cactgggcgg tctggggaca gggaaactacg gtgactgtgt ccagcggcgg gggagggaagc	420
ggcggagggg ggagcggagg cggaggatca ggaggaggcg gctccgatat ccagatgacc	480

_SL

cagtcgccat cgacctctc cgctagcgtg ggggataggg tcactatcac ttgccgagcc	540
agccaatcca ttagcgaccg gcttgccctgg taccaacaga aacctggaaa ggccccgaag	600
ctgctcatct acaaggcctc gtcactggag tcgggagtcc cgtcccgtt ttccggctcg	660
ggctcaggca ccgagttcac tctgaccatc tcgagcctgc agccggacga tttcgccgtg	720
tattactgcc agcaatacgg acatctccca atgtacacgt tcggtcaggg caccaaggtc	780
gaaatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcttcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggtcttg acttcgcctg cgatatctac atttggggc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
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ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accaggggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgctcgg	1458

<210> 584

<211> 723

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 584

caagtccaac tcgttcaatc aggcgcagaa gtcgaaaagc ccggagcatc agtcaaagtc	60
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	_SL	
tcttgcaagg cttccggcta caccttcacg gactactaca tgcactgggt gcgccaggct		120
ccaggccagg gactggagtg gatgggatgg atcaaccga attccggggg aactaactac		180
gcccagaagt ttcagggccg ggtgactatg actcgcgata cctcgatctc gactgcgtac		240
atggagctca gccgcctccg gtcggacgat accgccgtgt actattgtgc gtcgggatgg		300
gacttcgact actgggggca gggcactctg gtcactgtgt caagcggagg aggtggatca		360
ggtggagggtg gaagcggggg aggaggttcc ggcggcggag gatcagatat cgtgatgacg		420
caatcgcctt cctcgttgtc cgcacccgtg ggagacaggg tgaccattac ttgcagagcg		480
tcccagtcca ttcggtacta cctgtcgtgg taccagcaga agccggggaa agccccaaaa		540
ctgcttatct atactgcctc gatcctccaa aacggcgtgc catcaagatt cagcggttcg		600
ggcagcggga ccgactttac cctgactatc agcagcctgc agccggaaga tttcgccacg		660
tactactgcc tgcaaacctc caccaccccg gacttcggac ctggaaccaa ggtggagatc		720
aag		723

<210> 585

<211> 1455

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 585

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg		60
ccccaaagtcc aactcgttca atcaggcgca gaagtcgaaa agcccggagc atcagtcaaa		120
gtctcttgca aggcttccgg ctacaccttc acggactact acatgcactg ggtgcgccag		180
gctccaggcc agggactgga gtggatggga tggatcaacc cgaattccgg gggaactaac		240
tacgcccaga agtttcaggg ccgggtgact atgactcgcg atacctcgat ctcgactgcg		300
tacatggagc tcagccgcct ccggctcgac gataccgccg tgtactattg tgcgtcggga		360

_SL

tgggacttcg actactgggg gcagggcact ctggtcactg tgtcaagcgg aggaggtgga	420
tcaggtggag gtggaagcgg gggaggaggt tccggcggcg gaggatcaga tatcgtgatg	480
acgcaatcgc cttcctcggt gtccgcatcc gtgggagaca gggtgaccat tacttgcaga	540
gcgtcccagt ccattcggta ctacctgtcg tgggtaccagc agaagccggg gaaagcccca	600
aaactgctta tctatactgc ctcgatcctc caaaacggcg tgccatcaag attcagcggg	660
tcgggcagcg ggaccgactt taccctgact atcagcagcc tgcagccgga agatttcgcc	720
acgtactact gcctgcaaac ctacaccacc ccggacttcg gacctggaac caaggtggag	780
atcaagacca ctaccccagc accgaggcca cccaccccgg ctcttaccat cgcctcccag	840
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gcagatgctc cagcctacaa gcaggggcag aaccagctct acaacgaact caatcttggt	1200
cggagagagg agtacgacgt gctggacaag cggagaggac gggacccaga aatgggcggg	1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg	1320
gcagaagcct atagcgagat tggatatgaaa ggggaacgca gaagaggcaa aggccacgac	1380
ggactgtacc agggactcag caccgccacc aaggacacct atgacgctct tcacatgcag	1440
gccctgccgc ctcgg	1455

<210> 586

<211> 759

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

_SL

<400> 586
caagtgaac tcgtccagtc aggtgcagaa gtgaagaaac ccggagcgtc agtcaaagtg 60
tcatgcaagg cgtcaggcta caccttcacc agctactaca tgcactgggt gcggcaggcc 120
ccaggccaag gcttggagtg gatgggaatc attaaccctg caggaggctc cacctcctac 180
gcccagaagt ttcagggaag agtgacgatg actcgggata cgtcgacctc gaccgtgtac 240
atggaactga gctcgctgcg ctccgaggac actgctgtgt actactgcgc acggtacaga 300
ctcattgccg tggcaggaga ctactactac tatggcatgg acgtctgggg gcagggcact 360
atggtcactg tgtcgtccgg cggaggaggc tcgggtggag gaggtagcgg aggaggggga 420
agcggagggg ggggctccga tatccagatg actcagtcgc cttcctccgt gtcggcctcg 480
gttggagatc gcgtcaccat cacttgctga gcttcccaag gagtcggtag gtggctggcg 540
tggtaccagc aaaagccggg aactgccccg aagctcctga tctacgcggc tagcaccctg 600
cagtcgggag tgccatcccc cttcagcgga tctgggtcag gtaccgactt cacccttacg 660
atcaacaatc tccagccgga ggactttgcc acctattact gccaacaggc caacagcttc 720
cctctgactt tcggaggggg cactcgctg gaaatcaag 759

<210> 587

<211> 1491

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 587
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtgc aactcgtcca gtcagggtgca gaagtgaaga aacccggagc gtcagtcaaa 120
gtgtcatgca aggcgtcagg ctacaccttc accagctact acatgcactg ggtgcggcag 180
gccccaggcc aaggcttggg gtggatggga atcattaacc cgtcaggagg ctccacctcc 240

_SL

tacgcccaga agtttcaggg aagagtgacg atgactcggg atacgtcgac ctcgaccgtg	300
tacatggaac tgagctcgct gcgctccgag gacactgctg tgtactactg cgcacgggtac	360
agactcattg ccgtggcagg agactactac tactatggca tggacgtctg ggggcagggc	420
actatggtca ctgtgtcgtc cggcggagga ggctcgggtg gaggaggtag cggaggaggg	480
ggaagcggag gggggggctc cgatatccag atgactcagt cgccttcctc cgtgtcggcc	540
tcggttggag atcgcgtcac catcacttgt cgagcttccc aaggagtcgg taggtggctg	600
gcgtggtacc agcaaaagcc gggaactgcc ccgaagctcc tgatctacgc ggctagcacc	660
ctgcagtcgg gagtgccatc ccgcttcagc ggatctgggt caggtagcga cttcaccctt	720
acgatcaaca atctccagcc ggaggacttt gccacctatt actgccaaca ggccaacagc	780
ttccctctga ctttcggagg gggcactcgc ctggaaatca agaccactac cccagcaccg	840
aggccacca ccccggtcc taccatcgcc tcccagcctc tgtccctgcg tccggaggca	900
tgtagacccg cagctggtgg ggccgtgcat acccggggtc ttgacttcgc ctgcgatatc	960
tacatttggg cccctctggc tgggtacttg ggggtcctgc tgctttcact cgtgatcact	1020
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cctgtgcaga ctactcaaga ggaggacggc tgttcatgcc ggttcccaga ggaggaggaa	1140
ggcggctgcg aactgcgcgt gaaattcagc cgcagcgcag atgctccagc ctacaagcag	1200
gggcagaacc agctctacaa cgaactcaat cttggtcgga gagaggagta cgacgtgctg	1260
gacaagcggg gaggacggga cccagaaatg ggcggaagc cgcgcagaaa gaatcccaa	1320
gagggcctgt acaacgagct ccaaaaggat aagatggcag aagcctatag cgagattggt	1380
atgaaagggg aacgcagaag aggcaaaggc cacgacggac tgtaccaggg actcagcacc	1440
gccaccaagg acacctatga cgctcttcac atgcaggccc tgccgcctcg g	1491

<210> 588

<211> 750

<212> DNA

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 588

caagtgcaat tggttcaatc aggaggagga gtggtgcaac ctggaagatc tctcagactg	60
tcgtgtgcgg catcgggatt cacttttctca tcatacgcaa tgcactgggt ccgccaggcc	120
ccgggcaaag gcttgggaatg ggtggcggtc atttcatacg acggctcgaa caagtactac	180
gctgacagcg tgaagggacg ctttactatt tcccgggaca attcgaagaa cactctgtac	240
ctccagatga actccccttag ggctgaggac accgccgtct actactgcgc acgttgga	300
gtgtcgtcca gctccccagc ttttgactac tggggacagg gaacccttgt gaccgtgtcg	360
tccggtggag ggggaagcgg cggaggggga tcaggtggcg gcggatcggg aggcggggga	420
tcagaaatcg tgctgactca gtccccggcc acgctgtctc tcagcccggg agagagagcg	480
atcctgtcct gccgcgctc gcagagcgtg tacactaagt acctggggtg gtaccagcag	540
aaaccgggtc aagcgcctcg gctgctgac tacgatgcct ccaccgggc caccggaatc	600
cccgatcggg tctccggcag cggctcggga actgatttca cgctgaccat caatcgctg	660
gagccggaag atttcgccgt ctattactgc cagcattacg gcgggagccc actcatcacc	720
ttcgggtcaag gaacccgact cgaaatcaag	750

<210> 589

<211> 1482

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 589

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aattggttca atcaggagga ggagtgggtgc aacctggaag atctctcaga	120

_SL

ctgtcgtgtg cggcatcggg attcactttc tcatcatacg caatgcactg ggtccgccag	180
gccccgggca aaggcttgga atgggtggcg gtcatttcat acgacggctc gaacaagtac	240
tacgttgaca gcgtgaaggg acgctttact atttcccggg acaattcgaa gaacactctg	300
tacctccaga tgaactccct tagggctgag gacaccgccg tctactactg cgcacgctgg	360
aaagtgtcgt ccagctcccc agcttttgac tactggggac agggaaacct tgtgaccgtg	420
tcgtccggtg gagggggaag cggcggaggg ggatcagggtg gcggcggatc gggaggcggg	480
ggatcagaaa tcgtgctgac tcagtccccg gccacgctgt ctctcagccc gggagagaga	540
gcgatcctgt cctgccgcgc ctcgcagagc gtgtacacta agtacctggg gtggtaccag	600
cagaaaccgg gtcaagcgcc tcggctgctg atctacgatg cctccacccg ggccaccgga	660
atccccgatc ggttctccgg cagcggctcg ggaactgatt tcacgctgac catcaatcgc	720
ctggagccgg aagatttcgc cgtctattac tgccagcatt acggcgggag cccactcatc	780
accttcggtc aaggaacccg actcgaaatc aagaccacta cccagcacc gaggccaccc	840
accccggtc ctaccatcgc ctcccagcct ctgtccctgc gtccggaggc atgtagaccc	900
gcagctggtg gggccgtgca taccgggggt cttgacttcg cctgcgatat ctacatttgg	960
gcccctctgg ctggtacttg cggggtcctg ctgctttcac tcgtgatcac tctttactgt	1020
aagcgcggtc ggaagaagct gctgtacatc tttaagcaac ctttcatgag gcctgtgcag	1080
actactcaag aggaggacgg ctgttcatgc cggttcccag aggaggagga aggcggtgc	1140
gaactgcgcg tgaaattcag ccgcagcgca gatgctccag cctacaagca ggggcagaac	1200
cagctctaca acgaactcaa tcttggtcgg agagaggagt acgacgtgct ggacaagcgg	1260
agaggacggg acccagaaat gggcgggaag ccgcgcagaa agaatcccca agagggcctg	1320
tacaacgagc tccaaaagga taagatggca gaagcctata gcgagattgg tatgaaaggg	1380
gaacgcagaa gaggcaaagg ccacgacgga ctgtaccagg gactcagcac cgccaccaag	1440
gacacctatg acgctcttca catgcaggcc ctgccgcctc gg	1482

<210> 590

_SL

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 590

caagtccaac tccagcagtc aggtgcagaa gtcaaaaagc caggagcatc cgtgaagggtt	60
tcgtgcaaga cttccggcta ccccttttacc ggggtactccc tccattgggt gagacaagca	120
ccgggccagg gactggagtg gatgggatgg atcaacccaa attcgggcgg caccaactat	180
gcgcagaagt tccagggacg ggtgaccatg actcgcgaca cttcgatctc cactgcctac	240
atggagctgt cccgcttgag atctgacgac acggccgtct actactgcgc ccgggatcac	300
tacggaggta attcgtgtt ctactggggg cagggaaccc ttgtgactgt gtcctcgggt	360
ggtggagggt caggaggcgg aggctcaggg ggaggaggta gcggaggagg cggatcagac	420
atccaactga cccagtcacc atcctccatc tcggctagcg tcggagacac cgtgtcgatt	480
actttagagg cctcccaaga ctcagggacg tggctggcgt ggtatcagca aaaaccgggc	540
aaagctccga acctgttgat gtacgacgcc agcacctcg aagatggagt gcctagccgc	600
ttcagcggaa gcgcctcggg cactgaattc acgtgactg tgaatcggct ccagccggag	660
gattcggcga cctactactg ccagcagtac aacagctacc ccctgacctt tggaggcggg	720
accaaggtgg atatcaag	738

<210> 591

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 591

_SL

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactccagca gtcagggtgca gaagtcaaaa agccaggagc atccgtgaag	120
gtttcgtgca agacttccgg ctaccctttt accgggtact ccctccattg ggtgagacaa	180
gcaccggggcc agggactgga gtggatggga tggatcaacc caaattcggg cggcaccaac	240
tatgcgcaga agttccaggg acgggtgacc atgactcgcg acacttcgat ctccactgcc	300
tacatggagc tgtcccgctt gagatctgac gacacggccg tctactactg cgcccgggat	360
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ggtggtggag ggtcaggagg cggaggctca gggggaggag gtagcggagg aggcggatca	480
gacatccaac tgacccagtc accatcctcc atctcggcta gcgtcggaga caccgtgtcg	540
attacttgta gggcctccca agactcaggg acgtggctgg cgtggatatca gcaaaaaccg	600
ggcaaagctc cgaacctgtt gatgtacgac gccagcacc tcgaagatgg agtgcctagc	660
cgcttcagcg gaagcgcctc gggcactgaa ttcacgctga ctgtgaatcg gctccagccg	720
gaggattcgg cgacctacta ctgccagcag tacaacagct accccctgac ctttggaggc	780
gggaccaagg tggatatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
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gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctacgcaccg ccaccaagga cacctatgac	1440

gctcttcaca tgcaggccct gccgcctcgg

1470

<210> 592

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 592

caagtgaac tcgtccagtc aggtgcagaa gtgaagaaac caggagcgtc cgtcgaagtg	60
tcgtgtaagg cgtccggcta cactttcacc tcgtactaca tgcactgggt gcggcaggcc	120
ccgggacaag gcctcgaatg gatgggaatc atcaaccca gcggaggctc gactggttac	180
gcccagaagt tccagggaag ggtgacgatg acccgcgata cctcgacttc gaccgttcat	240
atggagctct cgtccctgcg gagcgaggac actgctgtct actattgcgc gcggggagga	300
tactctagct cctccgatgc atttgacatt tggggccagg gaactatggt gaccgtgtca	360
tcaggcggag gtggatcagg aggaggaggg tcgggagggg gaggcagcgg cgggggtggg	420
tcggacattc agatgacgca gtccccctct agcctgagcg cctcgggtggg tgacagagtg	480
accatcactt gcagagcctc gcaagacatc tcctccgcat tggcttggtta ccagcaaaag	540
ccgggcactc cgccgaaact gctcatctac gatgcctcct cactggagtc aggagtccca	600
tctcgcttct cggggtcagg aagcggcacc gattttaccc ttaccatctc cagcctgcag	660
cccaggagact tcgccacgta ctactgcaa cagttcagct cctaccact gaccttcggg	720
ggcggaactc gcctggaaat caag	744

<210> 593

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 593

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aactcgtcca gtcagggtgca gaagtgaaga aaccaggagc gtccgtcgaa	120
gtgtcgtgta aggcgtccgg ctacactttc acctcgtact acatgcactg ggtgcggcag	180
gccccgggac aaggcctcga atggatggga atcatcaacc cgagcggagg ctcgactggt	240
tacgcccaga agttccaggg aagggtgacg atgacccgcg atacctcgac ttcgaccgtt	300
catatggagc tctcgtccct gcggagcgag gacactgctg tctactattg cgcgcgggga	360
ggatactcta gtcctccga tgcatttgac atttggggcc agggaaactat ggtgaccgtg	420
tcatcaggcg gaggtggatc aggaggagga gggtcgggag ggggaggcag cggcgggggt	480
gggtcggaca ttcagatgac gcagtcccct cctagcctga gcgcctcggg gggtgacaga	540
gtgaccatca cttgcagagc ctcgcaagac atctcctccg cattggcttg gtaccagcaa	600
aagccgggca ctccgccgaa actgctcatc tacgatgcct ctcactgga gtcaggagtc	660
ccatctcgct tctcggggtc aggaagcggc accgatttta cccttaccat ctccagcctg	720
cagcccgagg acttcgccac gtactactgc caacagttca gtcctaccc actgaccttc	780
gggggcggaa ctcgcctgga aatcaagacc actaccccag caccgaggcc acccaccg	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcatgtag acccgagct	900
ggtggggccg tgcatacccg gggctttgac ttcgcctgcg atatctacat ttggggcccct	960
ctggctggta cttgcggggg cctgctgctt tctctgtga tctctttta ctgtaagcgc	1020
ggtcggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctaca agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gagtacgacg tgctggacaa gcggagagga	1260
cgggacccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320

_SL

gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440
tatgacgctc ttcacatgca ggccctgccg cctcgg	1476

<210> 594
 <211> 765
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 594	
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ccgggccaaag gactggagtg gatgggatgg atctcagcct acaacggtaa caccaactac	180
gcccagaagc tgcaaggacg cgtgaccatg actactgata cgagcacctc cactgcctac	240
atggaattgc ggtcccttcg gtcggacgat actgctgtgt actactgcgc aagagtcgcc	300
ggagggatct actactacta cggcatggac gtctggggac agggaaccac cattacggtg	360
tcgagcggag ggggaggctc ggggggagga ggaagcggag gtggcggctc cgggggcggc	420
ggatcggaca ttgtgatgac ccagactcct gactccctgg ctgtttcgtt gggagagcgc	480
gcgactatct cgtgtaagtc cagccactca gtcctgtaca atcgcaataa caagaactac	540
ctcgcgtggt accagcaaaa accgggtcag ccgcctaaac tcctgttcta ctgggcctcc	600
accagaaaaga gcgggggtgcc agatcgattc tctggatcag gatcaggtag cgactttacg	660
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actttccccc tcaccttcgg tcaaggcacc aggctggaaa tcaat	765

<210> 595
 <211> 1497
 <212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 595

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aactcgtcca gagcggagca gaagtcaaga agccaggagc gtcagtga	120
gtgtcatgca aggccagcgg ctataccttt acttcgtatg ggatctcctg ggtgcggcag	180
gcaccgggcc aaggactgga gtggatggga tggatctcag cctacaacgg taacaccaac	240
tacgcccaga agctgcaagg acgcgtgacc atgactactg atacgagcac ctccactgcc	300
tacatggaat tgcggtccct tcggtcggac gatactgctg tgtactactg cgcaagagtc	360
gccggaggga tctactacta ctacggcatg gacgtctggg gacagggaac caccattacg	420
gtgtcgagcg gagggggagg ctcgggggga ggaggaagcg gaggtggcgg ctccgggggc	480
ggcggatcgg acattgtgat gaccagact cctgactccc tggctgtttc gttgggagag	540
cgcgcgacta tctcgtgtaa gtccagccac tcagtcctgt acaatcgcaa taacaagaac	600
tacctcgcgt ggtaccagca aaaaccgggt cagccgccta aactcctgtt ctactgggcc	660
tccaccagaa agagcggggg gccagatcga ttctctggat caggatcagg taccgacttt	720
acgctgacca tctcgtccct gcagccggag gatttcgcga cttacttctg ccagcagact	780
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ccccaagagg	gcctgtacaa	cgagctccaa	aaggataaga	tggcagaagc	ctatagcgag	1380
attggtatga	aaggggaacg	cagaagaggc	aaaggccacg	acggactgta	ccagggactc	1440
agcaccgcca	ccaaggacac	ctatgacgct	cttcacatgc	aggccctgcc	gcctcgg	1497

<210> 596

<211> 723

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 596

caagtccaat	tgcagcagag	cggagcagaa	gtgaagaagc	caggagcgtc	agtcaaagtg	60
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ccgggcccaag	gactcgagtg	gatgggctgg	atcaacccta	actctggagg	caccaactac	180
gcccagaatt	tccaaggcag	agtgaccatg	acccgggaca	cctccatctc	gactgcctat	240
atggaaactgc	ggcggctgcg	ctcggacgat	actgctgtgt	attactgcgc	cagcggctgg	300
gactttgact	actggggaca	gggtactctg	gtgactgttt	cctcgggagg	aggcggatcg	360
ggtggaggag	gtagcggggg	aggggggtcg	ggaggcggag	gcagcgatat	tcgcatgact	420
caatcgccgt	cctccctgag	cgctagcgtg	ggagatcgag	tcaccatcac	ttgcagagcg	480
tcacagtcga	ttcgctacta	cctgtcctgg	taccagcaga	aaccgggaaa	ggcaccaaag	540
cttctgatct	acacggcctc	catcctgcaa	aatgggtgtcc	catcaagggt	ctccgggtca	600
gggagcggca	ctgacttcac	tctcaccatc	tcctcactcc	agcccaggga	ctttgcaacc	660
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aaa						723

_SL

<210> 597
<211> 1455
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 597
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gtgtcgtgta aggcgtcagg atacaccttc acgggatact acatgcactg ggtgcgccag 180
gccccgggcc aaggactcga gtggatgggc tggatcaacc ctaactctgg aggcaccaac 240
tacgcccaga atttccaagg cagagtgacc atgacccggg acacctccat ctcgactgcc 300
tatatggaac tgcggcggct gcgctcggac gatactgctg tgtattactg cgccagcggc 360
tgggactttg actactgggg acagggtact ctggtgactg tttcctcggg aggaggcgga 420
tcgggtggag gaggtagcgg gggagggggg tcgggaggcg gaggcagcga tattcgcatg 480
actcaatcgc cgtcctccct gagcgctagc gtgggagatc gagtcacat cacttgaga 540
gcgtcacagt cgattcgcta ctacctgtcc tgggtaccagc agaaaccggg aaaggcacca 600
aagcttctga tctacacggc ctccatcctg caaaatggtg tcccatcaag gttctccggg 660
tcagggagcg gcactgactt cactctcacc atctctcac tccagcccga ggactttgca 720
acctactact gcctccagac gtacaccacc ccggatttcg gtcctggaac caaggtggaa 780
atcaaaacca ctacccagc accgaggcca cccaccccg gtcctaccat cgcctccag 840
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tgccggttcc cagaggagga ggaaggcggc tgcgaactgc gcgtgaaatt cagccgcagc	1140
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cggagagagg agtacgacgt gctggacaag cggagaggac gggacccaga aatgggcggg	1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg	1320
gcagaagcct atagcgagat tggtatgaaa ggggaacgca gaagaggcaa aggccacgac	1380
ggactgtacc agggactcag caccgccacc aaggacacct atgacgctct tcacatgcag	1440
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<210> 598

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 598

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ccgggccagg ggctggagt gatgggccgg attaacccta acagcggggg aactaattac	180
gctcagaagt tccagggtag agtcaccatg actacggaca cttccacttc caccgcctat	240
atggaactgc gtcctcctcg ctcagatgat actgccgtgt attactgcgc gcggactacc	300
acgtcatacg catttgacat ctggggccag ggaactatgg tgaccgtgag ctcgggcgga	360
ggcggttcag ggggaggagg aagcggagga ggaggatcgg gaggagggtg ctccgatatc	420
cagctgactc agtccccgag caccctgtcg gcgtcgggtg gggacagggt taccatcacc	480
tgtagagctt cccaatccat ttcgacttgg ctggcctggt accagcaaaa gccgggaaag	540
gccccctaatt tgcttatcta caaggcatcg accctcgaaa gcggtgtgcc ctcccggttt	600
tcgggatcag gatcaggggac cgagttcacc ctgacctct catccctcca gccggacgac	660

ttcgccactt actactgcca gcagtacaac acctactcgc catacacttt cggccaaggc	720
accaaagctgg agatcaag	738

<210> 599
 <211> 1470
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 599	
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
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gtgtcttgca aagccagcgg ctacaccttc acgggttact acatgcactg ggtgcgccag	180
gcgccggggcc aggggctgga gtggatgggc cggattaacc ctaacagcgg gggaactaat	240
tacgctcaga agttccaggg tagagtcacc atgactacgg acatttcac ttccaccgcc	300
tatatggaac tgcgctccct ccgctcagat gatactgccg tgtattactg cgcgcggaact	360
accacgtcat acgcatttga catctggggc cagggaacta tggtgaccgt gagctcgggc	420
ggaggcgggt cagggggagg aggaagcggg ggaggaggat cgggaggagg tggctccgat	480
atccagctga ctcagtcacc gagcaccctg tcggcgctcg tgggggacag ggttaccatc	540
acctgtagag cttcccaatc catttcgact tggctggcct ggtaccagca aaagccggga	600
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ttttcgggat caggatcagg gaccgagttc accctgacca tctcatccct ccagccggac	720
gacttcgcca cttactactg ccagcagtac aacacctact cgccatacac tttcggccaa	780
ggcaccaagc tggagatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960

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ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
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gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
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ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
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<210> 600

<211> 747

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 600

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ccgggaaagg gactcgaatg ggtgtcatac atcggaaggt caggctcgtc catgtactac	180
gcagactcgg tgaaaggcag attcaccttt agccgggaca acgccaagaa ttccctctac	240
ttgcagatga acagcctgcg agccgaggat actgctgtct actactgtgc cgcgtcgccg	300
gtggtggcag ctactgaaga tttccagcac tggggacagg gaactctggt cacggtgtcg	360
agcgggtgggg gcggaagcgg aggcggagga tcgggcggcg gaggttcggg ggggggaggg	420
tctgacatcg tgatgaccca aaccccagcc accctgagcc tctcccctgg agagcgcgcg	480
actctttcgt gccgcgcttc ccagtcagtg accagcaatt acttggttg gtaccaacag	540

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aagccgggac aggcgccacg gctgctgctt tttgggtgcc	gcactcgcgc caccggaatc	600
ccggatcgct tctcgggctc aggggtccggg acggacttca	ccctgactat caaccggctg	660
gaacctgagg acttcgcgat gtactactgc cagcagtacg	gctccgcacc agtcactttc	720
ggacaaggca ccaagctgga gatcaag		747

<210> 601
 <211> 1479
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 601	
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ctgtcatgcg aagcgagcgg ttttatcttc tccgattact	atatgggatg gattcggcag 180
gccccgggaa agggactcga atgggtgtca tacatcggaa	ggtcaggctc gtccatgtac 240
tacgcagact cggtgaaagg cagattcacc tttagccggg	acaacgcaa gaattccctc 300
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tcgagcggtg ggggcggaag cggaggcgga ggatcgggcg	gcggagggttc ggggggggga 480
gggtctgaca tcgtgatgac ccaaacccca gccaccctga	gcctctcccc tggagagcgc 540
gcgactcttt cgtgccgcgc ttcccagtca gtgaccagca	attacttggc ttggtaccaa 600
cagaagccgg gacaggcgcc acggctgctg ctttttggtg	ccagcactcg cgccaccgga 660
atcccggatc gcttctcggg ctcagggtcc gggacggact	tcaccctgac tatcaaccgg 720
ctggaacctg aggacttcgc gatgtactac tgccagcagt	acggctccgc accagtcact 780
ttcggacaag gcaccaagct ggagatcaag accactaccc	cagcaccgag gccaccacc 840

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ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagacccgca	900
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cctctggctg gtacttgctg ggtcctgctg ctttcactcg tgatcactct ttactgtaag	1020
cgcggtcgga agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac	1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg	1479

<210> 602

<211> 747

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 602

caagtccaac tcgtccagtc gggagcagaa gttagagcac caggagcgtc agtgaaaatc	60
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ccgggtcagg gattggagtg gatgggaatc attaacccat caggagggag ccgggcttac	180
gcgcagaagt tccagggacg cgtcactatg acccgagata cttccacctc gactgtgtac	240
atggaactct cgtccctgag gtccgacgac actgcgatgt attactgtgc tcggactgcc	300
agctgcggtg gggactgtta ctacctgat tactggggcc agggaactct ggtgaccgtg	360
tccagcggag gtggcgggtc aggggggtggc ggaagcggag gcggcggttc aggcggagga	420

ggctcggaca tccaaatgac gcaatcgccg cctaccctga gcgcttccgt gggagatcgg	480
gtgaccatta cttgcagagc atccgagaac gtcaatatct ggctggcctg gtaccaacag	540
aagccgggga agggccctaa actgctgatc tacaagtcga gcagccttgc ctctggagtg	600
ccctcccgt tctcgggctc gggatcagga gcggaattca ccctcaccat ctcctccctg	660
cagccagatg actttgccac ctactactgc cagcagtacc agagctatcc gttgaccttt	720
gggggaggga ctaaagtga catcaag	747

<210> 603

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 603

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactcgtcca gtcgggagca gaagttagag caccaggagc gtcagtga	120
atctcatgca aggcctcggg cttcacgttc cgcggatact acatccactg ggtgcgcaa	180
gccccgggtc agggattgga gtggatggga atcattaacc catcaggagg gagccgggct	240
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tacatggaac tctcgtccct gaggtccgac gacactgcga tgtattactg tgctcggact	360
gccagctgcg gtggggactg ttactacctc gattactggg gccagggaac tctggtgacc	420
gtgtccagcg gaggtggcgg gtcaggggggt ggcggaagcg gaggcggcgg ttcaggcgga	480
ggaggctcgg acatccaaat gacgcaatcg ccgcctaccc tgagcgcttc cgtgggagat	540
cgggtgacca ttacttgca agcatccgag aacgtcaata tctggctggc ctggtaccaa	600
cagaagccgg ggaaggcccc taaactgctg atctacaagt cgagcagcct tgcctctgga	660
gtgccctccc gcttctcggg ctcgggatca ggagcggaat tcaccctcac catctcctcc	720

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ctgcagccag atgactttgc cacctactac tgccagcagt accagagcta tccgttgacc	780
tttgggggag gcactaaagt ggacatcaag accactaccc cagcaccgag gccacccacc	840
ccggctccta ccatcgccctc ccagcctctg tccctgcgtc cggaggcatg tagacccgca	900
gctggtgggg ccgtgcatac ccggggtctt gacttcgcct gcgatatcta catttgggcc	960
cctctggctg gtacttgagg ggtcctgctg ctttcactcg tgatcactct ttactgtaag	1020
cgcggtcgga agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccaggacg tcagcaccgc caccaaggac	1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg	1479

<210> 604

<211> 732

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 604

caagttcaac tcgttcaatc aggtggagga ctcgtgcaac caggaagatc actcagactc	60
agctgcgccg cgtcgggatt cactttcgat gactacgcaa tgcactgggt gcggcaggcc	120
ccgggcaaag gactggaatg ggtgagcgga attagctgga actcggggtc catcgggtac	180
gccgactcgg tgaaggagcg ctttacgata tcccgggaca atgccaaaga ctccctgtat	240
ttgcagatga actccttgag ggctgaggac accgccgtgt actactgcgc taaagatgga	300

tcacgcgcct ggtcctgggg atacttcgat tactggggcc agggcactct ggtgaccgtg	360
tcgtcaggcg gtggaggggtc gggcggagga ggtagcggag gcggagggag cagctctgaa	420
ctgacccaag acccggcggg gtcggtcgcc cttggtcaga ctgtgcggac tacctgtcag	480
ggggacgcgc tgcgctcgta ctacgcttca tggtagcagc agaagcccgg acaggcacct	540
atgctgggtca tctacggaaa gaataaccgc ccatccggca tcccggatcg cttctcgggt	600
tcggacagcg gcgacaccgc atccctgacg atcactggag cgcaggccga ggatgaagcc	660
gactactact gcaattcccg agattcaagc ggctaccctg tgtttgggac cggaactaag	720
gtcaccgtcc tg	732

<210> 605

<211> 1464

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 605

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagttc aactcgttca atcagggtgga ggactcgtgc aaccaggaag atcactcaga	120
ctcagctgcg ccgcgtcggg attcactttc gatgactacg caatgcactg ggtgcggcag	180
gccccgggca aaggactgga atgggtgagc ggaattagct ggaactcggg gtccatcggg	240
tacgccgact cggatgaagg acgctttacg atctcccggg acaatgcaa gaactccctg	300
tatttgcaga tgaactcctt gagggctgag gacaccgccg tgtactactg cgctaaagat	360
ggatcatcgt cctggctcctg gggatacttc gattactggg gccagggcac tctggtgacc	420
gtgtcgtcag gcggtggagg gtcgggcgga ggaggtagcg gaggcggagg gagcagctct	480
gaactgaccc aagacccggc ggtgtcggtc gcccttggtc agactgtgcg gactacctgt	540
cagggggacg cgctgcgctc gtactacgct tcattggtacc agcagaagcc cggacaggca	600

_SL

cctatgctgg tcatctacgg aaagaataac cgcccatccg gcatcccgga tcgcttctcg	660
ggttcggaca gcggcgacac cgcattccctg acgatcactg gagcgcaggc cgaggatgaa	720
gccgactact actgcaattc ccgagattca agcggctacc ctgtgttttg gaccggaact	780
aaggtcaccg tcctgaccac taccacagca ccgaggccac ccaccccggc tcctaccatc	840
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catacccggtg gtcttgactt cgcctgcgat atctacattt gggccctctt ggctgggtact	960
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aatcttggtc ggagagagga gtacgacgtg ctggacaagc ggagaggacg ggacccagaa	1260
atgggcggga agccgcgcag aaagaatccc caagagggcc tgtacaacga gtcctaaaag	1320
gataagatgg cagaagccta tagcgagatt ggtatgaaag gggaacgcag aagaggcaaa	1380
ggccacgacg gactgtacca gggactcagc accgccacca aggacaccta tgacgtcttt	1440
cacatgcagg ccctgccgcc tcgg	1464

<210> 606

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 606

gaagtgaac tcgtggaatc tggaggagga cttgtgcaac ctggaagatc gttgagactc	60
tcattgtgctg cctccgggtt cacctttgac gactacgcca tgactgggt gcgccaggca	120
ccaggaaagg gtctggagtg ggtttcgggt atctcgtgga actccgggag cactggctac	180

_SL

gctgattcgg tgaaaggccg gtttaccatc tcccagagaca atgcgaagaa ttccctctat	240
ctgcagatga acagcctccg ggccgaggat actgccctgt actactgcgc caaggatagc	300
tcatcatggt acggagggtgg atcggctttc gatatctggg gccagggcac gatggtcacc	360
gtgtcctcgg ggggcggagg ctccggggga ggaggtagcg gaggaggagg atcgagctca	420
gagttgactc aagaacccgc agtgtccgtg gcactgggcc aaaccgtcag gatcacttgc	480
caggagagaca gcctgaggtc gtactacgcg tcctggtacc agcagaagcc gggacaggcc	540
ccggtcctgg tcattttcgg acgctcaaga cgcccatcgg gcatcccga ccggttcagc	600
ggaagctcct cgggaaacac cgcgtcactt atcattaccg gcgcacaggc tgaggacgaa	660
gcggattact actgcaactc ccgcgacaat actgccaacc attacgtgtt cgggaccgga	720
acgaaactga ctgtcctg	738

<210> 607

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 607

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aactcgtgga atctggtgga ggacttgtgc aacctggaag atcgttgaga	120
ctctcatgtg ctgcctccgg gttcaccttt gacgactacg ccatgcactg ggtgcgccag	180
gcaccaggaa agggctctgga gtgggtttcg ggtatctcgt ggaactccgg gagcactggc	240
tacgctgatt cggtgaaagg ccggtttacc atctcccag acaatgcgaa gaattccctc	300
tatctgcaga tgaacagcct ccgggccgag gatactgccc tgtactactg cgccaaggat	360
agctcatcat ggtacggagg tggatcggct ttcgatatct ggggccaggg cacgatggtc	420
accgtgtcct cggggggcgg aggctccggg ggaggaggta gcggaggagg aggatcgagc	480

_SL

tcagagttga ctcaagaacc cgcagtgtcc gtggcactgg gccaaaccgt caggatcact	540
tgccagggag acagcctgag gtcgtactac gcgtcctggg accagcagaa gccgggacag	600
gccccgggtcc tgggtcatttt cggacgctca agacgccccat cgggcatccc ggaccgggttc	660
agcgggaagct cctcgggaaa caccgctca cttatcatta ccggcgacaca ggctgaggac	720
gaagcggatt actactgcaa ctcccgcgac aatactgcca accattacgt gttcgggacc	780
ggaacgaaac tgactgtcct gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctgggtggg	900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggctcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
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gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
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gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 608

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 608

gaagttcaat tgggtggaatc tggaggagga cttgtgcaac ccggtagatc tctgagactg	60
--	----

tcctgtgcgg catcgggatt caccttcgac gactacgcta tgactgggt gagacaagcc	120
cctggaaaag gactggagtg ggtgtcaggc atctcctgga atagcgggtc cactggatac	180
gccgattcgg tcaagggtcg cttcaccatt tcccgggaca atgccaagaa ctccctgtac	240
cttcaaata ga actccctccg ggccgaggat accgccctct actactgcgc caaagacagc	300
tcgtcatggt atggcggagg gtcggcattt gacatctggg gacagggaac tatggtgact	360
gtgtcatcag gaggcggcgg aagcggcggc ggccgggtccg gcggaggagg gtcgtccagc	420
gaactcacc aagatccagc agtgagcgtc gcgctgggcc agaccgtcag gatcacgtgc	480
caggagatt cactgcgtc atactacgcg tcctgggtacc agcagaagcc ggggcaggcc	540
ccggctcctc tgatctacgg aaagaacaac cgcccgctcg gtatcccaga ccgcttttcg	600
ggtagctcca gcggaaatac ggctagcctg accatcactg gagcacaggc tgaggatgaa	660
gcggactact actgcaattc gcggggctca tcggggaacc attacgtgtt cggaactggt	720
accaaggtga ctgtcctg	738

<210> 609

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 609

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagttc aattggtgga atctggagga ggacttgtgc aaccggtag atctctgaga	120
ctgtcctgtg cgccatcggg attcaccttc gacgactacg ctatgcactg ggtgagacaa	180
gcccctggaa aaggactgga gtgggtgtca ggcatctcct ggaatagcgg gtccactgga	240
tacgccgatt cgggtcaaggg tcgcttcacc atttcccggg acaatgccaa gaactccctg	300
taccttcaaa tgaactccct ccgggccgag gataccgccc tctactactg cgccaaagac	360

_SL

agctcgtcat ggtatggcgg agggtcggca tttgacatct ggggacaggg aactatggtg	420
actgtgtcat caggaggcgg cggaagcggc ggcggcgggt ccggcggagg agggtcgtcc	480
agcgaactca cccaagatcc agcagtgagc gtcgcgctgg gccagaccgt caggatcacg	540
tgccagggag attcactgcg ctcatactac gcgtcctggt accagcagaa gccggggcag	600
gccccggtcc tcgtgatcta cggaagaac aaccgcccgt cgggtatccc agaccgcttt	660
tcgggtagct ccagcggaaa tacggctagc ctgaccatca ctggagcaca ggctgaggat	720
gaagcggact actactgcaa ttcgcggggc tcatcgggga accattacgt gttcggaaact	780
ggtaccaagg tgactgtcct gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccggggctt tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
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gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctacgaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 610

<211> 753

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

_SL

<400> 610
caagtgcagc tcgttcaatc aggcggagga ctcgttcaac caggaggatc attgcgactc 60
tcatgtgcgg cctctggatt cacgtttagc tcatattgga tgcactgggt gcggcaggcg 120
ccggggaaaag gtctgggtgtg ggtcagccgc atcaactcag acggctcctc gacttcgtac 180
gccgactccg tgaaggagcg ctttaccatt tcccgcgaca acgccaagaa taccctttac 240
cttcagatga actccctccg cgctgaggat accgccgtgt actactgcgt gaggactggc 300
tgggtcggca gctactacta ctacatggac gtgtggggca aaggaactac tgtcaccgtg 360
tcaagcggcg gtggaggttc cggcggggga ggatcggggg ggggcggatc ggggtggcga 420
ggatcggaga tcgtgttgac ccagtcgccg ggaaccctgt cgctgtcgcc tggggagaga 480
gcaactctgt cctgccgggc ttcccagtcg gtgtcgagca attacctggc atggtaccaa 540
cagaagccgg gacagccgcc acgcctgctg atctatgacg tgtcaactcg ggcaactgga 600
atccctgcgc gggtcagcgg cggagggagc ggtaccgatt tcaccctgac tatttcctcc 660
ctcgaaccag aagatttcgc cgtctactac tgccagcaga gaagcaactg gccgccctgg 720
acgttcggac aaggaaccaa ggtcgaaatc aag 753

<210> 611
<211> 1485
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 611
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtgc agctcgttca atcaggcggga ggactcgttc aaccaggagg atcattgcga 120
ctctcatgtg cggcctctgg attcacgttt agctcatatt ggatgcactg ggtgcggcag 180
gcgccggggga aaggtctggt gtgggtcagc cgcatcaact cagacggctc ctcgacttcg 240

_SL

tacgccgact ccgtaaggg acgctttacc atttcccgcg acaacgcaa gaataccctt	300
taccttcaga tgaactccct ccgcgctgag gataccgccg tgtactactg cgtgaggact	360
ggctgggtcg gcagctacta ctactacatg gacgtgtggg gcaaaggaac tactgtcacc	420
gtgtcaagcg gcggtggagg ttccggcggg ggaggatcgg gggggggcgg atcgggtggc	480
ggaggatcgg agatcgtgtt gacccagtcg ccgggaaccc tgtcgtgtc gcctggggag	540
agagcaactc tgtcctgccg ggcttcccag tcggtgtcga gcaattacct ggcatggtag	600
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ggaatccctg cgcggttcag cggcggaggg agcggtagcg atttcaccct gactatttcc	720
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tggacgttcg gacaaggaac caaggtcgaa atcaagacca ctaccccagc accgaggcca	840
cccaccccgg ctctaccat cgcctcccag cctctgtccc tgcgtccgga ggcatgtaga	900
cccgagctg gtggggccgt gcatacccgg ggtcttgact tcgcctgcga tatctacatt	960
tgggcccctc tggctggtag ttgcgggggtc ctgctgcttt cactcgtgat cactctttac	1020
tgtaagcgcg gtcggaagaa gctgctgtac atctttaagc aacccttcat gaggcctgtg	1080
cagactactc aagaggagga cggctgttca tgccggttcc cagaggagga ggaaggcggc	1140
tgcgaactgc gcgtgaaatt cagccgcagc gcagatgctc cagcctacaa gcaggggcag	1200
aaccagctct acaacgaact caatcttggg cggagagagg agtacgacgt gctggacaag	1260
cggagaggac gggaccaga aatgggcggg aagccgcgca gaaagaatcc ccaagagggc	1320
ctgtacaacg agctccaaaa ggataagatg gcagaagcct atagcgagat tggtagaaa	1380
ggggaacgca gaagaggcaa aggccacgac ggactgtacc agggactcag caccgccacc	1440
aaggacacct atgacgctct tcacatgcag gccctgccgc ctcgg	1485

<210> 612

<211> 750

<212> DNA

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 612

caagtgcaat tggttcaatc aggaggagga gtcgtgcagc ccggaagatc gttgagactg	60
tcatgtgccg cgagcggctt tacttttctca agctacggaa tgcattgggt gcgacaggct	120
ccgggaaaag gactggaatg ggctgcagtg atctcatacg acggctcgaa caagtactac	180
gccgactccg tcaagggtcg gttcacgatt tcgcgcgata attccaagaa cactctgtac	240
ctccaaatga acagcctccg ggcagaggac accgccgtct actactgcgc taagggatac	300
tcgcgctact actactatgg aatggatgtg tggggccagg gaactaccgt gacggtgtcg	360
tccggcggcg gtgggtcggg cggaggcgga tcagggtggag gtggaagcgg aggaggaggg	420
agcgaaatcg tcatgactca gtcccctgct accctttctc tgtcgccggg agaaagagcc	480
atcctgagct gccgggcctc ccagagcgtg tacaccaaat acctgggatg gtaccagcag	540
aagccggggc aggcaccaag gtcctgatc tacgatgcgt ccacccgcgc gactggtatc	600
ccagaccgct tttccggctc ggggtcaggg actgacttca cccttactat caatcggctc	660
gagcctgagg atttcgccgt gtattactgc cagcactacg gaggggtccc gctgattacc	720
ttcgccaag gcaccaaagt ggacatcaag	750

<210> 613

<211> 1482

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 613

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaaagtgc aattggttca atcaggagga ggagtcgtgc agcccgaag atcgttgaga	120

_SL

ctgtcatgtg ccgcgagcgg ctttactttc tcaagctacg gaatgcattg ggtgcgacag	180
gctccgggaa aaggactgga atgggtcgca gtgatctcat acgacggctc gaacaagtac	240
tacgccgact ccgtcaaggg tcggttcacg atttcgcgcg ataattccaa gaacactctg	300
tacctccaaa tgaacagcct ccgggcagag gacaccgccg tctactactg cgctaaggga	360
tactcgcgct actactacta tggaatggat gtgtggggcc agggaaactac cgtgacggtg	420
tcgtccggcg gcggtgggtc gggcggaggc ggatcagggtg gaggtggaag cggaggagga	480
gggagcga aa tcgtcatgac tcagtcccct gctacccttt ctctgtcgcc gggagaaaga	540
gccatcctga gctgccgggc ctcccagagc gtgtacacca aatacctggg atggtaccag	600
cagaagccgg ggcaggcacc aaggctcctg atctacgatg cgtccacccg cgcgactggg	660
atcccagacc gcttttccgg ctccgggtca gggactgact tcacccttac tatcaatcgg	720
ctcgagcctg aggatttcgc cgtgtattac tgccagcact acggagggtc cccgctgatt	780
accttcggcc aaggcaccaa agtggacatc aagaccacta ccccagcacc gaggccaccc	840
accccggtc ctaccatcgc ctcccagcct ctgtccctgc gtccggaggc atgtagaccc	900
gcagctgggtg gggccgtgca taccgggggt cttgacttcg cctgcgatat ctacatttgg	960
gcccctctgg ctggtacttg cggggtcctg ctgctttcac tcgtgatcac tctttactgt	1020
aagcgcggtc ggaagaagct gctgtacatc tttaagcaac ctttcatgag gcctgtgcag	1080
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gaactgcgcg tgaaattcag ccgcagcgca gatgctccag cctacaagca ggggcagaac	1200
cagctctaca acgaactcaa tcttggtcgg agagaggagt acgacgtgct ggacaagcgg	1260
agaggacggg acccagaaat gggcgggaag ccgcgcagaa agaatcccca agagggcctg	1320
tacaacgagc tccaaaagga taagatggca gaagcctata gcgagattgg tatgaaaggg	1380
gaacgcagaa gaggcaaagg ccacgacgga ctgtaccagg gactcagcac cgccaccaag	1440
gacacctatg acgctcttca catgcaggcc ctgccgcctc gg	1482

<210> 614

_SL

<211> 747

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 614

caagtgaac ttgttcaatc aggaggagga ctcgttcaac ccggaggatc actgcgactc	60
tcatgtgcag cgtcgggggtt caccttctcc agctacgcaa tgtcctgggt gcgccaagcc	120
cctggaaaag gcctggagtg ggtgtcggcc atctctggga gcgggggata aacttactac	180
gctgactccg tcaagggccg ctttaccatc tcccgggaca acagcaagaa cactctctat	240
ctccagatga actcgctgag agccgaagat accgctgtct actactgcgc gaagagagaa	300
gctgccgcag ggcacgattg gtacttcgac ttgtggggca ggggcaccct tgtgaccgtg	360
tcctccggtg gaggcggatc aggaggtggg ggatcgggtg gaggaggaag cggaggcggc	420
ggttcggaca ttgcggtcac ccagtcaccg agctccctca gcgcatcggg gggcgaccgg	480
gtcactatca cttgccgggc gtcccagtcg atctcatcgt atctgaattg gtaccagcag	540
aaaccgggaa aggcgccgaa gctgttgatc tacgctgcca gctccctgca gtcgggtgtg	600
ccatcacgct tttccggctc gggatcggga accgatttca ctctgacgat ctctagcctg	660
cagccagaag atttcgccac ttactactgc cagcagtcct acagcatccc tctgactttc	720
ggacaaggga cgaaagtgga gattaag	747

<210> 615

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 615

_SL

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aacttgttca atcaggagga ggactcgttc aaccggagg atcactgcga	120
ctctcatgtg cagcgtcggg gttcaccttc tccagctacg caatgtcctg ggtgcgcaa	180
gcccctggaa aaggcctgga gtgggtgtcg gccatctctg ggagcggggg atcaacttac	240
tacgtgact ccgtcaaggg ccgctttacc atctccggg acaacagcaa gaacactctc	300
tatctccaga tgaactcgct gagagccgaa gataccgtg tctactactg cggaagaga	360
gaagctgccg cagggcacga ttggtacttc gacttgtggg gcaggggcac ctttgtgacc	420
gtgtcctccg gtggaggcgg atcaggaggt gggggatcgg gtggaggagg aagcggaggc	480
ggcggttcgg acattcgcgt caccagtcga ccgagctccc tcagcgcacg ggtgggcgac	540
cgggtcacta tcacttgccg ggcgtcccag tcgatctcat cgtatctgaa ttggtaccag	600
cagaaaccgg gaaaggcgcc gaagctgttg atctacgtg ccagctccct gcagtcgggt	660
tgccatcac gcttttccgg ctcgggatcg ggaaccgatt tcactctgac gatctctagc	720
ctgcagccag aagatttcgc cacttactac tgccagcagt cctacagcat ccctctgact	780
ttcggacaag ggacgaaagt ggagattaag accactaccc cagcaccgag gccaccacc	840
ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagaccgca	900
gctggtgggg ccgtgcatac ccggggtctt gacttcgcct gcgatatcta catttgggcc	960
cctctggctg gtacttgccg ggtcctgctg ctttactcg tgatcactct ttactgtaag	1020
cgcggtcggg agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccaggacg tcagcaccgc caccaaggac	1440

acctatgacg ctcttcacat gcaggccctg cgcctcgg ^{_SL} 1479

<210> 616
 <211> 741
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 616
 caagtccaac tcgttcagtc atgggcagaa gtcaagaaac ccggtgcaag cgtcaaagtg 60
 tcgtgtaagg cctccggcta cactttcact tcctactaca tgactgggt gcgccaagcc 120
 ccgggacagg gccttgaatg gatgggcatc atcaacccat caggagggtc cacgagctac 180
 gcgcagaagt tccaggggag agtgacgatg actagagata cctccacgag caccgtctac 240
 atggagctgt cgaatctgcg gtcagaggac actgctgtgt attactgcg gcgctccccg 300
 cgggtgacca ctggctactt tgactactgg ggacaaggga ccctggtgac cgtcagctcg 360
 ggaggcggag gatcgggagg tggagggtcc ggtggaggcg gctctggagg aggcgggtcg 420
 gacattcaat tgaccagag cccatccacc ctctcagcct cggtagggga tagggtgact 480
 atcacttgcc gggcctccca gtcaatttcc agctggctgg cttggtacca gcaaaagcct 540
 ggaaaggcac cgaagctcct gatctacaag gcctcatctc tggaatcagg agtgccttcg 600
 cgcttcagcg gaagcggctc gggaactgag ttacacctga ccatctcgag cctgcagcca 660
 gatgacttcg cgacctatta ctgccagcag tactcgtcct acccgttgac tttcggagga 720
 ggtacccgcc tcgaaatcaa a 741

<210> 617
 <211> 1473
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 617

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactcgttca gtcattgggca gaagtcaaga aaccgggtgc aagcgtcaaa	120
gtgtcgtgta aggcctccgg ctacactttc acttcctact acatgcactg ggtgcgccaa	180
gccccgggac agggccttga atggatgggc atcatcaacc catcaggagg ttccacgagc	240
tacgcgcaga agttccaggg gagagtgcgc atgactagag atacctccac gagcaccgtc	300
tacatggagc tgtcgaatct gcggtcagag gacactgctg tgtattactg cgcgcgctcc	360
ccgcgggtga ccactggcta ctttgactac tggggacaag ggaccctggg gaccgtcagc	420
tcgggaggcg gaggatcggg aggtggaggg tccgggtggag gcggctctgg aggaggcggg	480
tcggacattc aattgacca gagcccatcc accctctcag cctcgggtggg ggatagggtg	540
actatcactt gccgggcctc ccagtcaatt tccagctggc tggcttggtg ccagcaaaag	600
cctggaaaagg caccgaagct cctgatctac aaggcctcat ctctggaatc aggagtgcct	660
tcgcgcttca gcggaagcgg ctcgggaact gagtttacct tgaccatctc gagcctgcag	720
ccagatgact tcgcgaccta ttactgccag cagtactcgt cctaccggtt gactttcgga	780
ggaggtagcc gcctcgaaat caaaaccact accccagcac cgaggccacc caccgggct	840
cctaccatcg cctcccagcc tctgtccctg cgtccggagg catgtagacc cgcagctggg	900
ggggccgtgc ataccggggg tcttgacttc gcctgcgata tctacatttg ggccccctg	960
gctggtactt gcggggctct gctgctttca ctcgtgatca ctctttactg taagcgcggt	1020
cggaagaagc tgctgtacat ctttaagcaa cccttcatga ggcctgtgca gactactcaa	1080
gaggaggacg gctgttcatg ccggttccca gaggaggagg aaggcggctg cgaactgcgc	1140
gtgaaattca gccgcagcgc agatgctcca gcctacaagc aggggcagaa ccagctctac	1200
aacgaactca atcttggtcg gagagaggag tacgacgtgc tggacaagcg gagaggacgg	1260
gaccagaaaa tgggcgggaa gccgcgcaga aagaatcccc aagagggcct gtacaacgag	1320

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ctccaaaagg ataagatggc agaagcctat agcgagattg gtatgaaagg ggaacgcaga	1380
agaggcaaag gccacgacgg actgtaccag ggactcagca ccgccaccaa ggacacctat	1440
gacgctcttc acatgcaggc cctgccgcct cgg	1473

<210> 618
 <211> 759
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 618	
caagtccaac tcgtccagtc cgggtgcagaa gtcagaaggc caggagcaag cgtgaagatc	60
tcgtgtagag cgtcaggaga caccagcact cgccattaca tccactggct gcgccaggct	120
ccgggccaaag ggccggagtg gatgggtgtg atcaaccga ctacgggacc ggctaccgga	180
agccctgcgt acgcacagat gctgcaggga cgggtgacta tgaccgcga tactagcact	240
aggaccgtgt acatggaact ccgctcgttg cggttcgaag ataccgccgt ctactactgc	300
gcccgggtccg tgggtgggccg aagcgcccct tactacttcg attactgggg acagggcact	360
ctggtgaccg ttagctccgg tgggggaggc tcgggtggag gcggatcggg aggaggaggc	420
agcgggtggag ggggatcggga cattcagatg acccagtcac cctcctccct ctcagcctcg	480
gtcggggacc gggtgaccat tacgtgcaga gcctcacaag ggatctcgga ctactccgcc	540
tggtagcagc agaaaccggg aaaagcgcca aagctcctga tctacgccg gagcaccctg	600
caatcaggag tgccatcgcg cttttctgga tcgggctcag ggactgactt cacgctgact	660
atctcctacc ttcagtccga ggatttcgct acctactact gccaacagta ttactcctat	720
cccctgacct ttggcggagg cactaagggtg gacatcaag	759

<210> 619
 <211> 1491
 <212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 619

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactcgtcca gtccgggtgca gaagtcagaa ggccaggagc aagcgtgaag	120
atctcgtgta gagcgtcagg agacaccagc actcgccatt acatccactg gctgcgccag	180
gctccgggcc aagggccgga gtggatgggt gtgatcaacc cgactacggg accggctacc	240
ggaagccctg cgtacgcaca gatgctgcag ggacgggtga ctatgacccg cgatactagc	300
actaggaccg tgtacatgga actccgctcg ttgcggttcg aagataccgc cgtctactac	360
tgcgcccggg ccgtgggtggg ccgaagcgcc ctttactact tcgattactg gggacagggc	420
actctgggtga ccgttagctc cgggtggggga ggctcgggtg gaggcggatc gggaggagga	480
ggcagcgggtg gaggggggatc ggacattcag atgacccagt caccctcctc cctctcagcc	540
tcggtcgggg accgggtgac cattacgtgc agagcctcac aagggatctc ggactactcc	600
gcctgggtacc agcagaaaacc gggaaaagcg ccaaagctcc tgatctacgc cgcgagcacc	660
ctgcaatcag gagtgccatc gcgcttttct ggatcgggct cagggactga cttcacgctg	720
actatctcct accttcagtc cgaggatttc gctacctact actgccaaca gtattactcc	780
tatcccctga cctttggcgg aggcactaag gtggacatca agaccactac ccagcaccg	840
aggccaccca ccccggtcc taccatcgcc tcccagcctc tgtccctgcg tccggaggca	900
tgtagacccg cagctgggtg ggccgtgcat acccggggtc ttgacttcgc ctgcgatatc	960
tacatttggg cccctctggc tgggtacttg cgggtcctgc tgctttcact cgtgatcact	1020
ctttactgta agcgcggtcg gaagaagctg ctgtacatct ttaagcaacc cttcatgagg	1080
cctgtgcaga ctactcaaga ggaggacggc tgttcatgcc ggttcccaga ggaggaggaa	1140
ggcggctgcg aactgcgcgt gaaattcagc cgcagcgagc atgctccagc ctacaagcag	1200

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gggcagaacc agctctacaa cgaactcaat cttggtcgga gagaggagta cgacgtgctg	1260
gacaagcggga gaggacggga cccagaaatg ggcgggaagc cgcgagaaa gaatcccca	1320
gagggcctgt acaacgagct ccaaaaggat aagatggcag aagcctatag cgagattggt	1380
atgaaagggg aacgcagaag aggcaaaggc cacgacggac tgtaccaggg actcagcacc	1440
gccaccaagg acacctatga cgctcttcac atgcaggccc tgccgcctcg g	1491

<210> 620

<211> 747

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 620

caagtccaac tccagcaatc gggagcagaa gtcaagaaac caggcgcacg ggtgaaagt	60
tcgtgtaagg cgtcagggtg caccttcacc aactactata tgcactgggt gcgccaggct	120
ccaggccagg ggttggagtg gatggggatc atcaatccgt cagggtggcta caccacttac	180
gctcagaagt tccagggacg cctcactatg actcgcgata ctagcacctc cacggtgtac	240
atggaactgt catcgctgag gtccgaagat accgccgtct actactgcgc acggatcaga	300
tcctgcggag gagattgtta ctactttgac aactggggac agggcaccct tgttactgtg	360
tcatcgggag gagggggaag cggaggaggt ggatcaggcg gcggtggcag cgggggcgga	420
ggatcggaca ttcagctgac tcagtcccc tccactttgt cggccagcgt gggagacaga	480
gtgaccatca cttgccgggc gtccgagaac gtcaatatct ggctggcctg gtaccagcaa	540
aagcctggaa aagccccgaa gctgctcatc tataagtcac ccagcctggc gtctgggtgtg	600
ccgtcgcggt tctccggcag cgggagcgga gccgagttca ctctaccat ttcgagcctt	660
caaccggacg atttcgccac ctactactgc cagcagtacc aatcctaccc tctgacgttt	720
ggaggtggaa ccaaggtgga catcaag	747

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<210> 621
<211> 1479
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 621
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtcc aactccagca atcgggagca gaagtcaaga aaccaggcgc atcggtgaaa 120
gtgtcgtgta aggcgtcagg gtacaccttc accaactact atatgcactg ggtgcgccag 180
gctccaggcc aggggttggga gtggatgggg atcatcaatc cgtcagggtgg ctacaccact 240
tacgctcaga agttccaggg acgcctcact atgactcgcg atactagcac ctccacgggtg 300
tacatggaac tgtcatcgct gaggtccgaa gataccgccg tctactactg cgcacggatc 360
agatcctgcg gaggagattg ttactacttt gacaactggg gacagggcac cttgttact 420
gtgtcatcgg gaggaggggg aagcggagga ggtggatcag gcggcggtgg cagcgggggc 480
ggaggatcgg acattcagct gactcagtcc ccctccactt tgcggccag cgtgggagac 540
agagtgacca tcacttgccg ggcgtccgag aacgtcaata tctggctggc ctggtaccag 600
caaaagcctg gaaaagcccc gaagctgctc atctataagt catccagcct ggctgttggt 660
gtgccgtcgc ggttctccgg cagcgggagc ggagccgagt tcactctcac catttcgagc 720
cttcaaccgg acgatttcgc cacctactac tgccagcagt accaatccta ccctctgacg 780
tttggaggtg gaaccaaggt ggacatcaag accactaccc cagcaccgag gccacccacc 840
ccggctccta ccatcgcctc ccagcctctg tccctgcgtc cggaggcatg tagacccgca 900
gctggtgggg ccgtgcatac ccggggtctt gacttcgcct gcgatatcta catttgggcc 960
cctctggctg gtacttgccg ggtcctgctg ctttcactcg tgatcactct ttactgtaag 1020
cgcggtcggga agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact 1080

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actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac	1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg	1479

<210> 622

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 622

caaactactc tgaaagaatc tggaccggcc ctggttaagc cgactcaaac gctcaccctt	60
acttgcacct tcagcggatt ctactcagc actgctggtg tgcacgtcgg atggattaga	120
cagccgcctg gaaaggccct ggaatggctc gccctcatct cctgggccga tgacaagaga	180
tacaggccct cgcttcgatc ccggttgac attaccggg tgacctcgaa agatcaggtg	240
gtgctctcaa tgaccaatat gcagccggag gacaccgcta cgtactactg cgactgcaa	300
ggatttgacg gctacgaggc taactgggga ccaggctactc tggtcaccgt gagctccggc	360
gggggaggat caggcggggg ggggtcagga ggcggaggct ccggtggagg aggatcggat	420
atcgctcatga cccagtcccc aagctcgctg agcgcgtcag cgggcgaccg cgtgactatc	480
acttgccggg ccagccgcgg catctcctcc gactggcgt ggtaccagca gaagcctgga	540
aaaccgcaa agctcctgat ctatgatgcc tccagcctgg agtcaggtgt ccccagccgc	600
ttctcgggtt cgggctcggg aaccgacttc actttgacca tcgactcgct ggaaccggaa	660

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gatttcgcaa cctactactg tcagcagtcc tactcgaccc cttggacttt tggacaaggg	720
acgaaggtgg acatcaag	738

<210> 623
 <211> 1470
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 623 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccaaatca ctctgaaaga atctggaccg gccctgggta agccgactca aacgctcacc	120
cttacttgca ccttcagcgg attctcactc agcactgctg gtgtgcacgt cggatggatt	180
agacagccgc ctggaaaaggc cctggaatgg ctcgccctca tctcctgggc cgatgacaag	240
agatacaggc cctcgcttcg atcccgggtg gacattaccc gggtgacctc gaaagatcag	300
gtggtgctct caatgaccaa tatgcagccg gaggacaccg ctacgtacta ctgcgcactg	360
caaggatttg acggctacga ggctaactgg ggaccaggta ctctgggtcac cgtgagctcc	420
ggcggggggag gatcaggcgg ggggggggtca ggaggcggag gctccgggtgg aggaggatcg	480
gatatcgtca tgacccagtc cccaagctcg ctgagcgcgt cagcgggcga ccgcgtgact	540
atcacttgcc gggccagccg cggcatctcc tccgactgg cgtggtacca gcagaagcct	600
ggaaaaccgc caaagctcct gatctatgat gcctccagcc tggagtcagg tgtccccagc	660
cgcttctcgg gttcgggctc gggaaccgac ttcactttga ccatcgactc gctggaaccg	720
gaagatttcg caacctacta ctgtcagcag tcctactcga ccccttggac ttttggacaa	780
gggacgaagg tggacatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960

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ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaaccc ttcattgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 624

<211> 717

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 624

caagtccagc tccagcagtc gggcccagag ttggagaagc ctggggcgag cgtgaagatc	60
tcatgcaaag cctcaggcta ctcctttact ggatacacga tgaattgggt gaaacagtcg	120
catggaaagt cactggaatg gatcggctctg attacgcctt acaacggcgc ctccagctac	180
aaccagaagt tcaggggaaa ggcgaccctt actgtcgaca agtcgtcaag caccgcctac	240
atggacctcc tgtccctgac ctccgaagat agcgcggctt acttttgtgc acgcggaggt	300
tacgatggac ggggattcga ctactggggc cagggaacca ctgtcaccgt gtcgagcgga	360
ggcggaggga gcggaggagg aggcagcgga ggtggagggt cggatatcga actcactcag	420
tccccagcaa tcatgtccgc ttcaccggga gaaaaggatga ccatgacttg ctcggcctcc	480
tcgtccgtgt catacatgca ctggtaccaa caaaaatcgg ggacctcccc taagagatgg	540

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atctacgata ccagcaaact ggcttcaggc gtgccgggac gcttctcggg ttcggggagc	600
ggaaaattcgt attcgttgac catttcgtcc gtggaagccg aggacgacgc aacttattac	660
tgccaacagt ggtcaggcta cccgctcact ttcggagccg gcactaagct ggagatc	717

<210> 625

<211> 1149

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 625

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc agctccagca gtcggggcca gagttggaga agcctggggc gagcgtgaag	120
atctcatgca aagcctcagg ctactccttt actggataca cgatgaattg ggtgaaacag	180
tcgcatggaa agtcactgga atggatcggg ctgattacgc cctacaacgg cgccctccagc	240
tacaaccaga agttcagggg aaaggcgacc cttactgtcg acaagtcgtc aagcaccgcc	300
tacatggacc tcctgtccct gacctccgaa gatagcgagg tctacttttg tgcacgcgga	360
ggttacgatg gacgggggatt cgactactgg ggccagggaa cactgtcac cgtgtcgagc	420
ggaggcggag ggagcggagg aggaggcagc ggaggtggag ggtcggatat cgaactcact	480
cagtccccag caatcatgtc cgcttcaccg ggagaaaagg tgaccatgac ttgctcggcc	540
tcctcgtccg tgtcatacat gactgggtac caacaaaaat cggggacctc ccctaagaga	600
tggatctacg ataccagcaa actggcttca ggcgtgccgg gacgcttctc gggttcgggg	660
agcggaaatt cgtattcgtt gaccatttcg tccgtggaag ccgaggacga cgcaacttat	720
tactgccaac agtggtcagg ctacccgctc actttcggag ccggcactaa gctggagatc	780
accactaccc cagcaccgag gccacccacc ccggctccta ccatcgctc ccagcctctg	840
tccctgcgtc cggaggcatg tagacccgca gctgggtgggg ccgtgcatac ccggggcttt	900

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gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgcg ggtcctgctg	960
ctttcactcg tgatcactct ttactgtaag cgcggtcgga agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcatgccgg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140
gctccagcc	1149

<210> 626
 <211> 249
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 626
 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 Ser Asn Tyr
 20 25 30

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Ala Thr Tyr Arg Gly His Ser Asp Thr Tyr Tyr Asn Gln Lys Phe
 50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Ala Ile Tyr Asn Gly Tyr Asp Val Leu Asp Asn Trp Gly
 100 105 110

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Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln
130 135 140

Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
145 150 155 160

Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr Leu Asn Trp
165 170 175

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Tyr Thr
180 185 190

Ser Asn Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
210 215 220

Ala Thr Tyr Tyr Cys Gln Gln Tyr Arg Lys Leu Pro Trp Thr Phe Gly
225 230 235 240

Gln Gly Thr Lys Leu Glu Ile Lys Arg
245

<210> 627

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

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<400> 627

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 Ser Ala Ser Gln Asp Ile Ser 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 Tyr Thr Ser Asn Leu His 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 Tyr Arg Lys Leu Pro Trp
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Gly Gly Gly Gly
100 105 110

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115 120 125

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
130 135 140

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Ser Asn Tyr
145 150 155 160

Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
165 170 175

Gly Ala Thr Tyr Arg Gly His Ser Asp Thr Tyr Tyr Asn Gln Lys Phe
180 185 190

_SL

Lys Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
195 200 205

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
210 215 220

Ala Arg Gly Ala Ile Tyr Asn Gly Tyr Asp Val Leu Asp Asn Trp Gly
225 230 235 240

Gln Gly Thr Leu Val Thr Val Ser Ser
245

<210> 628

<211> 239

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 628

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 Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr ^{_SL}Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser
130 135 140

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser
145 150 155 160

Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
165 170 175

Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr
210 215 220

Ser Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
225 230 235

<210> 629

<211> 717

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

_SL

polynucleotide"

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<400> 629
gaagtgcaat tgggtggaatc aggggggagga cttgtgcagc ctggaggatc gctgagactg      60
tcatgtgccg tgtccggctt tgccctgtcc aaccacggga tgtcctgggt ccgccgcgcg      120
cctggaaagg gcctcgaatg ggtgtcgggt attgtgtaca gcggtagcac ctactatgcc      180
gcatccgtga aggggagatt caccatcagc cgggacaact ccaggaaacac tctgtacctc      240
caaatgaatt cgctgaggcc agaggacact gccatctact actgctccgc gcatggcgga      300
gagtccgacg tctggggaca ggggaccacc gtgaccgtgt ctagcgcgtc cggcggaggc      360
ggcagcgggg gtcgggcatc agggggcggc ggatcggaca tccagctcac ccagtccccg      420
agctcgctgt ccgcctccgt gggagatcgg gtcaccatca cgtgccgcgc cagccagtcg      480
atttcctcct acctgaactg gtaccaacag aagcccggaa aagccccgaa gcttctcatc      540
tacgccgctt cgagcctgca gtcaggagtg ccctcacggt tctccggctc cggttccggt      600
actgatttca ccctgaccat ttcctccctg caaccggagg acttcgctac ttactactgc      660
cagcagtcgt actccacccc ctacactttc ggacaaggca ccaaggtcga aatcaag      717
```

<210> 630

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 630

```
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 Val Ser Gly Phe Ala Leu Ser Asn His
20           25           30
```

```
Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
```


_SL

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 Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 632

<211> 483

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 632

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

_SL

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Gln Leu Thr Gln Ser
145 150 155 160

Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
165 170 175

Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys
180 185 190

Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln
195 200 205

Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
210 215 220

Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr
225 230 235 240

Cys Gln Gln Ser Tyr Ser Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys
245 250 255

Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
260 265 270

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
275 280 285

_SL

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
290 295 300

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
305 310 315 320

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
325 330 335

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
340 345 350

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
355 360 365

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
370 375 380

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
385 390 395 400

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
405 410 415

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
420 425 430

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
435 440 445

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
450 455 460

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
465 470 475 480

Pro Pro Arg

<210> 633
<211> 1449
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 633
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgaagtgc aattggtgga atcaggggga ggacttgtgc agcctggagg atcgctgaga 120
ctgtcatgtg ccgtgtccgg ctttgccctg tccaaccacg ggatgtcctg ggtccgccgc 180
gcgccctggaa agggcctcga atgggtgtcg ggtatttgtt acagcggtag cacctactat 240
gccgcatccg tgaaggggag attcaccatc agccgggaca actccaggaa cactctgtac 300
ctccaaatga attcgctgag gccagaggac actgccatct actactgctc cgcgcatggc 360
ggagagtccg acgtctgggg acaggggacc accgtgaccg tgtctagcgc gtccggcgga 420
ggcggcagcg ggggtcgggc atcagggggc ggcggtatcg acatccagct caccagttcc 480
ccgagctcgc tgtccgcctc cgtgggagat cgggtcacca tcacgtgccg cgccagccag 540
tcgatttcct cctacctgaa ctggtaccaa cagaagcccg gaaaagcccc gaagcttctc 600
atctacgccg cctcgagcct gcagtcagga gtgccctcac ggttctccgg ctccggttcc 660
ggtactgatt tcaccctgac catttcctcc ctgcaaccgg aggacttcgc tacttactac 720
tgccagcagt cgtactccac cccctacact ttcggaacaag gcaccaaggt cgaaatcaag 780
accactaccc cagcaccgag gccacccacc ccggctccta ccatcgctc ccagcctctg 840
tccctgcgtc cggaggcatg tagacccgca gctgggtggg ccgtgcatac ccggggcttt 900
gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgccg ggtcctgctg 960

_SL

ctttcactcg tgatcactct ttactgtaag cgcggtcgga agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcatgccgg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140
gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcagaaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320
gcctatagcg agattggtat gaaaggggaa cgcagaagag gcaaaggcca cgacggactg	1380
taccagggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440
ccgcctcgg	1449

<210> 634

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 634

Gln	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	Ser	Asn	Tyr
		20					25						30		

Ala	Met	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Gly	Trp	Val
	35					40						45			

Ser	Gly	Ile	Ser	Arg	Ser	Gly	Glu	Asn	Thr	Tyr	Tyr	Ala	Asp	Ser	Val
	50					55				60					

Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr
65					70				75					80	

_SL

Leu Gln Met Asn Ser Leu Arg Asp Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Pro Ala His Tyr Tyr Gly Gly Met Asp Val Trp Gly Gln
100 105 110

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser
130 135 140

Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
145 150 155 160

Arg Ala Ser Gln Ser Ile Ser Ser Ser Phe Leu Ala Trp Tyr Gln Gln
165 170 175

Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Arg Arg
180 185 190

Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
195 200 205

Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Ser Ala Val Tyr
210 215 220

Tyr Cys Gln Gln Tyr His Ser Ser Pro Ser Trp Thr Phe Gly Gln Gly
225 230 235 240

Thr Lys Leu Glu Ile Lys
245

<210> 635

<211> 738

_SL

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 635

```
caagtgaac tcgtggaatc tggaggagga ctcgtgcaac ccggaagatc gcttagactg      60
tcgtgtgccg ccagcgggtt cactttctcg aactacgcga tgccttgggt ccgccaggca      120
cccgaaagg gactcgggtt ggtgtccggc atttcccggt ccggcgaaaa tacctactac      180
gccgactccg tgaagggccg cttcaccatc tcaagggaca acagcaaaaa caccctgtac      240
ttgcaaatga actccctgcg ggatgaagat acagccgtgt actattgcgc ccggtcgcct      300
gccattact acggcggaat ggacgtctgg ggacaggga ccactgtgac tgtcagcagc      360
gcgtcgggtg gcggcggctc agggggtcgg gcctccgggg ggggagggtc cgacatcgtg      420
ctgaccagtc ccccggaac cctgagcctg agcccgagg agcgcgcgac cctgtcatgc      480
cgggcatccc agagcattag ctctccttt ctcgcctggt atcagcagaa gcccggacag      540
gccccgaggc tgctgatcta cggcgctagc agaagggcta ccggaatccc agaccggttc      600
tccggctccg gttccgggac cgatttcacc ctactatct cgcgcctgga acctgaggac      660
tccgccgtct actactgcca gcagtaccac tcatccccgt cgtggacgtt cggacagggc      720
accaagctgg agattaag                                          738
```

<210> 636

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 636

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg

1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
 Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Gly Trp Val
 Ser Gly Ile Ser Arg Ser Gly Glu Asn Thr Tyr Tyr Ala Asp Ser Val
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 Leu Gln Met Asn Ser Leu Arg Asp Glu Asp Thr Ala Val Tyr Tyr Cys
 Ala Arg Ser Pro Ala His Tyr Tyr Gly Gly Met Asp Val Trp Gly Gln
 Gly Thr Thr Val Thr Val Ser Ser

<210> 637
 <211> 109
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 637
 Asp 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 Ile Ser Ser Ser
 20 25 30

_SL

Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
35 40 45

Ile Tyr Gly Ala Ser Arg Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Ser Ala Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro
85 90 95

Ser Trp Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 638

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 638

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Asn Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

_SL

Gly Leu Gly Trp Val Ser Gly Ile Ser Arg Ser Gly Glu Asn Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Asp Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ser Pro Ala His Tyr Tyr Gly Gly Met
115 120 125

Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile
145 150 155 160

Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg
165 170 175

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Ser Ser Phe Leu
180 185 190

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
195 200 205

Gly Ala Ser Arg Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser
210 215 220

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
225 230 235 240

Asp Ser Ala Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro Ser Trp
245 250 255

_SL

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

_SL

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 639

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 639

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atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
ccccaagtgc aactcgtgga atctggtgga ggactcgtgc aacccggaag atcgcttaga      120
ctgtcgtgtg ccgccagcgg gttcactttc tcgaactacg cgatgtcctg ggtccgccag      180
gcacccggaa agggactcgg ttgggtgtcc ggcatttccc ggtccggcga aaatacctac      240
tacgccgact ccgtgaaggg ccgcttcacc atctcaaggg acaacagcaa aaacaccctg      300
tacttgcaaa tgaactccct gcgggatgaa gatacagccg tgtactattg cgcccggtcg      360
cctgcccatt actacggcgg aatggacgtc tggggacagg gaaccactgt gactgtcagc      420
agcgcgtcgg gtggcggcgg ctacaggggt cgggcctccg gggggggagg gtccgacatc      480
gtgctgaccc agtccccggg aaccctgagc ctgagcccgg gagagcgcgc gaccctgtca      540
tgccgggcat ccagagcat tagctcctcc tttctgcctt ggtatcagca gaagcccgga      600
caggccccga ggctgtgat ctacggcgct agcagaaggg ctaccggaat ccagaccgg      660
ttctccggct ccggttccgg gaccgatttc acccttacta tctcgcgcct ggaacctgag      720
```

_SL

gactccgccg tctactactg ccagcagtac cactcatccc cgtcgtggac gttcggacag	780
ggcaccaagc tggagattaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaaccc ttcatgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 640
 <211> 244
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 640
 Gln 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 Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

_SL

Ser Gly Ile Ser Trp Asn Ser Gly Ser 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 Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95

Ser Val His Ser Phe Leu Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Pro
130 135 140

Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser
145 150 155 160

Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys
165 170 175

Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala
180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
195 200 205

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr
210 215 220

Cys Met Gln Ala Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys
225 230 235 240

_SL

Val Glu Ile Lys

<210> 641

<211> 732

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 641

caagtgaac tcgtcgaatc cggtaggaggt ctggtccaac ctggtagaag cctgagactg	60
tcgtgtgcgg ccagcggatt cacctttgat gactatgcta tgcactgggt gcggcaggcc	120
ccaggaaagg gcctggaatg ggtgtcggga attagctgga actccgggtc cattggctac	180
gccgactccg tgaagggccg cttcaccatc tcccgcgaca acgcaaagaa ctccctgtac	240
ttgcaaatga actcgctcag ggctgaggat accgcgctgt actactgctc cgtgcattcc	300
ttcctggcct actggggaca gggaactctg gtcaccgtgt cgagcgctc cggcggcggg	360
ggctcgggtg gacgggcctc gggcggaggg gggtccgaca tcgtgatgac ccagaccccg	420
ctgagcttgc ccgtgactcc cggagagcct gcatccatct cctgccggtc atcccagtcc	480
cttctccact ccaacggata caactacctc gactggtacc tccagaagcc gggacagagc	540
cctcagcttc tgatctacct ggggtcaaata agagcctcag gagtgccgga tcggttcagc	600
ggatctgggt cgggaactga tttcactctg aagatttccc gcgtggaagc cgaggacgtg	660
ggcgtctact actgtatgca ggcgctgcag accccctata ctttcggcca agggacgaaa	720
gtggagatca ag	732

<210> 642

<211> 115

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 642

Gln 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 Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Ser Trp Asn Ser Gly Ser 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 Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95

Ser Val His Ser Phe Leu Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 643

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 643

Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 644

<211> 488

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 644

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

_SL

Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Asp Asp Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Leu Tyr Tyr Cys Ser Val His Ser Phe Leu Ala Tyr Trp Gly Gln
115 120 125

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr
145 150 155 160

Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys
165 170 175

Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp
180 185 190

Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu
195 200 205

Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
210 215 220

_SL

Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp
225 230 235 240

Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln Thr Pro Tyr Thr Phe
245 250 255

Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg
260 265 270

Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg
275 280 285

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
290 295 300

Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr
305 310 315 320

Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg
325 330 335

Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro
340 345 350

Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu
355 360 365

Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala
370 375 380

Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
385 390 395 400

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
405 410 415

_SL

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
420 425 430

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
435 440 445

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
450 455 460

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
465 470 475 480

His Met Gln Ala Leu Pro Pro Arg
485

<210> 645

<211> 1464

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 645

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aactcgtcga atccggtgga ggtctgggtcc aacctggtag aagcctgaga	120
ctgtcgtgtg cggccagcgg attcaccttt gatgactatg ctatgcactg ggtgcggcag	180
gccccaggaa agggcctgga atgggtgtcg ggaattagct ggaactccgg gtccattggc	240
tacgccgact ccgtgaaggg ccgcttcacc atctcccgcg acaacgcaaa gaactccctg	300
tacttgcaaa tgaactcgtc cagggctgag gataccgcgc tgtactactg ctccgtgcat	360
tccttcctgg cctactgggg acaggggaact ctggtcaccg tgtcgagcgc ctccggcggc	420
gggggctcgg gtggacgggc ctcgggcgga ggggggtccg acatcgtgat gaccagacc	480

_SL

ccgctgagct tgcccgtgac tcccggagag cctgcatcca tctcctgccg gtcatcccag	540
tcccttctcc actccaacgg atacaactac ctcgactggg acctccagaa gccggggacag	600
agccctcagc ttctgatcta cctgggggtca aatagagcct caggagtgcc ggatcgggttc	660
agcggatctg gttcgggaac tgatttcact ctgaagattt cccgcgtgga agccgaggac	720
gtgggcgtct actactgtat gcaggcgtg cagacccccct ataccttcgg ccaagggacg	780
aaagtggaga tcaagaccac taccacagca ccgaggccac ccaccccggc tcctaccatc	840
gcctcccagc ctctgtccct gcgtccggag gcatgtagac ccgcagctgg tggggccgtg	900
catacccggg gtcttgactt cgcctgcgat atctacattt gggccccctt ggctggtact	960
tgccgggtcc tgctgctttc actcgtgata actctttact gtaagcgcgg tcggaagaag	1020
ctgctgtaca tctttaagca acccttcata aggcctgtgc agactactca agaggaggac	1080
ggctgttcat gccggttccc agaggaggag gaaggcggct gcgaactgcg cgtgaaattc	1140
agccgcagcg cagatgctcc agcctacaag caggggcaga accagctcta caacgaactc	1200
aatcttggtc ggagagagga gtacgacgtg ctggacaagc ggagaggacg ggacccagaa	1260
atgggcggga agccgcgcag aaagaatccc caagagggcc tgtacaacga gctccaaaag	1320
gataagatgg cagaagccta tagcgagatt ggtatgaaag gggaacgcag aagaggcaaa	1380
ggccacgacg gactgtacca gggactcagc accgccacca aggacaccta tgacgtcttt	1440
cacatgcagg ccctgccgcc tcgg	1464

<210> 646

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 646

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

1

5

10

15

_SL

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser
130 135 140

Val Thr Pro Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser
145 150 155 160

Leu Leu Arg Asn Asp Gly Lys Thr Pro Leu Tyr Trp Tyr Leu Gln Lys
165 170 175

Ala Gly Gln Pro Pro Gln Leu Leu Ile Tyr Glu Val Ser Asn Arg Phe
180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
195 200 205

_SL

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Ala Tyr Tyr
210 215 220

Cys Met Gln Asn Ile Gln Phe Pro Ser Phe Gly Gly Gly Thr Lys Leu
225 230 235 240

Glu Ile Lys

<210> 647

<211> 729

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 647

```
gaagtgcaat tgttgaatc tggaggagga cttgtgcagc ctggaggatc actgagactt      60
tcgtgtgcgg tgtcaggctt cgccctgagc aaccacggca tgagctgggt gcggagagcc      120
ccggggaagg gtctggaatg ggtgtccggg atcgtctact ccggttcaac ttactacgcc      180
gcaagcgtga agggtcgctt caccatttcc cgcgataact cccggaacac cctgtacctc      240
caaatgaact ccctgcggcc cgaggacacc gccatctact actgttccgc gcatggagga      300
gagtccgatg tctggggaca gggcactacc gtgaccgtgt cgagcgctc ggggggagga      360
ggctccggcg gtcgcgctc cgggggggggt ggcagcgaca ttgtgatgac gcagactcca      420
ctctcgctgt ccgtgacccc gggacagccc gcgtccatct cgtgcaagag ctcccagagc      480
ctgctgagga acgacggaaa gactcctctg tattggtacc tccagaaggc tggacagccc      540
ccgcaactgc tcatctacga agtgtcaaat cgcttctccg gggtgccgga tcggttttcc      600
ggctcgggat cgggcaccga cttcaccctg aaaatctcca gggtcgaggc cgaggacgtg      660
ggagcctact actgcatgca aaacatccag ttcccttcct tcggcggcgg cacaaagctg      720
```

_SL

gagattaag

729

<210> 648

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 648

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 649

_SL

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 649

Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu Arg Asn
20 25 30

Asp Gly Lys Thr Pro Leu Tyr Trp Tyr Leu Gln Lys Ala Gly Gln Pro
35 40 45

Pro Gln Leu Leu Ile Tyr Glu Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Ala Tyr Tyr Cys Met Gln Asn
85 90 95

Ile Gln Phe Pro Ser Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 650

<211> 487

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 650

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr
145 150 155 160

Pro Leu Ser Leu Ser Val Thr Pro Gly Gln Pro Ala Ser Ile Ser Cys
165 170 175

Lys Ser Ser Gln Ser Leu Leu Arg Asn Asp Gly Lys Thr Pro Leu Tyr
180 185 190

_SL

Trp Tyr Leu Gln Lys Ala Gly Gln Pro Pro Gln Leu Leu Ile Tyr Glu
195 200 205

Val Ser Asn Arg Phe Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
210 215 220

Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp
225 230 235 240

Val Gly Ala Tyr Tyr Cys Met Gln Asn Ile Gln Phe Pro Ser Phe Gly
245 250 255

Gly Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro
260 265 270

Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro
275 280 285

Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu
290 295 300

Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys
305 310 315 320

Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly
325 330 335

Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val
340 345 350

Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu
355 360 365

Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp
370 375 380

_SL

Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn
385 390 395 400

Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg
405 410 415

Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly
420 425 430

Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu
435 440 445

Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu
450 455 460

Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His
465 470 475 480

Met Gln Ala Leu Pro Pro Arg
485

<210> 651

<211> 1461

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 651

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgaagtgc aattgttgga atctggagga ggacttgtgc agcctggagg atcactgaga 120

ctttcgtgtg cgggtgtcagg cttcgccctg agcaaccacg gcatgagctg ggtgcggaga 180

gccccgggga agggctctgga atgggtgtcc gggatcgtct actccggttc aacttactac 240

_SL

gccgcaagcg tgaagggtcg cttcaccatt tcccgcgata actcccggaa caccctgtac	300
ctccaaatga actccctgcg gcccgaggac accgccatct actactgttc cgcgcatgga	360
ggagagtccg atgtctgggg acagggcact accgtgaccg tgtcgagcgc ctcgggggga	420
ggaggctccg gcggtcgcgc ctccggggggg ggtggcagcg acattgtgat gacgcagact	480
ccactctcgc tgtccgtgac cccgggacag cccgcgtcca tctcgtgcaa gagctcccag	540
agcctgctga ggaacgacgg aaagactcct ctgtattggg acctccagaa ggctggacag	600
ccccgcaac tgctcatcta cgaagtgtca aatcgcttct ccgggggtgcc ggatcggttt	660
tccggctcgg gatcgggcac cgacttcacc ctgaaaatct ccagggtcga ggccgaggac	720
gtgggagcct actactgcat gcaaaacatc cagttccctt ctttcggcgg cggcacaaaag	780
ctggagatta agaccactac cccagcaccg aggccaccca ccccggtcc taccatcgcc	840
tcccagcctc tgtccctgcg tccggaggca tgtagaccg cagctggtgg ggccgtgcat	900
accgggggtc ttgacttcgc ctgcgatatc tacatttggg cccctctggc tggacttgc	960
ggggtcctgc tgctttcact cgtgatcact ctttactgta agcgcggtcg gaagaagctg	1020
ctgtacatct ttaagcaacc cttcatgagg cctgtgcaga ctactcaaga ggaggacggc	1080
tgttcatgcc ggttcccaga ggaggaggaa ggcggctgcg aactgcgcgt gaaattcagc	1140
cgcagcgagc atgctccagc ctacaagcag gggcagaacc agctctacaa cgaactcaat	1200
cttggtcgga gagaggagta cgacgtgctg gacaagcgga gaggacggga cccagaaatg	1260
ggcgggaagc cgcgcagaaa gaatcccaa gagggcctgt acaacgagct ccaaaaggat	1320
aagatggcag aagcctatag cgagattggg atgaaagggg aacgcagaag aggcaaaggc	1380
cacgacggac tgtaccaggg actcagcacc gccaccaagg acacctatga cgctcttcac	1440
atgcaggccc tgccgcctcg g	1461

<210> 652

<211> 249

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 652

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Thr Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Asp Asn Phe
20 25 30

Gly Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Pro Lys Asn Asn Asn Thr Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Asn Thr Ala Tyr
65 70 75 80

Met Glu Val Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Pro Tyr Tyr Tyr Gln Ser Tyr Met Asp Val Trp Gly Gln
100 105 110

Gly Thr Met Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr
130 135 140

Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys
145 150 155 160

Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asn
165 170 175

_SL

Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu
180 185 190

Gly Ser Lys Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Phe Thr Leu His Ile Thr Arg Val Gly Ala Glu Asp
210 215 220

Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln Thr Pro Tyr Thr Phe
225 230 235 240

Gly Gln Gly Thr Lys Leu Glu Ile Lys
245

<210> 653

<211> 747

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 653

caagtccaac tcgtccagtc cggcgcagaa gtcagaaaaa ccggtgctag cgtgaaagtg 60

tcctgcaagg cctccggcta catthttcgat aacttcggaa tcaactgggt cagacaggcc 120

ccgggccagg ggctggaatg gatgggatgg atcaacccca agaacaacaa caccaactac 180

gcacagaagt tccagggccg cgtgactatc accgccgatg aatcgaccaa taccgcctac 240

atggagggtgt cctccctgcg gtcggaggac actgccgtgt attactgcgc gagggggccca 300

tactactacc aaagctacat ggacgtctgg ggacaggga ccatgggtgac cgtgtcatcc 360

gcctccggtg gtggaggctc cggggggcg gcttcaggag gcggaggaag cgatattgtg 420

atgacccaga ctccgcttag cctgcccgtg actcctggag aaccggcctc catttcctgc 480

_SL

cggtcctcgc aatcactcct gcattccaac gggtacaact acctgaattg gtacctccag 540
aagcctggcc agtcgccccca gttgctgata tatctgggct cgaagcgcgc ctccgggggtg 600
cctgaccggt ttagcggatc tgggagcggc acggacttca ctctccacat caccgcgtg 660
ggagcggagg acgtgggagt gtactactgt atgcaggcgc tgcagactcc gtacacattc 720
ggacagggca ccaagctgga gatcaag 747

<210> 654

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 654

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Thr Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Asp Asn Phe
20 25 30

Gly Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Asn Pro Lys Asn Asn Asn Thr Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Asn Thr Ala Tyr
65 70 75 80

Met Glu Val Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Pro Tyr Tyr Tyr Gln Ser Tyr Met Asp Val Trp Gly Gln

_SL

100 105 110

Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 655
 <211> 112
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 655
 Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Thr Pro Gly
 1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
 20 25 30

Asn Gly Tyr Asn Tyr Leu Asn Trp Tyr Leu Gln Lys Pro Gly Gln Ser
 35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Lys Arg Ala Ser Gly Val Pro
 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu His Ile
 65 70 75 80

Thr Arg Val Gly Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
 85 90 95

Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105 110

<210> 656
 <211> 493

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 656

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Arg Lys Thr Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Ile Phe Asp Asn Phe Gly Ile Asn Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Asn Pro Lys Asn Asn Asn Thr Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser
85 90 95

Thr Asn Thr Ala Tyr Met Glu Val Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Pro Tyr Tyr Tyr Gln Ser Tyr Met
115 120 125

Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Ala Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile
145 150 155 160

_SL

Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro
165 170 175

Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly
180 185 190

Tyr Asn Tyr Leu Asn Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln
195 200 205

Leu Leu Ile Tyr Leu Gly Ser Lys Arg Ala Ser Gly Val Pro Asp Arg
210 215 220

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu His Ile Thr Arg
225 230 235 240

Val Gly Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln
245 250 255

Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr
260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
340 345 350

_SL

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys
370 375 380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 657

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 657

_SL

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtcc aactcgtcca gtccggcgca gaagtcagaa aaaccggtgc tagcgtgaaa	120
gtgtcctgca aggcctccgg ctacattttc gataacttcg gaatcaactg ggtcagacag	180
gccccgggcc aggggctgga atggatggga tggatcaacc ccaagaacaa caacaccaac	240
tacgcacaga agttccaggg ccgcgtgact atcaccgccg atgaatcgac caataccgcc	300
tacatggagg tgtcctccct gcggctcgag gacactgccg tgtattactg cgcgaggggc	360
ccatactact accaaagcta catggacgtc tggggacagg gaaccatggt gaccgtgtca	420
tccgcctccg gtggtggagg ctccgggggg cgggcttcag gaggcggagg aagcgatatt	480
gtgatgaccc agactccgct tagcctgccc gtgactcctg gagaaccggc ctccatttcc	540
tgccggctct cgcaatcact cctgcattcc aacgggttaca actacctgaa ttggtacctc	600
cagaagcctg gccagtcgcc ccagttgctg atctatctgg gctcgaagcg cgcctccggg	660
gtgcctgacc ggtttagcgg atctgggagc ggcacggact tcactctcca catcaccgc	720
gtgggagcgg aggacgtggg agtgtactac tgtatgcagg cgctgcagac tccgtacaca	780
ttcggacagg gcaccaagct ggagatcaag accactaccc cagcaccgag gccaccacc	840
ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagaccgca	900
gctggtgggg ccgtgcatac ccggggctct gacttcgcct gcgatatcta catttgggcc	960
cctctggctg gtacttgccg ggtcctgctg ctttcactcg tgatcactct ttactgtaag	1020
cgcggtcgga agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac	1440

acctatgacg ctcttcacat gcaggccctg ccgcctcgg

1479

<210> 658

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 658

Gln Val Gln Leu Gln 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 Phe Ser Ser Asp
20 25 30

Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Val Ile Ser Gly Ser Gly Gly Thr Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Leu Asp Ser Ser Gly Tyr Tyr Tyr Ala Arg Gly Pro Arg Tyr
100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Gln Leu
130 135 140

_SL

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
145 150 155 160

Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Gly Ala Ser
180 185 190

Thr Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr His Phe Thr Leu Thr Ile Asn Ser Leu Gln Ser Glu Asp Ser Ala
210 215 220

Thr Tyr Tyr Cys Gln Gln Ser Tyr Lys Arg Ala Ser Phe Gly Gln Gly
225 230 235 240

Thr Lys Val Glu Ile Lys
245

<210> 659
<211> 738
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 659
caagtgaac ttcaagaatc aggcggagga ctcgtgcagc ccggaggatc attgcggctc 60
tcgtgcgccg cctcgggctt caccttctcg agcgacgcca tgacctgggt ccgccaggcc 120
ccggggaagg ggctggaatg ggtgtctgtg atttccggct ccgggggaac tacgtactac 180
gccgattccg tgaaaggctg cttcactatc tcccgggaca acagcaagaa caccctttat 240

_SL

ctgcaaatga attccctccg cgccgaggac accgccgtgt actactgcgc caagctggac 300
tcctcgggct actactatgc ccgggggtccg agatactggg gacaggggaac cctcgtgacc 360
gtgtcctccg cgtccggcgg aggaggggtcg ggagggcggg cctccggcgg cggcggttcg 420
gacatccagc tgaccagtc cccatcctca ctgagcgcaa gcgtgggcga cagagtcacc 480
attacatgca gggcgtccca gagcatcagc tcctacctga actggtacca acagaagcct 540
ggaaaggctc ctaagctgtt gatctacggg gcttcgaccc tggcatccgg ggtgcccgcg 600
aggtttagcg gaagcggtag cggcactcac ttcactctga ccattaacag cctccagtcc 660
gaggattcag ccacttacta ctgtcagcag tcctacaagc gggccagctt cggacagggc 720
actaaggctc agatcaag 738

<210> 660

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 660

Gln Val Gln Leu Gln 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 Phe Ser Ser Asp
20 25 30

Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Val Ile Ser Gly Ser Gly Gly Thr Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr

65		70		<u>SL</u> 75		80									
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85					90					95	
Ala	Lys	Leu	Asp	Ser	Ser	Gly	Tyr	Tyr	Tyr	Ala	Arg	Gly	Pro	Arg	Tyr
			100					105					110		
Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser					
			115				120								
<210> 661															
<211> 106															
<212> PRT															
<213> Artificial Sequence															
<220>															
<221> source															
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"															
<400> 661															
Asp	Ile	Gln	Leu	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	Gly	Ala	Ser	Thr	Leu	Ala	Ser	Gly	Val	Pro	Ala	Arg	Phe	Ser	Gly
	50					55					60				
Ser	Gly	Ser	Gly	Thr	His	Phe	Thr	Leu	Thr	Ile	Asn	Ser	Leu	Gln	Ser
65				70						75				80	
Glu	Asp	Ser	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Ser	Tyr	Lys	Arg	Ala	Ser
				85					90					95	

_SL

Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 662

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 662

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Asp Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Val Ile Ser Gly Ser Gly Gly Thr Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Leu Asp Ser Ser Gly Tyr Tyr Tyr Ala
115 120 125

_SL

Arg Gly Pro Arg Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135 140

Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly
145 150 155 160

Ser Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
165 170 175

Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser
180 185 190

Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
195 200 205

Ile Tyr Gly Ala Ser Thr Leu Ala Ser Gly Val Pro Ala Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr His Phe Thr Leu Thr Ile Asn Ser Leu Gln
225 230 235 240

Ser Glu Asp Ser Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Lys Arg Ala
245 250 255

Ser Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

_SL

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 663

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 663

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aacttcaaga atcaggcgga ggactcgtgc agcccggagg atcattgcgg	120
ctctcgtgcg ccgcctcggg cttcaccttc tcgagcgacg ccatgacctg ggtccgccag	180
gccccgggga aggggctgga atgggtgtct gtgatttccg gctccggggg aactacgtac	240
tacgccgatt ccgtgaaagg tcgcttcact atctcccgga acaacagcaa gaacaccctt	300
tatctgcaaa tgaattccct ccgcgccgag gacaccgccg tgtactactg cgccaagctg	360
gactcctcgg gctactacta tgccccgggt ccgagatact ggggacaggg aaccctcgtg	420
accgtgtcct ccgcgtccgg cggaggaggg tcgggagggc gggcctccgg cggcggcggt	480
tcggacatcc agctgaccca gtcccatcc tctactgagc caagcgtggg cgacagagtc	540
accattacat gcagggcgtc ccagagcatc agctcctacc tgaactggta ccaacagaag	600
cctggaaagg ctcctaagct gttgatctac ggggcttcga ccctggcatc cggggtgccc	660
gcgaggttta gcggaagcgg tagcggcact cacttcactc tgaccattaa cagcctccag	720
tccgaggatt cagccactta ctactgtcag cagtcctaca agcgggccag cttcggacag	780
ggcactaagg tcgagatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaacc ttcatgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200

_SL

gaactcaatc ttggtcggag agaggagtagc gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcggaagcc ggcagaaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 664
 <211> 247
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 664
 Gln Val Gln 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 Ser Asn Tyr
 20 25 30

Gly Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Pro Tyr Tyr Tyr Tyr Met Asp Val Trp Gly Lys Gly Thr
 100 105 110

_SL

Met Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg
115 120 125

Ala Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Leu
130 135 140

Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser
145 150 155 160

Ser Gln Ser Leu Leu Tyr Ser Asn Gly Tyr Asn Tyr Val Asp Trp Tyr
165 170 175

Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser
180 185 190

Asn Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Phe Lys Leu Gln Ile Ser Arg Val Glu Ala Glu Asp Val Gly
210 215 220

Ile Tyr Tyr Cys Met Gln Gly Arg Gln Phe Pro Tyr Ser Phe Gly Gln
225 230 235 240

Gly Thr Lys Val Glu Ile Lys
245

<210> 665

<211> 741

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

_SL

<400> 665
caagtccaac tgggtccagag cgggtgcagaa gtgaagaagc ccggagcgag cgtgaaagtg 60
tcctgcaagg cttccgggta caccttctcc aactacggca tcacttgggt gcgccaggcc 120
ccgggacagg gcctggaatg gatgggggtgg atttccgctg acaacggcaa tacgaactac 180
gctcagaagt tccagggtag agtgaccatg actaggaaca cctccatttc caccgcctac 240
atggaactgt cctccctgcg gagcgaggac accgccgtgt actattgctc ccggggacca 300
tactactact acatggatgt ctgggggaag gggactatgg tcaccgtgtc atccgcctcg 360
ggaggcggcg gatcaggagg acgcgcctct ggtggtggag gatcggagat cgtgatgacc 420
cagagccctc tctccttgcc cgtgactcct ggggagcccc catccatttc atgccggagc 480
tcccagtcac ttctctactc caacggctat aactacgtgg attggtacct ccaaaagccg 540
ggccagagcc cgcagctgct gatctacctg ggctcgaaca gggccagcgg agtgcctgac 600
cggttctccg ggtcgggaag cgggaccgac ttcaagctgc aaatctcgag agtggaggcc 660
gaggacgtgg gaatctacta ctgtatgcag ggccgccagt ttccgtactc gttcggacag 720
ggcaccaaag tggaaatcaa g 741

<210> 666
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 666
Gln Val Gln 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 Ser Asn Tyr
20 25 30

Gly Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

_SL

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Lys Leu Gln Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Ile Tyr Tyr Cys Met Gln Gly
85 90 95

Arg Gln Phe Pro Tyr Ser Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105 110

<210> 668

<211> 491

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 668

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr
35 40 45

Thr Phe Ser Asn Tyr Gly Ile Thr Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser
85 90 95

_SL

Ile Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Gly Pro Tyr Tyr Tyr Tyr Met Asp Val
115 120 125

Trp Gly Lys Gly Thr Met Val Thr Val Ser Ser Ala Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Glu Ile Val Met
145 150 155 160

Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly Glu Pro Ala Ser
165 170 175

Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Tyr Ser Asn Gly Tyr Asn
180 185 190

Tyr Val Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu
195 200 205

Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Phe Lys Leu Gln Ile Ser Arg Val Glu
225 230 235 240

Ala Glu Asp Val Gly Ile Tyr Tyr Cys Met Gln Gly Arg Gln Phe Pro
245 250 255

Tyr Ser Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr Pro
260 265 270

Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu
275 280 285

_SL

Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His
290 295 300

Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu
305 310 315 320

Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr
325 330 335

Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe
340 345 350

Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg
355 360 365

Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser
370 375 380

Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr
385 390 395 400

Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys
405 410 415

Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn
420 425 430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
465 470 475 480

_SL

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 669
<211> 1473
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 669
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtcc aactggtcca gagcgggtgca gaagtgaaga agcccggagc gagcgtgaaa 120
gtgtcctgca aggcttccgg gtacaccttc tccaactacg gcatcacttg ggtgcgccag 180
gccccgggac agggcctgga atggatgggg tggatttccg cgtacaacgg caatacgaac 240
tacgctcaga agttccaggg tagagtgacc atgactagga acacctccat ttccaccgcc 300
tacatggaac tgtcctccct gcggagcgag gacaccgccg tgtactattg cgcccgggga 360
ccatactact actacatgga tgtctggggg aaggggacta tggtcaccgt gtcacccgcc 420
tcgggaggcg gcggatcagg aggacgcgcc tctgggtggtg gaggatcgga gatcgtgatg 480
accagagacc ctctctcctt gcccgtgact cctggggagc ccgcatccat ttcacgccc 540
agctcccagt cacttctcta ctccaacggc tataactacg tggattggta cctccaaaag 600
ccgggccaga gcccgcagct gctgatctac ctgggctcga acagggccag cggagtgcct 660
gaccggttct ccgggtcggg aagcgggacc gacttcaagc tgcaaatctc gagagtggag 720
gccgaggacg tgggaatcta ctactgtatg cagggccgcc agtttccgta ctcgttcgga 780
cagggcacca aagtggaaat caagaccact accccagcac cgaggccacc caccgccgct 840
cctaccatcg cctcccagcc tctgtccctg cgtccggagg catgtagacc cgacgtggt 900
ggggccgtgc ataccggggg tcttgacttc gcctgcgata tctacatttg ggcccctctg 960

_SL

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser
130 135 140

Val Ser Pro Gly Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
145 150 155 160

Val Ser Ser Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
165 170 175

Arg Leu Leu Ile Tyr Gly Ala Ser Thr Arg Ala Ser Gly Ile Pro Asp
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Gly
210 215 220

Ser Ser Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
225 230 235

<210> 671

<211> 714

<212> DNA

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 671

```
gaagtgcaat tgctcgaaac tggaggaggt ctggtgcaac ctggaggatc acttcgcctg      60
tcctgcgccg tgtcgggctt tgccctgtcc aaccatggaa tgagctgggt ccgccgcgcg      120
ccggggaagg gcctcgaatg ggtgtccggc atcgtctact ccggctccac ctactacgcc      180
gcgtccgtga agggccggtt cacgatttca cgggacaact cgcggaacac cctgtacctc      240
caaatgaatt cccttcggcc ggaggatact gccatctact actgctccgc ccacggtggc      300
gaatccgacg tctggggcca gggaaccacc gtgaccgtgt ccagcgcgtc cgggggagga      360
ggaagcgggg gtagagcatc gggtaggaggc ggatcagaga tcgtgctgac ccagtcccccc      420
gccaccttga gcgtgtcacc aggagagtcc gccaccctgt catgccgcgc cagccagtcc      480
gtgtcctcca acctggcttg gtaccagcag aagccggggc aggcccctag actcctgac      540
tatggggcgt cgaccggggc atctggaatt cccgataggt tcagcggatc gggctcgggc      600
actgacttca ctctgaccat ctctcgctg caagccgagg acgtggctgt gtactactgt      660
cagcagtacg gaagctccct gactttcggg ggcgggacca aagtcgagat taag          714
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<210> 672

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 672

```
Glu Val Gln Leu Leu Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1           5           10          15
```

```
Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20           25           30
```

_SL

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 673

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 673

Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1 5 10 15

Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Gly Ala Ser Thr Arg Ala Ser Gly Ile ^{SL}Pro Asp Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Leu Thr
85 90 95

Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 674

<211> 482

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 674

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg

_SL

275		280		285											
Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp	Phe	Ala	Cys	Asp
	290					295					300				
Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly	Val	Leu	Leu	Leu
305					310					315					320
Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg	Lys	Lys	Leu	Leu
				325						330				335	
Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln	Thr	Thr	Gln	Glu
			340					345						350	
Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu	Glu	Glu	Gly	Gly	Cys
		355					360						365		
Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg	Ser	Ala	Asp	Ala	Pro	Ala	Tyr	Lys
	370					375					380				
Gln	Gly	Gln	Asn	Gln	Leu	Tyr	Asn	Glu	Leu	Asn	Leu	Gly	Arg	Arg	Glu
385					390					395					400
Glu	Tyr	Asp	Val	Leu	Asp	Lys	Arg	Arg	Gly	Arg	Asp	Pro	Glu	Met	Gly
				405					410					415	
Gly	Lys	Pro	Arg	Arg	Lys	Asn	Pro	Gln	Glu	Gly	Leu	Tyr	Asn	Glu	Leu
			420					425					430		
Gln	Lys	Asp	Lys	Met	Ala	Glu	Ala	Tyr	Ser	Glu	Ile	Gly	Met	Lys	Gly
		435					440					445			
Glu	Arg	Arg	Arg	Gly	Lys	Gly	His	Asp	Gly	Leu	Tyr	Gln	Gly	Leu	Ser
	450					455					460				
Thr	Ala	Thr	Lys	Asp	Thr	Tyr	Asp	Ala	Leu	His	Met	Gln	Ala	Leu	Pro

465

470

SL
475

480

Pro Arg

<210> 675

<211> 1446

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 675

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aattgctcga aactggagga ggtctggtgc aacctggagg atcacttcgc	120
ctgtcctgcg ccgtgtcggg ctttgccctg tccaaccatg gaatgagctg ggtccgccgc	180
gcgccggggga agggcctcga atgggtgtcc ggcatcgtct actccggctc cacctactac	240
gccgcgtccg tgaagggccg gttcacgatt tcacgggaca actcgcggaa caccctgtac	300
ctccaaatga attcccttcg gccggaggat actgccatct actactgctc cgcccacggt	360
ggcgaatccg acgtctgggg ccagggaacc accgtgaccg tgtccagcgc gtccggggga	420
ggaggaagcg ggggtagagc atcgggtgga ggcggatcag agatcgtgct gacccagtcc	480
cccgccacct tgagcgtgtc accaggagag tccgccaccc tgtcatgccg cgccagccag	540
tccgtgtcct ccaacctggc ttggtaccag cagaagccgg ggcaggcccc tagactcctg	600
atctatgggg cgtcgacccg ggcatctgga attcccgata ggttcagcgg atcgggctcg	660
ggcactgact tcactctgac catctcctcg ctgcaagccg aggacgtggc tgtgtactac	720
tgtcagcagt acggaagctc cctgactttc ggtggcgggga ccaaagtcga gattaagacc	780
actaccccag caccgaggcc acccaccctg gctcctacca tcgcctccca gcctctgtcc	840
ctgcgtccgg aggcattgtag acccgcagct ggtggggccg tgcatacccg gggctcttgac	900

_SL						
ttcgcctgcg	atatctacat	ttgggccccct	ctggctggta	cttgcggggt	cctgctgctt	960
tcactcgtga	tcactcttta	ctgtaagcgc	ggtcggaaga	agctgctgta	catctttaag	1020
caacccttca	tgaggcctgt	gcagactact	caagaggagg	acggctgttc	atgccggttc	1080
ccagaggagg	aggaaggcgg	ctgcgaactg	cgcgtgaaat	tcagccgcag	cgcagatgct	1140
ccagcctaca	agcaggggca	gaaccagctc	tacaacgaac	tcaatcttgg	tcggagagag	1200
gagtacgacg	tgctggacaa	gcggagagga	cgggaccag	aaatgggcgg	gaagccgcgc	1260
agaaagaatc	ccaagagg	cctgtacaac	gagctccaaa	aggataagat	ggcagaagcc	1320
tatagcgaga	ttggtatgaa	aggggaacgc	agaagaggca	aaggccacga	cggactgtac	1380
cagggactca	gcaccgccac	caaggacacc	tatgacgctc	ttcacatgca	ggccctgccg	1440
cctcgg						1446

```
<210> 676
<211> 239
<212> PRT
<213> Artificial Sequence
```

```
<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"
```

<400> 676
Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser ^{_SL} Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser
130 135 140

Val Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
145 150 155 160

Val Ser Ser Lys Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
165 170 175

Arg Leu Leu Met Tyr Gly Ala Ser Ile Arg Ala Thr Gly Ile Pro Asp
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly
210 215 220

Ser Ser Ser Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
225 230 235

<210> 677

<211> 717

<212> DNA

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 677

```
gaagtgcaat tggaggaaac tggaggagga cttgtgcaac ctggaggatc attgagactg      60
agctgcgcag tgtcgggatt cgccctgagc aaccatggaa tgcctgggt cagaagggcc      120
cctggaaaag gcctcgaatg ggtgtcaggg atcgtgtact ccggttcac ttactacgcc      180
gcctccgtga aggggcgctt cactatctca cgggataact cccgaatac cctgtacctc      240
caaatgaaca gcctgcggcc ggaggatacc gccatctact actgttccgc ccacggtgga      300
gagtctgacg tctggggcca gggaactacc gtgaccgtgt cctccgcgtc cggcgggtgga      360
gggagcggcg gccgcgccag cggcggcgga ggctccgaga tcgtgatgac ccagagcccc      420
gctactctgt cgggtgtgcc cggagaaagg gcgaccctgt cctgccgggc gtcgcagtcc      480
gtgagcagca agctggcttg gtaccagcag aagccggggc aggcaccacg cctgcttatg      540
tacggtgcct ccattcgggc caccggaatc ccggaccggt tctcggggtc ggggtccggt      600
accgagttca cactgaccat ttctcgctc gagcccgagg actttgccgt ctattactgc      660
cagcagtacg gtcctcctc atggacgttc ggccagggga ccaaggtcga aatcaag      717
```

<210> 678

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 678

```
Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1           5           10          15
```

```
Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
```

_SL

20	25	30	
Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val			
35	40	45	
Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys			
50	55	60	
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu			
65	70	75	80
Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser			
85	90	95	
Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr			
100	105	110	
Val Ser Ser			
115			

<210> 679
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 679

Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly			
1	5	10	15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Lys			
20	25	30	
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met			
35	40	45	

_SL

Tyr Gly Ala Ser Ile Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Ser Trp
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 680

<211> 483

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 680

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

_SL

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser
145 150 155 160

Pro Ala Thr Leu Ser Val Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
165 170 175

Arg Ala Ser Gln Ser Val Ser Ser Lys Leu Ala Trp Tyr Gln Gln Lys
180 185 190

Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly Ala Ser Ile Arg Ala
195 200 205

Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe
210 215 220

Thr Leu Thr Ile Ser Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr
225 230 235 240

Cys Gln Gln Tyr Gly Ser Ser Ser Trp Thr Phe Gly Gln Gly Thr Lys
245 250 255

Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
260 265 270

_SL

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
275 280 285

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
290 295 300

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
305 310 315 320

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
325 330 335

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
340 345 350

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
355 360 365

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
370 375 380

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
385 390 395 400

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
405 410 415

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
420 425 430

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
435 440 445

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
450 455 460

_SL

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
465 470 475 480

Pro Pro Arg

<210> 681
<211> 1449
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 681
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgaagtgc aattggtgga aactggagga ggacttgtgc aacctggagg atcattgaga 120
ctgagctgcg cagtgtcggg attcgccctg agcaaccatg gaatgtcctg ggtcagaagg 180
gcccttgaa aaggcctcga atgggtgtca gggatcgtgt actccggttc cacttactac 240
gccgcctccg tgaaggggcg cttcactatc tcacgggata actccgcaa taccctgtac 300
ctccaaatga acagcctgcg gccggaggat accgccatct actactgttc cgcccacggt 360
ggagagtctg acgtctgggg ccagggaact accgtgaccg tgtcctccgc gtccggcggt 420
ggagggagcg gcggccgcgc cagcggcggc ggaggctccg agatcgtgat gaccagagc 480
cccgtactc tgtcgggtgc gcccgagaa agggcgaccc tgtcctgccg ggcgtcgag 540
tccgtgagca gcaagctggc ttggtaccag cagaagccgg gccaggcacc acgcctgctt 600
atgtacggtg cctccattcg ggccaccgga atcccgacc ggttctcggg gtcgggggtcc 660
ggtaccgagt tcacactgac catttcctcg ctcgagcccg aggactttgc cgtctattac 720
tgccagcagt acggctcctc ctcatggacg ttcggccagg ggaccaaggt cgaaatcaag 780
accactaccc cagcaccgag gccacccacc ccggctccta ccatcgctc ccagcctctg 840

_SL

tccctgcgtc cggaggcatg tagacccgca gctgggtgggg ccgtgcatac ccggggtctt	900
gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgcg ggtcctgctg	960
ctttcactcg tgatcactct ttactgtaag cgcggctcgga agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcatgccgg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140
gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcagaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320
gcctatagcg agattggtat gaaaggggaa cgcagaagag gcaaaggcca cgacggactg	1380
taccagggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440
ccgcctcgg	1449

<210> 682

<211> 241

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 682

Glu	Val	Gln	Leu	Val	Glu	Thr	Gly	Gly	Gly	Val	Val	Gln	Pro	Gly	Gly
1				5					10					15	

Ser	Leu	Arg	Leu	Ser	Cys	Ala	Val	Ser	Gly	Phe	Ala	Leu	Ser	Asn	His
			20					25					30		

Gly	Met	Ser	Trp	Val	Arg	Arg	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			

Ser	Gly	Ile	Val	Tyr	Ser	Gly	Ser	Thr	Tyr	Tyr	Ala	Ala	Ser	Val	Lys
	50					55					60				

_SL

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
130 135 140

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
145 150 155 160

Val Gly Ser Thr Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
165 170 175

Pro Arg Leu Leu Ile Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro
180 185 190

Asp Arg Phe Ser Gly Gly Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
195 200 205

Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr
210 215 220

Gly Ser Ser Pro Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
225 230 235 240

Lys

_SL

<210> 683
<211> 723
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 683
gaagtgcaat tggaggagac tggaggagga gtggtgcaac ctggaggaag cctgagactg 60
tcatgcgcgg tgtcgggctt cgccctctcc aaccacggaa tgtcctgggt ccgccgggcc 120
cctgggaaaag gacttgaatg ggtgtccggc atcgtgtact cgggttccac ctactacgcg 180
gcctcagtga agggccggtt tactattagc cgcgacaact ccagaaacac actgtacctc 240
caaatgaact cgctgcggcc ggaagatacc gctatctact actgctccgc ccatggggga 300
gagtcggacg tctggggaca gggcaccact gtcactgtgt ccagcgcttc cggcgggtgt 360
ggaagcgggg gacgggcctc aggaggcggg ggcagcgaga ttgtgctgac ccagtcccc 420
gggaccctga gcctgtcccc gggagaaagg gccaccctct cctgtcgggc atcccagtcc 480
gtgggggtcta ctaaccttgc atggtaccag cagaagcccc gccaggcccc tcgcctgctg 540
atctacgacg cgtccaatag agccaccggc atcccggatc gcttcagcgg aggcggatcg 600
ggcaccgact tcaccctcac catttcaagg ctggaaccgg aggacttcgc cgtgtactac 660
tgccagcagt atggttcgtc cccaccctgg acgttcggcc aggggactaa ggctcgagatc 720
aag 723

<210> 684
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

_SL

polypeptide"

<400> 684

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 685

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 685

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

_SL

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Gly Ser Thr
20 25 30

Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
35 40 45

Ile Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Gly Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
85 90 95

Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 686

<211> 485

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 686

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Val
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

_SL

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser
145 150 155 160

Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
165 170 175

Arg Ala Ser Gln Ser Val Gly Ser Thr Asn Leu Ala Trp Tyr Gln Gln
180 185 190

Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Asp Ala Ser Asn Arg
195 200 205

Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Gly Gly Ser Gly Thr Asp
210 215 220

Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr
225 230 235 240

_SL

Tyr Cys Gln Gln Tyr Gly Ser Ser Pro Pro Trp Thr Phe Gly Gln Gly
245 250 255

Thr Lys Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
260 265 270

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
275 280 285

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
290 295 300

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
305 310 315 320

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys
325 330 335

Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr
340 345 350

Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu
355 360 365

Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro
370 375 380

Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
385 390 395 400

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
405 410 415

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
420 425 430

_SL

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
435 440 445

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
450 455 460

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
465 470 475 480

Ala Leu Pro Pro Arg
485

<210> 687

<211> 1455

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 687

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aattggtgga gactggagga ggagtgggtgc aacctggagg aagcctgaga	120
ctgtcatgcg cgggtgtcggg cttcgccctc tccaaccacg gaatgtcctg ggtccgccgg	180
gcccctggga aaggacttga atgggtgtcc ggcatcgtgt actcgggttc cacctactac	240
gcggcctcag tgaagggccg gtttactatt agccgcgaca actccagaaa cactactgtac	300
ctccaaatga actcgtgctg gccggaagat accgctatct actactgctc cgcccatggg	360
ggagagtcgg acgtctgggg acagggcacc actgtcactg tgtccagcgc ttccggcggt	420
ggtggaagcg ggggacgggc ctcaggaggc ggtggcagcg agattgtgct gaccaggtcc	480
cccgggaccc tgagcctgtc cccgggagaa agggccaccc tctcctgtcg ggcatcccag	540
tccgtgggggt ctactaacct tgcattgtac cagcagaagc ccggccaggc cctcgcctg	600

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ctgatctacg acgctccaa tagagccacc ggcattcccgg atcgcttcag cggaggcggg	660
tcgggcaccg acttcaccct caccatttca aggctggaac cggaggactt cgccgtgtac	720
tactgccagc agtatggttc gtccccaccc tggacgttcg gccaggggac taaggctcag	780
atcaagacca ctaccccagc accgaggcca cccaccccgg ctcttaccat cgcctcccag	840
cctctgtccc tgcgtccgga ggcattgtaga cccgcagctg gtggggccgt gcatacccgg	900
ggctcttgact tcgcctgcga tatctacatt tgggcccctc tggctggtag ttgcggggtc	960
ctgctgcttt cactcgtgat cactctttac tgtaagcgcg gtcggaagaa gctgctgtac	1020
atctttaagc aacccttcat gaggcctgtg cagactactc aagaggagga cggctgttca	1080
tgccgggttcc cagaggagga ggaaggcggc tgcgaactgc gcgtgaaatt cagccgcagc	1140
gcagatgctc cagcctacaa gcagggggcag aaccagctct acaacgaact caatcttggt	1200
cggagagagg agtacgacgt gctggacaag cggagaggac gggaccaga aatgggcggg	1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg	1320
gcagaagcct atagcgagat tggatatgaaa ggggaacgca gaagaggcaa aggccacgac	1380
ggactgtacc agggactcag caccgccacc aaggacacct atgacgtctt tcacatgcag	1440
gccctgccgc ctcgg	1455

<210> 688

<211> 239

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 688

Gln	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	Asp	Tyr
			20					25					30		

_SL

Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95

Ala Arg Glu Ser Gly Asp Gly Met Asp Val Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala
115 120 125

Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
130 135 140

Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser
145 150 155 160

Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys
165 170 175

Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val
180 185 190

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
195 200 205

Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
210 215 220

_SL

Ser Tyr Thr Leu Ala Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
225 230 235

<210> 689

<211> 717

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 689

caagtgaac tcgtggaatc tggaggagga ctcgtgaaac ctggaggatc attgagactg	60
tcatgcgcgg cctcgggatt cacgttctcc gattactaca tgagctggat tcgccaggct	120
ccggggaagg gactggaatg ggtgtcctac atttcctcat ccggctccac catctactac	180
gcggactccg tgaaggggag attcaccatt agccgcgata acgccaagaa cagcctgtac	240
cttcagatga actccctgcg ggctgaagat actgccgtct actactgcgc aaggagagagc	300
ggagatggga tggacgtctg gggacagggt accactgtga ccgtgtcgtc ggcctccggc	360
ggaggggggt cgggtggaag ggccagcggc ggccggaggca gcgacatcca gatgaccag	420
tccccctcat cgctgtccgc ctccgtgggc gaccgcgtca ccatcacatg ccgggcctca	480
cagtcgatct cctcctacct caattggtat cagcagaagc ccggaaaggc ccctaagctt	540
ctgatctacg cagcgtcctc cctgcaatcc ggggtcccat ctcggttctc cggctcgggc	600
agcggtagcg acttcactct gaccatctcg agcctgcagc cggaggactt cgccacttac	660
tactgtcagc aaagctacac cctcgcgttt ggccagggca ccaaagtgga catcaag	717

<210> 690

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 690

Gln 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 Asp Tyr
20 25 30

Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95

Ala Arg Glu Ser Gly Asp Gly Met Asp Val Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser
115

<210> 691

<211> 105

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 691

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser ^{SL}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 Thr Leu Ala Phe
85 90 95

Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

<210> 692

<211> 483

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 692

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe

35 40 45

Gly Leu Glu Trp Val Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Glu Ser Gly Asp Gly Met Asp Val Trp
115 120 125

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly
130 135 140

Ser Gly Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr
145 150 155 160

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
165 170 175

Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln
180 185 190

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
195 200 205

Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr
210 215 220

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr

225		230		<u>SL</u> 235		240									
Tyr	Tyr	Cys	Gln	Gln	Ser	Tyr	Thr	Leu	Ala	Phe	Gly	Gln	Gly	Thr	Lys
			245						250					255	
Val	Asp	Ile	Lys	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro	Thr	Pro	Ala
			260					265					270		
Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro	Glu	Ala	Cys	Arg
		275					280					285			
Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp	Phe	Ala	Cys
	290					295					300				
Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly	Val	Leu	Leu
305					310					315					320
Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg	Lys	Lys	Leu
				325					330					335	
Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln	Thr	Thr	Gln
			340					345					350		
Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu	Glu	Glu	Gly	Gly
		355					360						365		
Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg	Ser	Ala	Asp	Ala	Pro	Ala	Tyr
	370					375					380				
Lys	Gln	Gly	Gln	Asn	Gln	Leu	Tyr	Asn	Glu	Leu	Asn	Leu	Gly	Arg	Arg
385					390					395					400
Glu	Glu	Tyr	Asp	Val	Leu	Asp	Lys	Arg	Arg	Gly	Arg	Asp	Pro	Glu	Met
				405					410					415	
Gly	Gly	Lys	Pro	Arg	Arg	Lys	Asn	Pro	Gln	Glu	Gly	Leu	Tyr	Asn	Glu

_SL

420

425

430

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
435 440 445

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
450 455 460

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
465 470 475 480

Pro Pro Arg

<210> 693

<211> 1449

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 693

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aactcgtgga atctggtgga ggactcgtga aacctggagg atcattgaga	120
ctgtcatgcg cggcctcggg attcacgttc tccgattact acatgagctg gattcgccag	180
gctccgggga agggactgga atgggtgtcc tacatttcct catccggctc caccatctac	240
tacgcggact ccgtgaaggg gagattcacc attagccgcg ataacgcaa gaacagcctg	300
taccttcaga tgaactccct gcgggctgaa gatactgccg tctactactg cgcaaggagg	360
agcggagatg ggatggacgt ctggggacag ggtaccactg tgaccgtgtc gtcggcctcc	420
ggcggagggg gttcgggtgg aagggccagc ggcggcggag gcagcgacat ccagatgacc	480
cagtcctccct catcgtgtgc cgcctccgtg ggcgaccgcg tcaccatcac atgccgggcc	540

_SL

tcacagtcga tctcctccta cctcaattgg tatcagcaga agcccggaaa ggcccctaag	600
cttctgatct acgcagcgtc ctccctgcaa tccgggggtcc catctcggtt ctccggctcg	660
ggcagcggta ccgacttcac tctgaccatc tcgagcctgc agccggagga cttcgccact	720
tactactgtc agcaaagcta caccctcgcg tttggccagg gcaccaaagt ggacatcaag	780
accactaccc cagcaccgag gccacccacc ccggctccta ccatcgctc ccagcctctg	840
tccctgcgtc cggaggcatg tagacccgca gctgggtgggg ccgtgcatac ccggggcttt	900
gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgagg ggtcctgctg	960
ctttcactcg tgatcactct ttactgtaag cgcggtcgga agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcatgccgg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140
gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcagaaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320
gcctatagcg agattggtat gaaaggggaa cgcagaagag gcaaaggcca cgacggactg	1380
taccagggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440
ccgcctcgg	1449

<210> 694

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 694

Gln	Val	Gln	Leu	Val	Gln	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 Asp Tyr
 20 25 30

Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Tyr Ile Ser Ser Ser Gly Asn Thr Ile Tyr 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 Val Tyr Tyr Cys
 85 90 95

Ala Arg Ser Thr Met Val Arg Glu Asp Tyr Trp Gly Gln Gly Thr Leu
 100 105 110

Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala
 115 120 125

Ser Gly Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Leu Ser
 130 135 140

Leu Pro Val Thr Leu Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser
 145 150 155 160

Glu Ser Leu Val His Asn Ser Gly Lys Thr Tyr Leu Asn Trp Phe His
 165 170 175

Gln Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile Tyr Glu Val Ser Asn
 180 185 190

Arg Asp Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr
 195 200 205

Asp Phe Thr Leu Lys Ile Ser Arg Val Glu ^{_SL}Ala Glu Asp Val Gly Val
 210 215 220

Tyr Tyr Cys Met Gln Gly Thr His Trp Pro Gly Thr Phe Gly Gln Gly
 225 230 235 240

Thr Lys Leu Glu Ile Lys
 245

<210> 695
 <211> 738
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 695
 caagtgaac tgggtgcaaag cggaggagga ttggtcaaac ccggagggaag cctgagactg 60
 tcatgcgcgg cctctggatt caccttctcc gattactaca tgtcatggat cagacaggcc 120
 ccggggaagg gcctcgaatg ggtgtcctac atctcgtcct ccgggaacac catctactac 180
 gccgacagcg tgaagggccg ctttaccatt tcccgcgaca acgcaaagaa ctcgctgtac 240
 cttcagatga attccctgcg ggctgaagat accgcggtgt actattgcgc ccggtccact 300
 atggtccggg aggactactg gggacagggc acactcgtga ccgtgtccag cgcgagcggg 360
 ggtggaggca gcggtggacg cgcctccggc ggcggcgggt cagacatcgt gctgactcag 420
 tcgcccctgt cgctgccggt caccctgggc caaccggcct caattagctg caagtcctcg 480
 gagagcctgg tgcacaactc aggaaagact tacctgaact ggttccatca gcggcctgga 540
 cagtccccac ggaggctcat ctatgaagtg tccaacaggg attcgggggt gcccgaccgc 600
 ttcactggct ccgggtccgg caccgacttc accttgaaaa tctccagagt ggaagccgag 660
 gacgtgggcg tgtactactg tatgcagggt acccactggc ctggaacctt tggacaagga 720
 actaagctcg agattaag 738

_SL

<210> 696
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 696
Gln Val Gln Leu Val Gln 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 Asp Tyr
20 25 30

Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Tyr Ile Ser Ser Ser Gly Asn Thr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95

Ala Arg Ser Thr Met Val Arg Glu Asp Tyr Trp Gly Gln Gly Thr Leu
100 105 110

Val Thr Val Ser Ser
115

<210> 697
<211> 112
<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 697

Asp Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Leu Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Glu Ser Leu Val His Asn
20 25 30

Ser Gly Lys Thr Tyr Leu Asn Trp Phe His Gln Arg Pro Gly Gln Ser
35 40 45

Pro Arg Arg Leu Ile Tyr Glu Val Ser Asn Arg Asp Ser Gly Val Pro
50 55 60

Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Gly
85 90 95

Thr His Trp Pro Gly Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 698

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 698

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

_SL

195	200	205
Tyr 210	Glu Val Ser Asn Arg Asp 215	Ser Gly Val Pro Asp Arg Phe Thr Gly 220
Ser 225	Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala 230 235 240	
Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Gly Thr His Trp Pro Gly 245 250 255		
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala 260 265 270		
Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser 275 280 285		
Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr 290 295 300		
Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala 305 310 315 320		
Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys 325 330 335		
Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met 340 345 350		
Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe 355 360 365		
Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg 370 375 380		
Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn		

_SL

taccttcaga tgaattccct gcgggctgaa gataccgcgg tgtactattg cgcccggtcc	360
actatgggtcc gggaggacta ctggggacag ggcacactcg tgaccgtgtc cagcgcgagc	420
gggggtggag gcagcgggtgg acgcgcctcc ggcgggcgcg gttcagacat cgtgctgact	480
cagtcgcccc tgtcgtgcc ggtcaccctg ggccaaccgg cctcaattag ctgcaagtcc	540
tcggagagcc tgggtgcacaa ctcaggaaaag acttacctga actggttcca tcagcggcct	600
ggacagtccc cacggaggct catctatgaa gtgtccaaca gggattcggg ggtgcccgc	660
cgcttcactg gctccgggtc cggcaccgac ttcaccttga aaatctccag agtggaagcc	720
gaggacgtgg gcgtgtacta ctgtatgcag ggtaccact ggcttgaac ctttggacaa	780
ggaactaagc tcgagattaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctgggtggg	900
gccgtgcata cccgggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggctctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaaccc ttcattgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 700

<211> 239

<212> PRT

<213> Artificial Sequence

<220>

<221> source

_SL

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 700

Gln 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 Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Arg Leu Thr Gln Ser Pro Ser Pro Leu Ser
130 135 140

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Glu Asp
145 150 155 160

Ile Asn Lys Phe Leu Asn Trp Tyr His Gln Thr Pro Gly Lys Ala Pro
165 170 175

Lys Leu Leu Ile Tyr Asp Ala Ser Thr Leu ^{SL}Gln Thr Gly Val Pro Ser
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn
195 200 205

Ser Leu Gln Pro Glu Asp Ile Gly Thr Tyr Tyr Cys Gln Gln Tyr Glu
210 215 220

Ser Leu Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
225 230 235

<210> 701

<211> 717

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 701

caagtgaac tcgtggaatc tggaggagga ctcgtgcaac ccggtggaag ccttaggctg	60
tcgtgcgccg tcagcgggtt tgctctgagc aaccatggaa tgcctgggt ccgccgggca	120
ccgggaaaag ggctggaatg ggtgtccggc atcgtgtaca gcgggtcaac ctattacgcc	180
gcgtccgtga agggcagatt cactatctca agagacaaca gccggaacac cctgtacttg	240
caaatgaatt ccctgcgcc cgaggacacc gccatctact actgctccgc ccacggagga	300
gagtcggacg tgtggggcca gggaacgact gtgactgtgt ccagcgcac aggggggggt	360
ggttcgggcg gccgggcctc ggggggagga ggttccgaca ttcggctgac ccagtccccg	420
tccccactgt cggcctccgt cggcgaccgc gtgaccatca cttgtcaggc gtccgaggac	480
attaacaagt tcctgaactg gtaccaccag acccctggaa agggcccca gctgctgac	540
tacgatgcct cgacccttca aactggagtg ctagccgggt tctccgggtc cggctccggc	600
actgatttca ctctgaccat caactcattg cagccggaag atatcgggac ctactattgc	660

_SL

cagcagtagc aatccctccc gctcacattc ggcgggggaa ccaaggtcga gattaag

717

<210> 702

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 702

Gln 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 Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 703

_SL

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 703

Asp Ile Arg Leu Thr Gln Ser Pro Ser Pro Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Glu Asp Ile Asn Lys Phe
20 25 30

Leu Asn Trp Tyr His Gln Thr Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Asp Ala Ser Thr Leu Gln Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser Leu Gln Pro
65 70 75 80

Glu Asp Ile Gly Thr Tyr Tyr Cys Gln Gln Tyr Glu Ser Leu Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 704

<211> 483

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 704

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Asp Ile Arg Leu Thr Gln Ser
145 150 155 160

Pro Ser Pro Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
165 170 175

Gln Ala Ser Glu Asp Ile Asn Lys Phe Leu Asn Trp Tyr His Gln Thr
180 185 190

_SL

Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Asp Ala Ser Thr Leu Gln
195 200 205

Thr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
210 215 220

Thr Leu Thr Ile Asn Ser Leu Gln Pro Glu Asp Ile Gly Thr Tyr Tyr
225 230 235 240

Cys Gln Gln Tyr Glu Ser Leu Pro Leu Thr Phe Gly Gly Gly Thr Lys
245 250 255

Val Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
260 265 270

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
275 280 285

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
290 295 300

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
305 310 315 320

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
325 330 335

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
340 345 350

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
355 360 365

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
370 375 380

_SL

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
385 390 395 400

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
405 410 415

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
420 425 430

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
435 440 445

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
450 455 460

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
465 470 475 480

Pro Pro Arg

<210> 705

<211> 1449

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 705

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

ccccaagtgc aactcgtgga atctggtgga ggactcgtgc aaccgggtgg aagccttagg 120

ctgtcgtgcg ccgtcagcgg gtttgctctg agcaaccatg gaatgtcctg ggtccgccgg 180

gcaccgggaa aagggtgga atgggtgtcc ggcatcgtgt acagcgggtc aacctattac 240

_SL

gccgcgtccg tgaagggcag attcactatc tcaagagaca acagccggaa caccctgtac	300
ttgcaaatga attccctgcg ccccgaggac accgccatct actactgctc cgcccacgga	360
ggagagtcgg acgtgtgggg ccagggaaacg actgtgactg tgtccagcgc atcaggaggg	420
ggtggttcgg gcggccgggc ctcgggggga ggaggttccg acattcggct gacccagtcc	480
ccgtccccac tgtcggcctc cgtcggcgac cgcgtgacca tcacttgtca ggcgccgag	540
gacattaaca agttcctgaa ctggtaccac cagacccctg gaaaggcccc caagctgctg	600
atctacgatg cctcgaccct tcaaactgga gtgcctagcc ggttctccgg gtccggctcc	660
ggcactgatt tcactctgac catcaactca ttgcagccgg aagatatcgg gacctactat	720
tgccagcagt acgaatccct cccgctcaca ttcggcgggg gaaccaaggt cgagattaag	780
accactaccc cagcaccgag gccacccacc ccggctccta ccatcgccctc ccagcctctg	840
tccctgcgtc cggaggcatg tagacccgca gctgggtgggg ccgtgcatac ccggggcttt	900
gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgagg ggtcctgctg	960
ctttcactcg tgatcactct ttactgtaag cgcggctcga agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcattgccg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140
gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcagaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320
gcctatagcg agattggtat gaaaggggaa cgcagaagag gcaaaggcca cgacggactg	1380
taccagggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440
ccgcctcgg	1449

<210> 706

<211> 240

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 706

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Glu Thr Thr Leu Thr Gln Ser Pro Ala Thr Leu Ser
130 135 140

Val Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
145 150 155 160

Val Gly Ser Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Gly Pro
165 170 175

_SL

Arg Leu Leu Ile Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn
210 215 220

Asp Trp Leu Pro Val Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
225 230 235 240

<210> 707

<211> 720

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 707

gaagtgcaat tgggtggaac tggaggagga cttgtgcaac ctggaggatc attgcggctc	60
tcatgcgctg tctccggcctt cgccctgtca aatcacggga tgtcgtgggt cagacgggcc	120
ccgggaaagg gtctggaatg ggtgtcgggg atttgtgtaca gcggctccac ctactacgcc	180
gcttcgggtca agggccgctt cactatttca cgggacaaca gccgcaacac cctctatctg	240
caaatgaact ctctccgccc ggaggatacc gccatctact actgctccgc acacggcggc	300
gaatccgacg tgtggggaca gggaaccact gtcaccgtgt cgtccgcata cggtggcgga	360
ggatcgggtg gccgggcctc cgggggcggc ggagcgaga ctaccctgac ccagtcccct	420
gccactctgt ccgtgagccc gggagagaga gccaccctta gctgccgggc cagccagagc	480
gtgggctcca acctggcctg gtaccagcag aagccaggac aggggtcccag gctgctgata	540
tacggagcct ccactcgcgc gaccggcata cccgcgaggt tctccgggtc gggttccggg	600

_SL

accgagttca ccctgaccat ctctccctc caaccggagg acttcgcggt gtactactgt 660

cagcagtaca acgattggct gcccgtgaca tttggacagg ggacgaaggt ggaaatcaaa 720

<210> 708

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 708

Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

_SL

<210> 709

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 709

Glu Thr Thr Leu Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Gly Ser Asn
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Gly Pro Arg Leu Leu Ile
35 40 45

Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala 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 Val Tyr Tyr Cys Gln Gln Tyr Asn Asp Trp Leu Pro
85 90 95

Val Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 710

<211> 484

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

_SL

polypeptide"

<400> 710

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Glu Thr Thr Leu Thr Gln Ser
145 150 155 160

Pro Ala Thr Leu Ser Val Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
165 170 175

Arg Ala Ser Gln Ser Val Gly Ser Asn Leu Ala Trp Tyr Gln Gln Lys

_SL

180		185		190											
Pro	Gly	Gln	Gly	Pro	Arg	Leu	Leu	Ile	Tyr	Gly	Ala	Ser	Thr	Arg	Ala
		195					200					205			
Thr	Gly	Ile	Pro	Ala	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Glu	Phe
	210					215					220				
Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr
225					230					235					240
Cys	Gln	Gln	Tyr	Asn	Asp	Trp	Leu	Pro	Val	Thr	Phe	Gly	Gln	Gly	Thr
				245					250					255	
Lys	Val	Glu	Ile	Lys	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro	Thr	Pro
			260					265						270	
Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro	Glu	Ala	Cys
		275					280					285			
Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp	Phe	Ala
	290					295					300				
Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly	Val	Leu
305					310					315					320
Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg	Lys	Lys
				325					330					335	
Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln	Thr	Thr
			340					345					350		
Gln	Glu	Glu	Asp	Gly	Cys	Ser	Cys	Arg	Phe	Pro	Glu	Glu	Glu	Glu	Gly
		355					360					365			
Gly	Cys	Glu	Leu	Arg	Val	Lys	Phe	Ser	Arg	Ser	Ala	Asp	Ala	Pro	Ala

370

375

_SL

380

Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg
 385 390 395 400

Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu
 405 410 415

Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn
 420 425 430

Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met
 435 440 445

Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly
 450 455 460

Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala
 465 470 475 480

Leu Pro Pro Arg

<210> 711

<211> 1452

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 711

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgaagtgc aattggtgga aactggagga ggacttgtgc aacctggagg atcattgcgg 120

ctctcatgcg ctgtctccgg cttcgccctg tcaaatacacg ggatgtcgtg ggtcagacgg 180

_SL

gccccgggaa agggctctgga atgggtgtcg gggatttgtgt acagcggctc cacctactac	240
gccgcttcgg tcaagggccg cttcactatt tcacgggaca acagccgcaa caccctctat	300
ctgcaaatga actctctccg cccggaggat accgccatct actactgctc cgcacacggc	360
ggcgaatccg acgtgtgggg acaggggaacc actgtcaccg tgtcgtccgc atccggtggc	420
ggaggatcgg gtggccgggc ctccgggggc ggcggcagcg agactaccct gaccaggtcc	480
cctgccactc tgtccgtgag cccgggagag agagccaccc ttagctgccg ggccagccag	540
agcgtgggct ccaacctggc ctggtaccag cagaagccag gacaggggtcc caggctgctg	600
atctacggag cctccactcg cgcgaccggc atccccgca ggttctccgg gtcgggttcc	660
gggaccgagt tcacctgac catctcctcc ctccaaccgg aggacttcgc ggtgtactac	720
tgtcagcagt acaacgattg gctgcccgtg acatttggac agggggacgaa ggtggaaatc	780
aaaaccacta cccagcacc gaggccaccc accccggctc ctaccatcg cctcccagcct	840
ctgtccctgc gtccggaggc atgtagaccc gcagctggtg gggccgtgca taccgggggt	900
cttgacttcg cctgcgatat ctacatttgg gcccctctgg ctggtacttg cggggtcctg	960
ctgctttcac tcgtgatcac tctttactgt aagcgcggtc ggaagaagct gctgtacatc	1020
tttaagcaac ctttcatgag gcctgtgcag actactcaag aggaggacgg ctgttcatgc	1080
cggttcccag aggaggagga aggcggctgc gaactgcgcg tgaaattcag ccgcagcgca	1140
gatgctccag cctacaagca ggggcagaac cagctctaca acgaactcaa tcttggtcgg	1200
agagaggagt acgacgtgct ggacaagcgg agaggacggg acccagaaat gggcgggaag	1260
ccgcgcagaa agaatcccca agagggcctg tacaacgagc tccaaaagga taagatggca	1320
gaagcctata gcgagattgg tatgaaaggg gaacgcagaa gaggcaaagg ccacgacgga	1380
ctgtaccagg gactcagcac cgccaccaag gacacctatg acgctcttca catgcaggcc	1440
ctgccgcctc gg	1452

<210> 712
 <211> 241
 <212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 712

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 Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly Gly Arg Ala Ser Gly
115 120 125

Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser
130 135 140

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
145 150 155 160

Ile Gly Ser Ser Ser Leu Ala Trp Tyr Gln ^{SL}Gln Lys Pro Gly Gln Ala
165 170 175

Pro Arg Leu Leu Met Tyr Gly Ala Ser Ser Arg Ala Ser Gly Ile Pro
180 185 190

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
195 200 205

Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr
210 215 220

Ala Gly Ser Pro Pro Phe Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
225 230 235 240

Lys

<210> 713
<211> 723
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 713
gaagtgcaat tgggtggaatc tgggtggagga cttgtgcaac ctggaggatc actgagactg 60
tcatgcgcgg tgtccggttt tgccctgagc aatcatggga tgtcgtgggt ccggcgcgcc 120
cccgaaagg gtctggaatg ggtgtcgggt atcgtctact ccgggagcac ttactacgcc 180
gcgagcgtga agggccgctt caccatttcc cgcgataact cccgcaacac cctgtacttg 240
caaatgaact cgctccggcc tgaggacact gccatctact actgctccgc acacggagga 300
gaatccgacg tgtggggcca gggaactacc gtgaccgtca gcagcgcctc cggcggcggg 360
ggctcaggcg gacgggctag cggcggcggg ggctccgaga tcgtgctgac ccagtcgcct 420

_SL

ggcactctct cgctgagccc cggggaaagg gcaaccctgt cctgtcgggc cagccagtcc 480
attggatcat cctccctcgc ctggtatcag cagaaaccgg gacaggctcc gcggctgctt 540
atgtatgggg ccagctcaag agcctccggc attcccgacc ggttctccgg gtccggttcc 600
ggcaccgatt tcaccctgac tatctcgagg ctggagccag aggacttcgc cgtgtactac 660
tgccagcagt acgcggggtc cccgccgttc acgttcggac agggaaaccaa ggtcgagatc 720
aag 723

<210> 714

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 714

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 Val Ser Gly Phe Ala Leu Ser Asn His
20 25 30

Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr Ala Ala Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg Asn Thr Leu Tyr Leu
65 70 75 80

Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Ile Tyr Tyr Cys Ser
85 90 95

_SL

Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln Gly Thr Thr Val Thr
100 105 110

Val Ser Ser
115

<210> 715
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 715
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 Ile Gly Ser Ser
20 25 30

Ser Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
35 40 45

Met Tyr Gly Ala Ser Ser Arg Ala Ser Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Gly Ser Pro
85 90 95

Pro Phe Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

_SL

<210> 716

<211> 485

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 716

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Val Ser Gly Phe
35 40 45

Ala Leu Ser Asn His Gly Met Ser Trp Val Arg Arg Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Val Tyr Ser Gly Ser Thr Tyr Tyr
65 70 75 80

Ala Ala Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Arg
85 90 95

Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala
100 105 110

Ile Tyr Tyr Cys Ser Ala His Gly Gly Glu Ser Asp Val Trp Gly Gln
115 120 125

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Arg Ala Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser

145		150		<u>SL</u> 155		160									
Pro	Gly	Thr	Leu	Ser	Leu	Ser	Pro	Gly	Glu	Arg	Ala	Thr	Leu	Ser	Cys
				165					170					175	
Arg	Ala	Ser	Gln	Ser	Ile	Gly	Ser	Ser	Ser	Leu	Ala	Trp	Tyr	Gln	Gln
			180					185					190		
Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Met	Tyr	Gly	Ala	Ser	Ser	Arg
		195					200					205			
Ala	Ser	Gly	Ile	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp
	210					215					220				
Phe	Thr	Leu	Thr	Ile	Ser	Arg	Leu	Glu	Pro	Glu	Asp	Phe	Ala	Val	Tyr
225					230					235					240
Tyr	Cys	Gln	Gln	Tyr	Ala	Gly	Ser	Pro	Pro	Phe	Thr	Phe	Gly	Gln	Gly
				245					250					255	
Thr	Lys	Val	Glu	Ile	Lys	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro	Pro	Thr
			260					265					270		
Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro	Glu	Ala
		275					280					285			
Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu	Asp	Phe
	290					295					300				
Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys	Gly	Val
305					310					315					320
Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg	Gly	Arg	Lys
				325					330					335	
Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro	Val	Gln	Thr

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340	345	350	
Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu			
355	360	365	
Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro			
370	375	380	
Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly			
385	390	395	400
Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro			
405	410	415	
Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr			
420	425	430	
Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly			
435	440	445	
Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln			
450	455	460	
Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln			
465	470	475	480
Ala Leu Pro Pro Arg			
485			

<210> 717
 <211> 1455
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

_SL

<400> 717

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aattggtgga atctggtgga ggacttgtgc aacctggagg atcactgaga	120
ctgtcatgcg cgggtgtccgg ttttgccctg agcaatcatg ggatgtcgtg ggtccggcgc	180
gccccggaa agggctctgga atgggtgtcg ggtatcgtct actccgggag cacttactac	240
gccgcgagcg tgaagggccg cttcaccatt tcccgcgata actcccgcaa caccctgtac	300
ttgcaaatga actcgtccg gcctgaggac actgccatct actactgctc cgcacacgga	360
ggagaatccg acgtgtgggg ccagggaact accgtgaccg tcagcagcgc ctccggcggc	420
gggggctcag gcggacgggc tagcggcggc ggtggctccg agatcgtgct gaccagtcg	480
cctggcactc tctcgtgag ccccggggaa agggcaacc tgtcctgtcg ggccagccag	540
tccattggat catcctccct cgcctggtat cagcagaaac cgggacaggc tccgcggctg	600
cttatgtatg gggccagctc aagagcctcc ggcatcccc accggttctc cgggtccggt	660
tccggcaccg atttcaccct gactatctcg aggctggagc cagaggactt cgccgtgtac	720
tactgccagc agtacgcggg gtccccgccg ttcacgttcg gacagggaac caaggtcgag	780
atcaagacca ctacccagc accgaggcca cccaccccg ctcctaccat cgcctcccag	840
cctctgtccc tgcgtccgga ggcatgtaga cccgcagctg gtggggccgt gcatacccgg	900
ggtcttgact tcgcctgcga tatctacatt tgggcccctc tggctggtag ttgcggggtc	960
ctgctgcttt cactcgtgat cactctttac tgtaagcgcg gtcggaagaa gctgctgtac	1020
atctttaagc aacccttcat gaggcctgtg cagactactc aagaggagga cggctgttca	1080
tgccggttcc cagaggagga ggaaggcggc tgcgaactgc gcgtgaaatt cagccgcagc	1140
gcagatgctc cagcctacaa gcaggggcag aaccagctct acaacgaact caatcttggg	1200
cggagagagg agtacgacgt gctggacaag cggagaggac gggaccaga aatgggcggg	1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg	1320
gcagaagcct atagcgagat tggatatgaaa ggggaacgca gaagaggcaa aggccacgac	1380

ggactgtacc agggactcag caccgccacc aaggacacct atgacgtctt tcacatgcag 1440
 gccctgccgc ctcgg 1455

<210> 718
 <211> 243
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 718
 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
 1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Ser
 20 25 30

Tyr Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
 35 40 45

Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Ala Tyr Tyr Asn Pro Ser
 50 55 60

Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
 65 70 75 80

Ser Leu Arg Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
 85 90 95

Cys Ala Arg His Trp Gln Glu Trp Pro Asp Ala Phe Asp Ile Trp Gly
 100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Glu Thr Thr^{SL} Leu Thr Gln Ser Pro
 130 135 140

Ala Phe Met Ser Ala Thr Pro Gly Asp Lys Val Ile Ile Ser Cys Lys
 145 150 155 160

Ala Ser Gln Asp Ile Asp Asp Ala Met Asn Trp Tyr Gln Gln Lys Pro
 165 170 175

Gly Glu Ala Pro Leu Phe Ile Ile Gln Ser Ala Thr Ser Pro Val Pro
 180 185 190

Gly Ile Pro Pro Arg Phe Ser Gly Ser Gly Phe Gly Thr Asp Phe Ser
 195 200 205

Leu Thr Ile Asn Asn Ile Glu Ser Glu Asp Ala Ala Tyr Tyr Phe Cys
 210 215 220

Leu Gln His Asp Asn Phe Pro Leu Thr Phe Gly Gln Gly Thr Lys Leu
 225 230 235 240

Glu Ile Lys

<210> 719

<211> 729

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 719

caagtgcagc ttcaggaaaag cggaccgggc ctggtcaagc catccgaaac tctctccctg 60

acttgcaactg tgtctggcgg ttccatctca tcgtcgtact actactgggg ctggattagg 120

cagccgccccg gaaagggact ggagtggatc ggaagcatct actattccgg ctcggcgtac 180

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tacaacccta gcctcaagtc gagagtgacc atctccgtgg atacctccaa gaaccagttt 240
tccctgcgcc tgagctccgt gaccgccgt gacaccgccg tgtactactg tgctcggcat 300
tggcaggaat ggcccgatgc cttcgacatt tggggccagg gcactatggc cactgtgtca 360
tccgggggtg gaggcagcgg gggaggaggg tccggggggg gaggttcaga gacaaccttg 420
accagtcac ccgcattcat gtccgccact ccgggagaca aggtcatcat ctcgtgcaaa 480
gcgtcccagg atatcgacga tgccatgaat tgggtaccagc agaagcctgg cgaagcgccg 540
ctgttcatta tccaatccgc aacctcgccc gtgcctggaa tcccaccgcg gttcagcggc 600
agcggtttcg gaaccgactt ttccctgacc attaacaaca ttgagtccga ggacgccgcc 660
tactacttct gcctgcaaca cgacaacttc cctctcacgt tcggccaggg aaccaagctg 720
gaaatcaag 729

<210> 720

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 720

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Ser
20 25 30

Tyr Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
35 40 45

Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Ala Tyr Tyr Asn Pro Ser
50 55 60

_SL

Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
65 70 75 80

Ser Leu Arg Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
85 90 95

Cys Ala Arg His Trp Gln Glu Trp Pro Asp Ala Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 721

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 721

Glu Thr Thr Leu Thr Gln Ser Pro Ala Phe Met Ser Ala Thr Pro Gly
1 5 10 15

Asp Lys Val Ile Ile Ser Cys Lys Ala Ser Gln Asp Ile Asp Asp Ala
20 25 30

Met Asn Trp Tyr Gln Gln Lys Pro Gly Glu Ala Pro Leu Phe Ile Ile
35 40 45

Gln Ser Ala Thr Ser Pro Val Pro Gly Ile Pro Pro Arg Phe Ser Gly
50 55 60

Ser Gly Phe Gly Thr Asp Phe Ser Leu Thr Ile Asn Asn Ile Glu Ser
65 70 75 80

Glu Asp Ala Ala Tyr Tyr Phe Cys Leu Gln His^{_SL} Asp Asn Phe Pro Leu
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 722
<211> 487
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 722
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly
35 40 45

Ser Ile Ser Ser Ser Tyr Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro
50 55 60

Gly Lys Gly Leu Glu Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Ala
65 70 75 80

Tyr Tyr Asn Pro Ser Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr
85 90 95

Ser Lys Asn Gln Phe Ser Leu Arg Leu Ser Ser Val Thr Ala Ala Asp
100 105 110

Thr Ala Val Tyr Tyr Cys Ala Arg His Trp Gln Glu Trp Pro Asp Ala

_SL

115		120		125											
Phe	Asp	Ile	Trp	Gly	Gln	Gly	Thr	Met	Val	Thr	Val	Ser	Ser	Gly	Gly
	130					135					140				
Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Glu	Thr	Thr
145					150					155					160
Leu	Thr	Gln	Ser	Pro	Ala	Phe	Met	Ser	Ala	Thr	Pro	Gly	Asp	Lys	Val
				165					170					175	
Ile	Ile	Ser	Cys	Lys	Ala	Ser	Gln	Asp	Ile	Asp	Asp	Ala	Met	Asn	Trp
			180					185					190		
Tyr	Gln	Gln	Lys	Pro	Gly	Glu	Ala	Pro	Leu	Phe	Ile	Ile	Gln	Ser	Ala
	195						200					205			
Thr	Ser	Pro	Val	Pro	Gly	Ile	Pro	Pro	Arg	Phe	Ser	Gly	Ser	Gly	Phe
	210					215					220				
Gly	Thr	Asp	Phe	Ser	Leu	Thr	Ile	Asn	Asn	Ile	Glu	Ser	Glu	Asp	Ala
225					230					235					240
Ala	Tyr	Tyr	Phe	Cys	Leu	Gln	His	Asp	Asn	Phe	Pro	Leu	Thr	Phe	Gly
				245					250					255	
Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys	Thr	Thr	Thr	Pro	Ala	Pro	Arg	Pro
			260					265					270		
Pro	Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg	Pro
		275					280					285			
Glu	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly	Leu
	290					295					300				
Asp	Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr	Cys

305		310		<u>SL</u> 315		320
Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly		325		330		335
Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val		340		345		350
Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu		355		360		365
Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp		370		375		380
Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn		385		390		395
						400
Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg		405		410		415
Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly		420		425		430
Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu		435		440		445
Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu		450		455		460
Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His		465		470		475
						480
Met Gln Ala Leu Pro Pro Arg		485				

<210> 723

_SL

<211> 1461

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 723

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc agcttcagga aagcggaccg ggcctgggtca agccatccga aactctctcc	120
ctgacttgca ctgtgtctgg cggttccatc tcatcgtcgt actactactg gggctggatt	180
aggcagccgc ccggaaggga actggagtgg atcggaagca tctactattc cggctcggcg	240
tactacaacc ctagcctcaa gtcgagagtg accatctccg tggatacctc caagaaccag	300
ttttccctgc gcctgagctc cgtgaccgcc gctgacaccg ccgtgtacta ctgtgctcgg	360
cattggcagg aatggcccga tgccttcgac atttggggcc agggcactat ggtcactgtg	420
tcatccgggg gtggaggcag cgggggagga ggggtccgggg ggggagggttc agagacaacc	480
ttgacccagt caccgcatt catgtccgcc actccgggag acaagggtcat catctcgtgc	540
aaagcgtccc aggatatcga cgatgccatg aattgggtacc agcagaagcc tggcgaagcg	600
ccgctgttca ttatccaatc cgcaacctcg cccgtgcctg gaatcccacc gcggttcagc	660
ggcagcgggt tccgaaccga cttttccctg accattaaca acattgagtc cgaggacgcc	720
gcctactact tctgcctgca acacgacaac ttccctctca cgttcggcca gggaaccaag	780
ctggaaatca agaccactac ccagcaccg aggccacca ccccggtcc taccatcgcc	840
tcccagcctc tgtccctgcg tccggaggca tgtagaccg cagctggtgg ggccgtgcat	900
acccgggggtc ttgacttcgc ctgcgatatc tacatttggg cccctctggc tgggtacttgc	960
ggggtcctgc tgctttcact cgtgatcact ctttactgta agcgcggtcg gaagaagctg	1020
ctgtacatct ttaagcaacc cttcatgagg cctgtgcaga ctactcaaga ggaggacggc	1080
tgttcatgcc gggtcccaga ggaggaggaa ggcggtgcg aactgcgcgt gaaattcagc	1140

cgagcgagc atgctccagc ctacaagcag gggcagaacc agctctacaa cgaactcaat 1200
 cttggtcgga gagaggagta cgacgtgctg gacaagcgga gaggacggga cccagaaatg 1260
 ggcgggaagc cgcgagaaaa gaatccccaa gagggcctgt acaacgagct ccaaaaggat 1320
 aagatggcag aagcctatag cgagattggt atgaaagggg aacgcagaag aggcaaaggc 1380
 cacgacggac tgtaccaggg actcagcacc gccaccaagg acacctatga cgctcttcac 1440
 atgcaggccc tgccgcctcg g 1461

<210> 724

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 724

Val Asn Leu Arg Glu Ser Gly Pro Ala Leu Val Lys Pro Thr Gln Thr
 1 5 10 15

Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu Arg Thr Ser Gly
 20 25 30

Met Cys Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu Trp
 35 40 45

Leu Ala Arg Ile Asp Trp Asp Glu Asp Lys Phe Tyr Ser Thr Ser Leu
 50 55 60

Lys Thr Arg Leu Thr Ile Ser Lys Asp Thr Ser Asp Asn Gln Val Val
 65 70 75 80

Leu Arg Met Thr Asn Met Asp Pro Ala Asp Thr Ala Thr Tyr Tyr Cys
 85 90 95

Ala Arg Ser Gly Ala Gly Gly Thr Ser Ala ^{SL} Thr Ala Phe Asp Ile Trp
100 105 110

Gly Pro Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser
130 135 140

Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
145 150 155 160

Arg Ala Ser Gln Asp Ile Tyr Asn Asn Leu Ala Trp Phe Gln Leu Lys
165 170 175

Pro Gly Ser Ala Pro Arg Ser Leu Met Tyr Ala Ala Asn Lys Ser Gln
180 185 190

Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Ala Ser Gly Thr Asp Phe
195 200 205

Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr
210 215 220

Cys Gln His Tyr Tyr Arg Phe Pro Tyr Ser Phe Gly Gln Gly Thr Lys
225 230 235 240

Leu Glu Ile Lys

<210> 725

<211> 735

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

_SL

polynucleotide"

<400> 725

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acctgtactt tctccggctt ctccctgcgg acttccggga tgtgcgtgtc ctggatcaga    120
cagcctccgg gaaaggccct ggagtggctc gctcgcattg actgggatga ggacaagttc    180
tactccacct cactcaagac caggctgacc atcagcaaag atacctctga caaccaagtg     240
gtgctccgca tgaccaacat ggaccagcc gacactgcca cttactactg cgcgaggagc     300
ggagcgggcg gaacctccgc caccgccttc gatatttggg gcccggtac catggtcacc     360
gtgtcaagcg gaggaggggg gtccgggggc ggcggttccg ggggaggcgg atcggacatt     420
cagatgactc agtcaccatc gtccctgagc gctagcgtgg gcgacagagt gacaatcact     480
tgccgggcat cccaggacat ctataacaac cttgcgtggt tccagctgaa gcctggttcc     540
gcaccgcggt cacttatgta cgccccaac aagagccagt cgggagtgcc gtcccggttt     600
tccggttcgg cctcgggaac tgacttcacc ctgacgatct ccagcctgca acccgaggat     660
ttcgccacct actactgcca gcactactac cgctttccct actcgttcgg acagggaacc     720
aagctggaaa tcaag                                                    735
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<210> 726

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 726

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Gln Val Asn Leu Arg Glu Ser Gly Pro Ala Leu Val Lys Pro Thr Gln
1           5           10          15
```

```
Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu Arg Thr Ser
20          25          30
```

_SL

Gly Met Cys Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu
35 40 45

Trp Leu Ala Arg Ile Asp Trp Asp Glu Asp Lys Phe Tyr Ser Thr Ser
50 55 60

Leu Lys Thr Arg Leu Thr Ile Ser Lys Asp Thr Ser Asp Asn Gln Val
65 70 75 80

Val Leu Arg Met Thr Asn Met Asp Pro Ala Asp Thr Ala Thr Tyr Tyr
85 90 95

Cys Ala Arg Ser Gly Ala Gly Gly Thr Ser Ala Thr Ala Phe Asp Ile
100 105 110

Trp Gly Pro Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 727

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 727

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Tyr Asn Asn
20 25 30

Leu Ala Trp Phe Gln Leu Lys Pro Gly Ser Ala Pro Arg Ser Leu Met
35 40 45

Tyr Ala Ala Asn Lys Ser Gln Ser Gly Val ^{SL}Pro Ser Arg Phe Ser Gly
50 55 60

Ser Ala 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 His Tyr Tyr Arg Phe Pro Tyr
85 90 95

Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 728

<211> 489

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 728

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Asn Leu Arg Glu Ser Gly Pro Ala Leu
20 25 30

Val Lys Pro Thr Gln Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe
35 40 45

Ser Leu Arg Thr Ser Gly Met Cys Val Ser Trp Ile Arg Gln Pro Pro
50 55 60

Gly Lys Ala Leu Glu Trp Leu Ala Arg Ile Asp Trp Asp Glu Asp Lys
65 70 75 80

Phe Tyr Ser Thr Ser Leu Lys Thr Arg Leu Thr Ile Ser Lys Asp Thr

275 280 285

Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala

465	470	<u>SL</u> 475	480
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Leu His Met Gln Ala Leu Pro Pro Arg
485

<210> 729
<211> 1467
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 729
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtca atctgcgcga atccggcccc gccttggtca agcctaccca gaccctcact 120
ctgacctgta ctttctccgg cttctccctg cggacttccg ggatgtgcgt gtcctggatc 180
agacagcctc cgggaaaggc cctggagtgg ctgctcgca ttgactggga tgaggacaag 240
ttctactcca cctcactcaa gaccaggctg accatcagca aagatacctc tgacaaccaa 300
gtggtgctcc gcatgaccaa catggacca gccgacactg ccacttacta ctgcgcgagg 360
agcggagcgg gcggaacctc cgccaccgcc ttcgatattt ggggcccggg taccatggtc 420
accgtgtcaa gcggaggagg ggggtccggg ggcggcggtt ccgggggagg cggatcggac 480
attcagatga ctcagtcacc atcgtccctg agcgctagcg tgggcgacag agtgacaatc 540
acttgccggg catcccagga catctataac aaccttgcgt ggttccagct gaagcctggt 600
tccgcaccgc ggtcacttat gtacgccgcc aacaagagcc agtcgggagt gccgtcccgg 660
ttttccgggt cggcctcggg aactgacttc accctgacga tctccagcct gcaacccgag 720
gatttcgcca cctactactg ccagcactac taccgctttc cctactcgtt cggacaggga 780
accaagctgg aaatcaagac cactacccca gcaccgaggc caccacccc ggctcctacc 840
atgcctccc agcctctgtc cctgcgtccg gaggcatgta gaccgcagc tgggtggggcc 900

_SL

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gtgcataccc ggggtcttga cttgcctgc gatatctaca tttgggcccc tctggctggt      960
acttgcgggg tcctgtgct ttcactcgtg atcactcttt actgtaagcg cggtcggaag      1020
aagctgctgt acatctttta gcaacccttc atgaggcctg tgcagactac tcaagaggag      1080
gacggctgtt catgccggtt cccagaggag gaggaaggcg gctgcgaact gcgcgtgaaa      1140
ttcagccgca gcgcagatgc tccagcctac aagcaggggc agaaccagct ctacaacgaa      1200
ctcaatcttg gtcggagaga ggagtacgac gtgctggaca agcggagagg acgggaccca      1260
gaaatgggcg ggaagccgcg cagaaagaat cccaagagg gcctgtacaa cgagctccaa      1320
aaggataaga tggcagaagc ctatagcgag attggtatga aaggggaacg cagaagaggc      1380
aaaggccacg acggactgta ccagggactc agcaccgcca ccaaggacac ctatgacgct      1440
cttcacatgc aggccctgcc gcctcgg                                     1467

```

<210> 730

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 730

```

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 Ser Tyr
          20          25          30

```

```

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35          40          45

```

```

Ser Ser Ile Ser Ser Ser Ser Ser Tyr Ile Tyr Tyr Ala Asp Ser Val
          50          55          60

```

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn ^{_SL}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 Lys Thr Ile Ala Ala Val Tyr Ala Phe Asp Ile Trp Gly Gln Gly
 100 105 110

Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Leu Ser
 130 135 140

Leu Pro Val Thr Pro Glu Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser
 145 150 155 160

Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu
 165 170 175

Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn
 180 185 190

Arg Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
 195 200 205

Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val
 210 215 220

Tyr Tyr Cys Met Gln Ala Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly
 225 230 235 240

Thr Lys Leu Glu Ile Lys
 245

_SL

<210> 731

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 731

```
gaagtgcagc ttgtcgaatc cggggggggga ctggtcaagc cgggcggatc actgagactg      60
tcctgcgccg cgagcggctt cacgttctcc tcctactcca tgaactgggt ccgccaagcc      120
cccgggaagg gactggaatg ggtgtcctct atctcctcgt cgtcgtccta catctactac      180
gccgactccg tgaagggaag attcaccatt tcccgcgaca acgcaaagaa ctactgtac      240
ttgcaaata ga actcactccg ggccgaagat actgctgtgt actattgcgc caagactatt      300
gccgccgtct acgctttcga catctggggc cagggaacca ccgtgactgt gtcgtccggt      360
ggtggtggct cgggcggagg aggaagcggc ggcggggggt ccgagattgt gctgaccag      420
tcgccactga gcctccctgt gacccccgag gaacccgcca gcatcagctg ccggtccagc      480
cagtccctgc tccactcaa cggatacaat tacctcgatt ggtaccttca gaagcctgga      540
caaagccgc agctgctcat ctacttggga tcaaaccgcg cgtcaggagt gcctgaccgg      600
ttctccggct cgggcagcgg taccgatttc accctgaaaa tctccagggt ggaggcagag      660
gacgtgggag tgtattactg tatgcaggcg ctgcagactc cgtacacatt tgggcagggc      720
accaagctgg agatcaag                                     738
```

<210> 732

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 732

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 Ser Tyr
20 25 30

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ser Ile Ser Ser Ser Ser Ser Tyr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95

Ala Lys Thr Ile Ala Ala Val Tyr Ala Phe Asp Ile Trp Gly Gln Gly
100 105 110

Thr Thr Val Thr Val Ser Ser
115

<210> 733

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 733

Glu Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Glu
1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser ^{SL}Gln Ser Leu Leu His Ser
 20 25 30

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
 35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
 50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
 65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
 85 90 95

Leu Gln Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105 110

<210> 734

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 734

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser Tyr Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys

_SL

435

440

445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 735

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 735

```
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg      60
cccgaagtgc agcttgtcga atccggggggg ggactgggtca agccggggcgg atcactgaga    120
ctgtcctgcg ccgcgagcgg cttcacgttc tcctcctact ccatgaactg ggtccgccaa      180
gcccccgggga agggactgga atgggtgtcc tctatctcct cgtcgtcgtc ctacatctac     240
tacgccgact ccgtgaaggg aagattcacc atttcccgcg acaacgcaaa gaactcactg      300
tacttgcaaa tgaactcact ccgggccgaa gatactgctg tgtactattg cgccaagact      360
attgccgccg tctacgcttt cgacatctgg ggccagggaa ccaccgtgac tgtgtcgtcc      420
ggtggtggtg gctcgggcgg aggaggaagc ggcggcgggg ggtccgagat tgtgctgacc     480
cagtcgccac tgagcctccc tgtgaccccc gaggaacccg ccagcatcag ctgccgggtcc     540
agccagtccc tgctccactc caacggatac aattacctcg attggtacct tcagaagcct      600
ggacaaagcc cgcagctgct catctacttg ggatcaaacc gcgcgtcagg agtgcctgac     660
```


_SL

cggttctccg gctcgggcag cggtaccgat ttcaccctga aaatctccag ggtggaggca	720
gaggacgtgg gagtgtatta ctgtatgcag gcgctgcaga ctccgtacac atttgggcag	780
ggcaccaagc tggagatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccggggctct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaacc ttcatgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 736

<211> 240

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 736

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	Asp	Tyr
			20					25					30		

Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly ^{SL}Lys Gly Leu Glu Trp Val
 35 40 45

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85 90 95

Ala Arg Asp Leu Arg Gly Ala Phe Asp Ile Trp Gly Gln Gly Thr Met
 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly
 115 120 125

Gly Gly Gly Ser Ser Tyr Val Leu Thr Gln Ser Pro Ser Val Ser Ala
 130 135 140

Ala Pro Gly Tyr Thr Ala Thr Ile Ser Cys Gly Gly Asn Asn Ile Gly
 145 150 155 160

Thr Lys Ser Val His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Leu
 165 170 175

Leu Val Ile Arg Asp Asp Ser Val Arg Pro Ser Lys Ile Pro Gly Arg
 180 185 190

Phe Ser Gly Ser Asn Ser Gly Asn Met Ala Thr Leu Thr Ile Ser Gly
 195 200 205

Val Gln Ala Gly Asp Glu Ala Asp Phe Tyr Cys Gln Val Trp Asp Ser
 210 215 220

Asp	Ser	Glu	His	Val	Val	Phe	Gly	Gly	Gly	<u>SL</u> Thr	Lys	Leu	Thr	Val	Leu
225					230					235					240

<210> 737
 <211> 720
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

```

<400> 737
gaagtccagc tcgtggagtc cggcggaggc cttgtgaagc ctggaggttc gctgagactg      60
tcctgcgccg cctccggctt caccttctcc gactactaca tgtcctggat cagacaggcc      120
ccgggaaagg gcctggaatg ggtgtcctac atctcgtcat cgggcagcac tatctactac      180
gcggactcag tgaaggggcg gttcaccatt tcccgggata acgcaagaa ctcgctgtat      240
ctgcaaatga actcactgag ggccgaggac accgccgtgt actactgcgc ccgcgatctc      300
cgcggggcat ttgacatctg gggacaggga accatgggtca cagtgtccag cggaggggga      360
ggatcgggtg gcggaggttc cgggggtgga ggctcctcct acgtgctgac tcagagccca      420
agcgtcagcg ctgcgcccg ttacacggca accatctcct gtggcggaaa caacattggg      480
accaagtctg tgactggta tcagcagaag ccgggccaag ctcccctgtt ggtgatccgc      540
gatgactccg tgccgcctag caaaattccg ggacggttct ccggctcaa cagcggcaat      600
atggccactc tcaccatctc gggagtgcag gccggagatg aagccgactt ctactgcaa      660
gtctgggact cagactccga gcatgtggtg ttcgggggcg gaaccaagct gactgtgctc      720

```

<210> 738
 <211> 117
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic

_SL

polypeptide"

<400> 738

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 Asp Tyr
20 25 30

Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Leu Arg Gly Ala Phe Asp Ile Trp Gly Gln Gly Thr Met
100 105 110

Val Thr Val Ser Ser
115

<210> 739

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 739

Ser Tyr Val Leu Thr Gln Ser Pro Ser Val Ser Ala Ala Pro Gly Tyr
1 5 10 15

_SL

Thr Ala Thr Ile Ser Cys Gly Gly Asn Asn Ile Gly Thr Lys Ser Val
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Leu Leu Val Ile Arg
35 40 45

Asp Asp Ser Val Arg Pro Ser Lys Ile Pro Gly Arg Phe Ser Gly Ser
50 55 60

Asn Ser Gly Asn Met Ala Thr Leu Thr Ile Ser Gly Val Gln Ala Gly
65 70 75 80

Asp Glu Ala Asp Phe Tyr Cys Gln Val Trp Asp Ser Asp Ser Glu His
85 90 95

Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 740

<211> 484

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 740

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

_SL

Thr Phe Ser Asp Tyr Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Leu Arg Gly Ala Phe Asp Ile Trp
115 120 125

Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Tyr Val Leu Thr Gln Ser
145 150 155 160

Pro Ser Val Ser Ala Ala Pro Gly Tyr Thr Ala Thr Ile Ser Cys Gly
165 170 175

Gly Asn Asn Ile Gly Thr Lys Ser Val His Trp Tyr Gln Gln Lys Pro
180 185 190

Gly Gln Ala Pro Leu Leu Val Ile Arg Asp Asp Ser Val Arg Pro Ser
195 200 205

Lys Ile Pro Gly Arg Phe Ser Gly Ser Asn Ser Gly Asn Met Ala Thr
210 215 220

Leu Thr Ile Ser Gly Val Gln Ala Gly Asp Glu Ala Asp Phe Tyr Cys
225 230 235 240

_SL

Gln Val Trp Asp Ser Asp Ser Glu His Val Val Phe Gly Gly Gly Thr
245 250 255

Lys Leu Thr Val Leu Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro
260 265 270

Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys
275 280 285

Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala
290 295 300

Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu
305 310 315 320

Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys
325 330 335

Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr
340 345 350

Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Gly
355 360 365

Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala
370 375 380

Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg
385 390 395 400

Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu
405 410 415

Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn
420 425 430

_SL

Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met
435 440 445

Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly
450 455 460

Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala
465 470 475 480

Leu Pro Pro Arg

<210> 741

<211> 1452

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 741

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtcc agctcgtgga gtccggcgga ggccttgatga agcctggagg ttcgctgaga	120
ctgtcctgcg ccgcctccgg cttcaccttc tccgactact acatgtcctg gatcagacag	180
gccccgggaa agggcctgga atgggtgtcc tacatctcgt catcgggcag cactatctac	240
tacgaggact cagtgaaggg gcggttcacc atttcccggg ataacgcgaa gaactcgtg	300
tatctgcaaa tgaactcact gagggccgag gacaccgccg tgtactactg cgcccgcat	360
ctccgcgggg catttgacat ctggggacag ggaaccatgg tcacagtgtc cagcggaggg	420
ggaggatcgg gtggcgagg ttccgggggt ggaggctcct cctacgtgct gactcagagc	480
ccaagcgtca gcgtgcgcc cggttacacg gcaaccatct cctgtggcgg aaacaacatt	540
gggaccaagt ctgtgcactg gtatcagcag aagccgggcc aagctcccct gttggtgatc	600

_SL

cgcgatgact ccgtgcggcc tagcaaaatt ccgggacggt tctccggctc caacagcggc	660
aatatggcca ctctcaccat ctcgggagtg caggccggag atgaagccga cttctactgc	720
caagtctggg actcagactc cgagcatgtg gtgttcgggg gcggaaccaa gctgactgtg	780
ctcaccacta ccccgaccaggaggccaccc accccggctc ctaccatcgc ctcccagcct	840
ctgtccctgc gtccggaggc atgtagaccc gcagctgggt gggccgtgca taccgggggt	900
cttgacttcg cctgcgatat ctacatttgg gcccctctgg ctggtacttg cggggtcctg	960
ctgctttcac tcgtgatcac tctttactgt aagcgcgggtc ggaagaagct gctgtacatc	1020
tttaagcaac ctttcatgag gcctgtgcag actactcaag aggaggacgg ctgttcatgc	1080
cggttcccag aggaggagga aggcggctgc gaactgcgcg tgaaattcag ccgcagcgca	1140
gatgctccag cctacaagca ggggcagaac cagctctaca acgaactcaa tcttggtcgg	1200
agagaggagt acgacgtgct ggacaagcgg agaggacggg acccagaaat gggcgggaag	1260
ccgcgcagaa agaatcccca agagggcctg tacaacgagc tccaaaagga taagatggca	1320
gaagcctata gcgagattgg tatgaaaggg gaacgcagaa gaggcaaagg ccacgacgga	1380
ctgtaccagg gactcagcac cgccaccaag gacacctatg acgctcttca catgcaggcc	1440
ctgccgcctc gg	1452

<210> 742

<211> 241

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 742

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala
1				5							10				15

Ser	Val	Lys	Val	Ser	Cys	Lys	Pro	Ser	Gly	Tyr	Thr	Val	Thr	Ser	His
			20						25				30		

_SL

Tyr Ile His Trp Val Arg Arg Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Met Ile Asn Pro Ser Gly Gly Val Thr Ala Tyr Ser Gln Thr Leu
50 55 60

Gln Gly Arg Val Thr Met Thr Ser Asp Thr Ser Ser Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg Glu Gly Ser Gly Ser Gly Trp Tyr Phe Asp Phe Trp Gly Arg
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Ser Tyr Val Leu Thr Gln Pro Pro Ser
130 135 140

Val Ser Val Ser Pro Gly Gln Thr Ala Ser Ile Thr Cys Ser Gly Asp
145 150 155 160

Gly Leu Ser Lys Lys Tyr Val Ser Trp Tyr Gln Gln Lys Ala Gly Gln
165 170 175

Ser Pro Val Val Leu Ile Ser Arg Asp Lys Glu Arg Pro Ser Gly Ile
180 185 190

Pro Asp Arg Phe Ser Gly Ser Asn Ser Ala Asp Thr Ala Thr Leu Thr
195 200 205

Ile Ser Gly Thr Gln Ala Met Asp Glu Ala Asp Tyr Tyr Cys Gln Ala
210 215 220

_SL

Trp Asp Asp Thr Thr Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val
225 230 235 240

Leu

<210> 743
<211> 723
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 743
caagtgcagc tggcgcagag cggggccgaa gtcaagaagc cgggagcctc cgtgaaagtg 60
tcctgcaagc cttcgggata caccgtgacc tcccactaca ttcattgggt ccgccgcgcc 120
cccggccaag gactcgagtg gatgggcatg atcaacccta gcggcggagt gaccgcgtac 180
agccagacgc tgcagggacg cgtgactatg acctcggata cctcctcctc caccgtctat 240
atggaactgt ccagcctgcg gtccgaggat accgccatgt actactgcgc ccgggaagga 300
tcaggctccg ggtggtatct cgacttctgg ggaagaggca ccctcgtgac tgtgtcatct 360
gggggagggg gttccggtgg tggcggatcg ggaggaggcg gttcatccta cgtgctgacc 420
cagccaccct ccgtgtccgt gagccccggc cagactgcat cgattacatg tagcggcgac 480
ggcctctcca agaaatacgt gtcgtggtac cagcagaagg ccggacagag cccggtggtg 540
ctgatctcaa gagataagga gcggcctagc ggaatcccgg acaggttctc gggttccaac 600
tccgcggaca ctgctactct gaccatctcg gggacccagg ctatggacga agccgattac 660
tactgccaag cctgggacga cactactgtc gtgtttggag ggggcaccaa gttgaccgtc 720
ctt 723

_SL

<210> 744

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 744

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Pro Ser Gly Tyr Thr Val Thr Ser His
20 25 30

Tyr Ile His Trp Val Arg Arg Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Met Ile Asn Pro Ser Gly Gly Val Thr Ala Tyr Ser Gln Thr Leu
50 55 60

Gln Gly Arg Val Thr Met Thr Ser Asp Thr Ser Ser Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys
85 90 95

Ala Arg Glu Gly Ser Gly Ser Gly Trp Tyr Phe Asp Phe Trp Gly Arg
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 745

<211> 106

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 745

Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln
1 5 10 15

Thr Ala Ser Ile Thr Cys Ser Gly Asp Gly Leu Ser Lys Lys Tyr Val
20 25 30

Ser Trp Tyr Gln Gln Lys Ala Gly Gln Ser Pro Val Val Leu Ile Ser
35 40 45

Arg Asp Lys Glu Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
50 55 60

Asn Ser Ala Asp Thr Ala Thr Leu Thr Ile Ser Gly Thr Gln Ala Met
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Gln Ala Trp Asp Asp Thr Thr Val Val
85 90 95

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105

<210> 746

<211> 485

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 746

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

_SL

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ala Ser Val Lys Val Ser Cys Lys Pro Ser Gly Tyr
35 40 45

Thr Val Thr Ser His Tyr Ile His Trp Val Arg Arg Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Met Ile Asn Pro Ser Gly Gly Val Thr Ala
65 70 75 80

Tyr Ser Gln Thr Leu Gln Gly Arg Val Thr Met Thr Ser Asp Thr Ser
85 90 95

Ser Ser Thr Val Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Met Tyr Tyr Cys Ala Arg Glu Gly Ser Gly Ser Gly Trp Tyr Phe
115 120 125

Asp Phe Trp Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Tyr Val Leu
145 150 155 160

Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln Thr Ala Ser Ile
165 170 175

Thr Cys Ser Gly Asp Gly Leu Ser Lys Lys Tyr Val Ser Trp Tyr Gln
180 185 190

Gln Lys Ala Gly Gln Ser Pro Val Val Leu Ile Ser Arg Asp Lys Glu
195 200 205

_SL

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Asn Ser Ala Asp
210 215 220

Thr Ala Thr Leu Thr Ile Ser Gly Thr Gln Ala Met Asp Glu Ala Asp
225 230 235 240

Tyr Tyr Cys Gln Ala Trp Asp Asp Thr Thr Val Val Phe Gly Gly Gly
245 250 255

Thr Lys Leu Thr Val Leu Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
260 265 270

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
275 280 285

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
290 295 300

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
305 310 315 320

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys
325 330 335

Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr
340 345 350

Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu
355 360 365

Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro
370 375 380

Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
385 390 395 400

_SL

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
405 410 415

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
420 425 430

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
435 440 445

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
450 455 460

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
465 470 475 480

Ala Leu Pro Pro Arg
485

<210> 747

<211> 1455

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 747

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

ccccaagtgc agctggtgca gagcggggcc gaagtcaaga agccgggagc ctccgtgaaa 120

gtgtcctgca agccttcggg atacaccgtg acctcccact acattcattg ggtccgccgc 180

gccccgggcc aaggactcga gtggatgggc atgatcaacc ctagcggcgg agtgaccgcg 240

tacagccaga cgctgcaggg acgcgtgact atgacctcgg atacctcctc ctccaccgtc 300

tatatggaac tgtccagcct gcggtccgag gataccgccca tgtactactg cgcccgggaa 360

_SL

ggatcaggct ccgggtggta tttcgacttc tggggaagag gcaccctcgt gactgtgtca	420
tctggggggag ggggttccgg tgggtggcga tcgggaggag gcggttcac ctagtgctg	480
accagccac cctccgtgtc cgtgagcccc ggccagactg catcgattac atgtagcggc	540
gacggcctct ccaagaaata cgtgtcgtgg taccagcaga aggccggaca gagccccgtg	600
gtgctgatct caagagataa ggagcggcct agcggaatcc cggacagggt ctcgggttcc	660
aactccgcgg acactgctac tctgaccatc tcggggaccc aggctatgga cgaagccgat	720
tactactgcc aagcctggga cgacactact gtcgtgtttg gagggggcac caagttgacc	780
gtccttacca ctaccccagc accgaggcca cccaccccgg ctctaccat cgcctcccag	840
cctctgtccc tgcgtccgga ggcatgtaga cccgcagctg gtggggccgt gcatacccgg	900
ggtcttgact tcgcctgcga tatctacatt tgggcccctc tggctggtag ttgcggggtc	960
ctgctgcttt cactcgtgat cactctttac tgtaagcgcg gtcggaagaa gctgctgtac	1020
atctttaagc aacccttcat gaggcctgtg cagactactc aagaggagga cggctgttca	1080
tgccggttcc cagaggagga ggaaggcggc tgcgaactgc gcgtgaaatt cagccgcagc	1140
gcagatgctc cagcctacaa gcaggggcag aaccagctct acaacgaact caatcttggt	1200
cggagagagg agtacgacgt gctggacaag cggagaggac gggaccaga aatgggcggg	1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg	1320
gcagaagcct atagcgagat tggatatgaaa ggggaacgca gaagaggcaa aggccacgac	1380
ggactgtacc agggactcag caccgccacc aaggacacct atgacgctct tcacatgcag	1440
gccctgccgc ctcgg	1455

<210> 748

<211> 245

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 748

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly
20 25 30

Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu
35 40 45

Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
50 55 60

Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
65 70 75 80

Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
85 90 95

Cys Ala Arg Ala Gly Ile Ala Ala Arg Leu Arg Gly Ala Phe Asp Ile
100 105 110

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln
130 135 140

Ser Pro Ser Ser Val Ser Ala Ser Val Gly Asp Arg Val Ile Ile Thr
145 150 155 160

Cys Arg Ala Ser Gln Gly Ile Arg Asn Trp Leu Ala Trp Tyr Gln Gln
165 170 175

Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile Tyr Ala Ala Ser Asn Leu
180 185 190

_SL

Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Ala Asp
195 200 205

Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr
210 215 220

Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Phe Thr Phe Gly Pro Gly Thr
225 230 235 240

Lys Val Asp Ile Lys
245

<210> 749

<211> 735

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 749

caagtgcagc ttcaggagag cggcccggga ctcgtgaagc cgtcccagac cctgtccctg	60
acttgcaccg tgtcgggagg aagcatctcg agcggaggct actattgggtc gtggattcgg	120
cagcaccctg gaaagggcct ggaatggatc ggctacatct actactccgg ctcgacctac	180
tacaacccat cgctgaagtc cagagtgaca atctcagtgg acacgtccaa gaatcagttc	240
agcctgaagc tctcttccgt gactgcggcc gacaccgccg tgtactactg cgcacgcgct	300
ggaattgccg cccggctgag gggcgccttc gacatttggg gacagggcac catggtcacc	360
gtgtcctccg gcggcggagg ttccgggggt ggaggctcag gaggaggggg gtccgacatc	420
gtcatgactc agtcgccctc aagcgtcagc gcgtccgtcg gggacagagt gatcatcacc	480
tgtcgggcgt cccagggaat tcgcaactgg ctggcctggt atcagcagaa gcccggaaag	540
gcccccaacc tgttgatcta cgccgcctca aacctccaat ccgggggtgcc gagccgcttc	600

_SL

agcggctccg gttcgggtgc cgatttcact ctgaccatct cctccctgca acctgaagat 660
gtggctacct actactgcca aaagtacaac tccgcacctt ttacttttcgg accgggggacc 720
aaagtggaca ttaag 735

<210> 750

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 750

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Gly
20 25 30

Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro Gly Lys Gly Leu Glu
35 40 45

Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
50 55 60

Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
65 70 75 80

Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
85 90 95

Cys Ala Arg Ala Gly Ile Ala Ala Arg Leu Arg Gly Ala Phe Asp Ile
100 105 110

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser

_SL

115

120

<210> 751

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 751

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Ile Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Trp
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile
35 40 45

Tyr Ala Ala Ser Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Ala 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 Phe
85 90 95

Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
100 105

<210> 752

<211> 489

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 752

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Gln Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly
35 40 45

Ser Ile Ser Ser Gly Gly Tyr Tyr Trp Ser Trp Ile Arg Gln His Pro
50 55 60

Gly Lys Gly Leu Glu Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr
65 70 75 80

Tyr Tyr Asn Pro Ser Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr
85 90 95

Ser Lys Asn Gln Phe Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp
100 105 110

Thr Ala Val Tyr Tyr Cys Ala Arg Ala Gly Ile Ala Ala Arg Leu Arg
115 120 125

Gly Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp
145 150 155 160

Ile Val Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly Asp
165 170 175

_SL

Arg Val Ile Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Trp Leu
180 185 190

Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile Tyr
195 200 205

Ala Ala Ser Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
210 215 220

Gly Ser Gly Ala Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
225 230 235 240

Asp Val Ala Thr Tyr Tyr Cys Gln Lys Tyr Asn Ser Ala Pro Phe Thr
245 250 255

Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Thr Thr Thr Pro Ala Pro
260 265 270

Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
275 280 285

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
290 295 300

Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
305 310 315 320

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys
325 330 335

Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg
340 345 350

Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro
355 360 365

_SL

Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser
370 375 380

Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu
385 390 395 400

Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg
405 410 415

Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln
420 425 430

Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr
435 440 445

Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp
450 455 460

Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala
465 470 475 480

Leu His Met Gln Ala Leu Pro Pro Arg
485

<210> 753

<211> 1467

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 753

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

ccccaagtgc agcttcagga gagcggcccc ggactcgtga agccgtccca gaccctgtcc 120

_SL

ctgacttgca ccgtgtcggg aggaagcatc tcgagcggag gctactattg gtcgtggatt	180
cggcagcacc ctggaaaggg cctggaatgg atcggctaca tctactactc cggctcgacc	240
tactacaacc catcgctgaa gtccagagtg acaatctcag tggacacgtc caagaatcag	300
ttcagcctga agctctcttc cgtgactgcg gccgacaccg ccgtgtacta ctgcgcacgc	360
gctggaattg ccgcccggct gaggggtgcc ttcgacattt ggggacaggg caccatggtc	420
accgtgtcct ccggcggcgg aggttccggg ggtggaggct caggaggagg ggggtccgac	480
atcgatcatga ctcagtcgcc ctcaagcgtc agcgcgtccg tcggggacag agtgatcatc	540
acctgtcggg cgtcccaggg aattcgcaac tggctggcct ggtatcagca gaagcccga	600
aaggcccccac acctgttgat ctacgccgcc tcaaacctcc aatccgggggt gccgagccgc	660
ttcagcggct ccggttcggg tgccgatttc actctgacca tctcctccct gcaacctgaa	720
gatgtggcta cctactactg ccaaaagtac aactccgcac cttttacttt cggaccgggg	780
accaaagtgg acattaagac cactacccca gcaccgaggc caccacccc ggctcctacc	840
atgcctccc agcctctgtc cctgcgtccg gaggcattga gaccgcagc tgggtggggcc	900
gtgcataccc ggggtcttga cttgcctgc gatatttaca tttgggcccc tctggctggt	960
acttgccggg tcctgtgct ttactcgtg atcactcttt actgtaagcg cggtcggaag	1020
aagctgtgtg acatcttta gcaacccttc atgaggcctg tgcagactac tcaagaggag	1080
gacggctgtt catgccggtt cccagaggag gaggaaggcg gctgcgaact gcgcgtgaaa	1140
ttcagccgca gcgcagatgc tccagcctac aagcaggggc agaaccagct ctacaacgaa	1200
ctcaatcttg gtcggagaga ggagtacgac gtgctggaca agcggagagg acgggaccca	1260
gaaatgggcg ggaagccgcg cagaaagaat cccaagagg gcctgtacaa cgagctccaa	1320
aaggataaga tggcagaagc ctatagcgag attggtatga aaggggaacg cagaagaggc	1380
aaaggccacg acggactgta ccagggactc agcaccgcca ccaaggacac ctatgacgct	1440
cttcacatgc aggccctgcc gcctcgg	1467

<210> 754

_SL

<211> 253

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 754

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 Ser Ser Tyr
20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Arg Gly Gly Tyr Gln Leu Leu Arg Trp Asp Val Gly Leu Leu
100 105 110

Arg Ser Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
130 135 140

Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser Val Ala Pro Gly Gln
145 150 155 160

_SL

Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Ile Gly Ser Lys Ser Val
165 170 175

His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Leu Tyr
180 185 190

Gly Lys Asn Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Arg Ser Gly Thr Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
210 215 220

Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Arg Asp Ser Ser Gly Asp His
225 230 235 240

Leu Arg Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu
245 250

<210> 755

<211> 759

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 755

caagtgcagc tgggtccagtc gggcgccgag gtcaagaagc ccgggagctc tgtgaaagtg 60

tcctgcaagg cctccggggg caccttttagc tcctacgcca tctcctgggt ccgccaagca 120

ccgggtcaag gcctggagtg gatgggggga attatcccta tcttcggcac tgccaactac 180

gcccagaagt tccagggacg cgtgaccatt accgcggacg aatccacctc caccgttat 240

atggagctgt ccagcttgcg ctcggaagat accgccgtgt actactgcgc ccggaggggt 300

ggataccagc tgctgagatg ggacgtgggc ctctgcggt cggcgttcga catctggggc 360

_SL

cagggcacta tggctactgt gtccagcggg ggaggcggat cgggaggcgg cggatcaggg 420
ggaggcgggtt ccagctacgt gcttactcaa ccccttcgg tgtccgtggc cccgggacag 480
accgccagaa tcacttgcgg aggaacaac attgggtcca agagcgtgca ttggtaccag 540
cagaagccag gacaggcccc tgtgctgggtg ctctacggga agaacaatcg gcccagcggg 600
gtgccggaca ggttctcggg ttcacgctcc ggtacaaccg cttcactgac tatcaccggg 660
gcccaggcag aggatgaagc ggactactac tgttcctccc gggattcatc cggcgaccac 720
ctccgggtgt tcggaaccgg aacgaaggtc accgtgctg 759

<210> 756

<211> 129

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 756

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 Ser Ser Tyr
20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys

85 90 95

Ala Arg Arg Gly Gly Tyr Gln Leu Leu Arg Trp Asp Val Gly Leu Leu
100 105 110

Arg Ser Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser
115 120 125

_SL

Leu Arg Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu
100 105

<210> 758

<211> 497

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 758

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val
20 25 30

Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly
35 40 45

Thr Phe Ser Ser Tyr Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly Leu Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Arg Gly Gly Tyr Gln Leu Leu Arg Trp
115 120 125

_SL

Asp Val Gly Leu Leu Arg Ser Ala Phe Asp Ile Trp Gly Gln Gly Thr
130 135 140

Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Gly Gly Gly Gly Ser Ser Tyr Val Leu Thr Gln Pro Pro Ser Val Ser
165 170 175

Val Ala Pro Gly Gln Thr Ala Arg Ile Thr Cys Gly Gly Asn Asn Ile
180 185 190

Gly Ser Lys Ser Val His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
195 200 205

Val Leu Val Leu Tyr Gly Lys Asn Asn Arg Pro Ser Gly Val Pro Asp
210 215 220

Arg Phe Ser Gly Ser Arg Ser Gly Thr Thr Ala Ser Leu Thr Ile Thr
225 230 235 240

Gly Ala Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Arg Asp
245 250 255

Ser Ser Gly Asp His Leu Arg Val Phe Gly Thr Gly Thr Lys Val Thr
260 265 270

Val Leu Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr
275 280 285

Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala
290 295 300

Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile
305 310 315 320

_SL

Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser
325 330 335

Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr
340 345 350

Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu
355 360 365

Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu
370 375 380

Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln
385 390 395 400

Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu
405 410 415

Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly
420 425 430

Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln
435 440 445

Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu
450 455 460

Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr
465 470 475 480

Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro
485 490 495

Arg

_SL

<210> 759
<211> 1491
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 759
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
ccccaagtgc agctggtcca gtcgggcgcc gaggtcaaga agcccgggag ctctgtgaaa 120
gtgtcctgca aggcctccgg gggcaccttt agctcctacg ccatctcctg ggtccgccaa 180
gcaccgggtc aaggcctgga gtggatgggg ggaattatcc ctatcttcgg cactgccaac 240
tacgcccaga agttccaggg acgcgtgacc attaccgcgg acgaatccac ctccaccgct 300
tatatggagc tgtccagctt gcgctcggaa gataccgccg tgtactactg cgcccgagg 360
ggtggatacc agctgctgag atgggacgtg ggcctcctgc ggtcggcggt cgacatctgg 420
ggccagggca ctatggtcac tgtgtccagc ggaggaggcg gatcgggagg cggcggatca 480
gggggaggcg gttccagcta cgtgcttact caacccccct cggtgtccgt ggccccggga 540
cagaccgcca gaatcacttg cggaggaaac aacattgggt ccaagagcgt gcattgggtac 600
cagcagaagc caggacaggc ccctgtgctg gtgctctacg ggaagaacaa tcggcccagc 660
ggagtgccgg acaggttctc gggttcacgc tccggtacaa ccgcttcact gactatcacc 720
ggggcccagg cagaggatga agcggactac tactgttcct cccgggattc atccggcgac 780
cacctccggg tgttcggaac cggaacgaag gtcaccgtgc tgaccactac cccagcaccg 840
aggccaccca ccccggtcc taccatcgcc tcccagcctc tgtccctgcg tccggaggca 900
ttagacccg cagctggtgg ggccgtgcat acccggggtc ttgacttcgc ctgcgatatc 960
tacatttggg cccctctggc tgggtacttc ggggtcctgc tgctttcact cgtgatcact 1020
ctttactgta agcgcggctc gaagaagctg ctgtacatct ttaagcaacc cttcatgagg 1080

_SL

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cctgtgcaga ctactcaaga ggaggacggc tgttcatgcc ggttcccaga ggaggaggaa      1140
ggcggctgcg aactgcgcgt gaaattcagc cgcagcgcag atgctccagc ctacaagcag      1200
gggcagaacc agctctacaa cgaactcaat cttggtcgga gagaggagta cgacgtgctg      1260
gacaagcggga gaggacggga cccagaaatg ggcggaagc cgcgcagaaa gaatcccca      1320
gagggcctgt acaacgagct ccaaaaggat aagatggcag aagcctatag cgagattggt      1380
atgaaagggg aacgcagaag aggcaaaggc cacgacggac tgtaccaggg actcagcacc      1440
gccaccaagg acacctatga cgctcttcac atgcaggccc tgccgcctcg g              1491

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<210> 760

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 760

```

Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1           5           10          15

```

```

Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn
          20          25          30

```

```

Ser Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
          35          40          45

```

```

Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Phe Tyr Ala
          50          55          60

```

```

Ile Ser Leu Lys Ser Arg Ile Ile Ile Asn Pro Asp Thr Ser Lys Asn
65           70           75           80

```

```

Gln Phe Ser Leu Gln Leu Lys Ser Val Thr Pro Glu Asp Thr Ala Val
          85          90          95

```

_SL

Tyr Tyr Cys Ala Arg Ser Ser Pro Glu Gly Leu Phe Leu Tyr Trp Phe
100 105 110

Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Asp
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Ser Glu Leu
130 135 140

Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Ile Arg Ile
145 150 155 160

Thr Cys Gln Gly Asp Ser Leu Gly Asn Tyr Tyr Ala Thr Trp Tyr Gln
165 170 175

Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Thr Asn Asn
180 185 190

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Ala Ser Ser Ser Gly Asn
195 200 205

Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp
210 215 220

Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly His His Leu Leu Phe Gly
225 230 235 240

Thr Gly Thr Lys Val Thr Val Leu
245

<210> 761

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

SL

<221> source

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<223> /note="Description of Artificial Sequence: Synthetic  
polynucleotide"
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<400> 761

gaagtgcagc	tccaacagtc	aggaccgggg	ctcgtgaagc	catcccagac	cctgtccctg	60
acttgtgcca	tctcgggaga	tagcgtgtca	tcgaactccg	ccgcctggaa	ctggattcgg	120
cagagcccgt	cccgcggact	ggagtggctt	ggaaggacct	actaccggtc	caagtggtag	180
tctttctacg	cgatctcgct	gaagtccgcg	attatcatta	accctgatac	ctccaagaat	240
cagttctccc	tccaactgaa	atccgtcacc	cccgaggaca	cagcagtgtg	ttactgcgca	300
cggagcagcc	ccgaaggact	gttcctgtat	tggtttgacc	cctggggcca	ggggactctt	360
gtgaccgtgt	cgagcggcgg	agatgggtcc	ggtggcgggtg	gttcggggggg	cggcggatca	420
tcatccgaac	tgaccagga	cccggctgtg	tccgtggcgc	tgggacaaac	catccgcatt	480
acgtgccagg	gagactccct	gggcaactac	tacgccactt	ggtaccagca	gaagccgggc	540
caagcccctg	tgttggtcat	ctacgggacc	aacaacagac	cttcgggcac	ccccgaccgg	600
ttcagcgctt	cgtcctccgg	caacactgcc	agcctgacca	tcactggagc	gcaggccgaa	660
gatgaggccg	actactactg	caacagcaga	gactcctcgg	gtcatcacct	cttgttcgga	720
actggaacca	aggtcaccgt	gctg				744

<210> 762

<211> 125

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<221> source

```
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"
```

<400> 762

Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn

_SL

Gly Thr Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Ala Ser
50 55 60

Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
65 70 75 80

Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly His His
85 90 95

Leu Leu Phe Gly Thr Gly Thr Lys Val Thr Val Leu
100 105

<210> 764

<211> 492

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 764

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Gln Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp
35 40 45

Ser Val Ser Ser Asn Ser Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro
50 55 60

Ser Arg Gly Leu Glu Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp
65 70 75 80

_SL

Tyr Ser Phe Tyr Ala Ile Ser Leu Lys Ser Arg Ile Ile Ile Asn Pro
85 90 95

Asp Thr Ser Lys Asn Gln Phe Ser Leu Gln Leu Lys Ser Val Thr Pro
100 105 110

Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Ser Ser Pro Glu Gly Leu
115 120 125

Phe Leu Tyr Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val
130 135 140

Ser Ser Gly Gly Asp Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly
165 170 175

Gln Thr Ile Arg Ile Thr Cys Gln Gly Asp Ser Leu Gly Asn Tyr Tyr
180 185 190

Ala Thr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile
195 200 205

Tyr Gly Thr Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Ala
210 215 220

Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala
225 230 235 240

Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly His
245 250 255

His Leu Leu Phe Gly Thr Gly Thr Lys Val Thr Val Leu Thr Thr Thr
260 265 270

_SL

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu
385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
450 455 460

_SL

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 765
<211> 1476
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 765
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgaagtgc agctccaaca gtcaggaccg gggctcgtga agccatccca gaccctgtcc 120
ctgacttgatg ccatctcggg agatagcgtg tcatcgaact ccgccgcctg gaactggatt 180
cggcagagcc cgtcccgagg actggagtgg cttggaagga cctactaccg gtccaagtgg 240
tactctttct acgcgatctc gctgaagtcc cgcattatca ttaaccctga tacctccaag 300
aatcagttct ccctccaact gaaatccgtc acccccgagg acacagcagt gtattactgc 360
gcacggagca gccccgaagg actgttcctg tattggtttg acccctgggg ccaggggact 420
cttgtagaccg tgtcgagcgg cggagatggg tccggtggcg gtgggttcggg gggcggcgga 480
tcatcatccg aactgacca ggacccggct gtgtccgtgg cgctgggaca aaccatccgc 540
attacgtgcc agggagactc cctgggcaac tactacgcca cttggtacca gcagaagccg 600
ggccaagccc ctgtgttggt catctacggg accaacaaca gaccttcgg catccccgac 660
cggttcagcg cttcgtcctc cggcaacact gccagcctga ccatcactgg agcgcaggcc 720
gaagatgagg ccgactacta ctgcaacagc agagactcct cgggtcatca cctcttggtc 780
ggaactggaa ccaaggtcac cgtgctgacc actaccccag caccgaggcc acccaccgcc 840

						_SL	
gctcctacca	tcgcctccca	gcctctgtcc	ctgcgtccgg	aggcatgtag	acccgcagct	900	
ggtggggccg	tgcatacccg	gggtcttgac	ttcgctgcg	atatctacat	ttggggccct	960	
ctggctggta	cttgcggggt	cctgctgctt	tcactcgtga	tcactcttta	ctgtaagcgc	1020	
ggtcggaaga	agctgctgta	catctttaag	caacccttca	tgaggcctgt	gcagactact	1080	
caagaggagg	acggctgttc	atgccggttc	ccagaggagg	aggaaggcgg	ctgcgaactg	1140	
cgcgtgaaat	tcagccgcag	cgcagatgct	ccagcctaca	agcaggggca	gaaccagctc	1200	
tacaacgaac	tcaatcttgg	tcggagagag	gagtacgacg	tgctggacaa	gcggagagga	1260	
cgggaccag	aaatgggcgg	gaagccgcgc	agaaagaatc	cccaagaggg	cctgtacaac	1320	
gagctccaaa	aggataagat	ggcagaagcc	tatagcgaga	ttggtatgaa	aggggaacgc	1380	
agaagaggca	aaggccacga	cggactgtac	cagggactca	gcaccgccac	caaggacacc	1440	
tatgacgctc	ttcacatgca	ggccctgccg	cctcgg			1476	

```
<210> 766
<211> 246
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"
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<400> 766
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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

_SL

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 Val Glu Gly Ser Gly Ser Leu Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln Ser Pro Gly Thr Leu
130 135 140

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
145 150 155 160

Ser Val Ser Ser Ala Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
165 170 175

Pro Pro Arg Leu Leu Ile Ser Gly Ala Ser Thr Arg Ala Thr Gly Ile
180 185 190

Pro Asp Arg Phe Gly Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
195 200 205

Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His
210 215 220

Tyr Gly Ser Ser Phe Asn Gly Ser Ser Leu Phe Thr Phe Gly Gln Gly
225 230 235 240

Thr Arg Leu Glu Ile Lys
245

_SL

<210> 767
<211> 738
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 767
gaagtgcagc tcgtggagtc aggaggcggc ctggtccagc cgggagggtc ccttagactg 60
tcatgcgccg caagcggatt cactttctcc tcctatgcc a tgagctgggt ccgccaagcc 120
cccggaaagg gactggaatg ggtgtccgcc atctcgggggt ctggaggctc aacttactac 180
gctgactccg tgaagggacg gttcaccatt agccgcgaca actccaagaa caccctctac 240
ctccaaatga actccctgcg ggccgaggat accgccgtct actactgcgc caaagtggaa 300
ggttcaggat cgctggacta ctggggacag ggtactctcg tgaccgtgtc atcgggcgga 360
ggaggttccg gcggtggcgg ctccggcggc ggagggtcgg agatcgtgat gacccagagc 420
cctggtactc tgagcctttc gccgggagaa agggccaccc tgcctgccg cgcttcccaa 480
tccgtgtcct ccgcgtactt ggcgtggtac cagcagaagc cgggacagcc ccctcggtg 540
ctgatcagcg gggccagcac ccgggcaacc ggaatcccag acagattcgg gggttccggc 600
agcggcacag atttcaccct gactatttcg aggttggagc ccgaggactt tgcggtgtat 660
tactgtcagc actacgggtc gtcctttaat ggctccagcc tgttcacgtt cggacagggg 720
acccgcctgg aaatcaag 738

<210> 768
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

_SL

polypeptide"

<400> 768

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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Val Glu Gly Ser Gly Ser Leu Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 769

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 769

Glu Ile Val Met Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

_SL

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ala
20 25 30

Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Arg Leu Leu
35 40 45

Ile Ser Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Gly
50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Ser Ser Phe
85 90 95

Asn Gly Ser Ser Leu Phe Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile
100 105 110

Lys

<210> 770

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 770

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

_SL

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Val Glu Gly Ser Gly Ser Leu Asp Tyr
115 120 125

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr Gln
145 150 155 160

Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser
165 170 175

Cys Arg Ala Ser Gln Ser Val Ser Ser Ala Tyr Leu Ala Trp Tyr Gln
180 185 190

Gln Lys Pro Gly Gln Pro Pro Arg Leu Leu Ile Ser Gly Ala Ser Thr
195 200 205

Arg Ala Thr Gly Ile Pro Asp Arg Phe Gly Gly Ser Gly Ser Gly Thr
210 215 220

_SL

Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val
225 230 235 240

Tyr Tyr Cys Gln His Tyr Gly Ser Ser Phe Asn Gly Ser Ser Leu Phe
245 250 255

Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Thr Thr Thr Pro Ala
260 265 270

Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser
275 280 285

Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr
290 295 300

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

_SL

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 771
<211> 1470
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 771
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgaagtgc agctcgtgga gtcaggaggc ggcttggctc agccgggagg gtcccttaga 120
ctgtcatgcg ccgcaagcgg attcactttc tcctcctatg ccatgagctg ggtccgccaa 180
gcccccgaa agggactgga atgggtgtcc gccatctcgg ggtctggagg ctcaacttac 240
tacgctgact ccgtgaaggg acggttcacc attagccgcg acaactccaa gaacaccctc 300
tacctcaaaa tgaactccct gcgggccgag gataccgccg tctactactg cgccaaagtg 360
gaaggttcag gatcgttgga ctactgggga cagggtactc tcgtgaccgt gtcacgggc 420
ggaggagggtt ccggcggtgg cggctccggc ggccggagggt cggagatcgt gatgaccag 480

_SL

agccctggta ctctgagcct ttcgccggga gaaagggcca ccctgtcctg ccgcgcttcc	540
caatccgtgt cctccgcgta cttggcgtgg taccagcaga agccgggaca gccccctcgg	600
ctgctgatca gcggggccag caccggggca accggaatcc cagacagatt cgggggttcc	660
ggcagcggca cagatttcac cctgactatt tcgaggttgg agcccagga ctttgcggtg	720
tattactgtc agcactacgg gtcgtccttt aatggctcca gcctgttcac gttcggacag	780
gggacccgcc tggaaatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccgggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggctctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaaccc ttcatgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 772

<211> 241

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 772

Glu	Val	Gln	Leu	Val	Glu	Thr	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1				5					10					15	

_SL

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Thr Phe Ser Arg Tyr
20 25 30

Pro Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Ser Asp Ser Gly Val Ser Thr Tyr Tyr Ala Asp Ser Ala
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Phe
65 70 75 80

Leu Gln Met Ser Ser Leu Arg Asp Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Val Thr Arg Ala Gly Ser Glu Ala Ser Asp Ile Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu
130 135 140

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
145 150 155 160

Ser Val Ser Asn Ser Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
165 170 175

Pro Arg Leu Leu Ile Tyr Asp Ala Ser Ser Arg Ala Thr Gly Ile Pro
180 185 190

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
195 200 205

_SL

Ser Arg Leu Glu Pro Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Phe
210 215 220

Gly Thr Ser Ser Gly Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
225 230 235 240

Lys

<210> 773

<211> 723

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 773

gaagtgaac tgggtggaaac cggtggcggc ctggtgcagc ctggaggatc attgaggctg	60
tcatgcgcgg ccagcggatat taccttctcc cggtacccca tgtcctgggt cagacaggcc	120
ccggggaaaag ggcttgaatg ggtgtccggg atctcggact ccggtgtcag cacttactac	180
gccgactccg ccaagggacg cttcaccatt tcccgggaca actcgaagaa caccctgttc	240
ctccaaatga gtcctcctcg ggacgaggat actgcagtgt actactgcgt gacccgcgcc	300
gggtccgagg cgtctgacat ttggggacag ggcactatgg tcaccgtgtc gtccggcgga	360
gggggctcgg gaggcgggtg cagcggagga ggagggtccg agatcgtgct gacccaatcc	420
ccggccaccc tctcgtgag ccctggagaa agggcaacct tgtcctgtcg cgcgagccag	480
tccgtgagca actccctggc ctggtaccag cagaagcccg gacaggctcc gagacttctg	540
atctacgacg cttcagaccg ggccactgga atccccgacc gcttttcggg gtccggctca	600
ggaaccgatt tcaccctgac aatctcacgg ctggagccag aggatttcgc catctattac	660
tgccagcagt tcggtacttc ctccggcctg actttcggag gcggcacgaa gctcgaaatc	720

aag

723

<210> 774
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 774
Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Thr Phe Ser Arg Tyr
20 25 30

Pro Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Ser Asp Ser Gly Val Ser Thr Tyr Tyr Ala Asp Ser Ala
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Phe
65 70 75 80

Leu Gln Met Ser Ser Leu Arg Asp Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Val Thr Arg Ala Gly Ser Glu Ala Ser Asp Ile Trp Gly Gln Gly Thr
100 105 110

Met Val Thr Val Ser Ser
115

<210> 775

_SL

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 775

Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Asn Ser
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45

Tyr Asp Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro
65 70 75 80

Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Phe Gly Thr Ser Ser Gly
85 90 95

Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 776

<211> 485

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 776

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile
35 40 45

Thr Phe Ser Arg Tyr Pro Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Ser Asp Ser Gly Val Ser Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Ala Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Phe Leu Gln Met Ser Ser Leu Arg Asp Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Val Thr Arg Ala Gly Ser Glu Ala Ser Asp Ile
115 120 125

Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln
145 150 155 160

Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser
165 170 175

Cys Arg Ala Ser Gln Ser Val Ser Asn Ser Leu Ala Trp Tyr Gln Gln
180 185 190

_SL

Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Asp Ala Ser Ser Arg
195 200 205

Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
210 215 220

Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Ile Tyr
225 230 235 240

Tyr Cys Gln Gln Phe Gly Thr Ser Ser Gly Leu Thr Phe Gly Gly Gly
245 250 255

Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr
260 265 270

Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala
275 280 285

Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe
290 295 300

Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val
305 310 315 320

Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys
325 330 335

Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr
340 345 350

Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu
355 360 365

Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro
370 375 380

_SL

Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly
385 390 395 400

Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro
405 410 415

Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr
420 425 430

Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly
435 440 445

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
450 455 460

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
465 470 475 480

Ala Leu Pro Pro Arg
485

<210> 777

<211> 1455

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 777

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgaagtgc aactggtgga aaccggtggc ggcttggtgc agcctggagg atcattgagg 120

ctgtcatgcg cggccagcgg tattaccttc tcccgttacc ccatgtcctg ggtcagacag 180

gccccgggga aagggttga atgggtgtcc gggatctcgg actccggtgt cagcacttac 240

_SL

tacgccgact ccgccaaggg acgcttcacc atttcccggg acaactcgaa gaacaccctg	300
ttcctccaaa tgagctccct ccgggacgag gatactgcag tgtactactg cgtgacccgc	360
gccgggtccg aggcgtctga catttgggga cagggcacta tggtcaccgt gtcgtccggc	420
ggagggggct cgggaggcgg tggcagcgga ggaggagggt ccgagatcgt gctgacccaa	480
tccccggcca ccctctcgct gagccctgga gaaagggcaa ctttgtcctg tcgcgcgagc	540
cagtccgtga gcaactccct ggcctggtag cagcagaagc ccggacaggc tccgagactt	600
ctgatctacg acgcttcgag ccggggccact ggaatccccg accgcttttc ggggtccggc	660
tcaggaaccg atttcaccct gacaatctca cggctggagc cagaggattt cgccatctat	720
tactgccagc agttcggtac ttcctccggc ctgactttcg gaggcggcac gaagctcgaa	780
atcaagacca ctaccccagc accgaggcca cccaccccgg ctcttaccat cgcctcccag	840
cctctgtccc tgcgtccgga ggcatgtaga cccgcagctg gtggggccgt gcatacccgg	900
ggtcttgact tcgcctgcga tatctacatt tgggcccctc tggctggtag ttgcggggtc	960
ctgctgcttt cactcgtgat cactctttac tgtaagcgcg gtcggaagaa gctgctgtac	1020
atctttaagc aacccttcat gaggcctgtg cagactactc aagaggagga cggctgttca	1080
tgccggttcc cagaggagga ggaaggcggc tgcgaactgc gcgtgaaatt cagccgcagc	1140
gcagatgctc cagcctacaa gcagggggcag aaccagctct acaacgaact caatcttggt	1200
cggagagagg agtacgacgt gctggacaag cggagaggac gggacccaga aatgggcggg	1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg	1320
gcagaagcct atagcgagat tggatatgaaa ggggaacgca gaagaggcaa aggccacgac	1380
ggactgtacc agggactcag caccgccacc aaggacacct atgacgctct tcacatgcag	1440
gccctgccgc ctcgg	1455

<210> 778

<211> 248

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 778

Gln 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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr 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 Ile Tyr Tyr Cys
85 90 95

Ala Arg Ala Thr Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp
100 105 110

Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr
130 135 140

Gln Ser Pro Gly Thr Val Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu
145 150 155 160

Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser Phe Leu Ala Trp Tyr
165 170 175

_SL

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser
180 185 190

Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Ser Ala
210 215 220

Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro Ser Trp Thr Phe Gly
225 230 235 240

Gln Gly Thr Arg Leu Glu Ile Lys
245

<210> 779

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 779

caagtgcagc tcgtggaatc ggggtggcggga ctggtgcagc cgggggggctc acttagactg 60

tcctgcgcgg ccagcggatt cactttctcc tcctacgcca tgtcctgggt cagacaggcc 120

cctggaaaagg gcctggaatg ggtgtccgca atcagcggca gcggcggctc gacctattac 180

gcggattcag tgaagggcag attcaccatt tcccgggaca acgccaagaa ctccttgtac 240

cttcaaatga actccctccg cgcggaagat accgcaatct actactgcgc tcgggccact 300

tacaagaggg aactgcgcta ctactacggg atggacgtct ggggccaggg aaccatggtc 360

accgtgtcca gcggaggagg aggatcggga ggaggcggta gcgggggtgg agggtcggag 420

atcgtgatga cccagtcgcc cggcactgtg tcgctgtccc ccggcgaacg ggccaccctg 480

_SL

tcatgtcggg ccagccagtc agtgtcgtca agcttcctcg cctggtacca gcagaaaccg 540
ggacaagctc cccgcctgct gatctacgga gccagcagcc gggccaccgg tattcctgac 600
cggttctccg gttcggggtc cgggaccgac tttactctga ctatctctcg cctcgagcca 660
gaggactccg ccgtgtatta ctgccagcag taccactcct ccccgtcctg gacgttcgga 720
cagggcacaa ggctggagat taag 744

<210> 780

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 780

Gln 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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr 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 Ile Tyr Tyr Cys
85 90 95

Ala Arg Ala Thr Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp

100

105

_SL

110

Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 781

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 781

Glu Ile Val Met Thr Gln Ser Pro Gly Thr Val Ser Leu Ser Pro Gly
 1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
 20 25 30

Phe 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 Ser Arg Leu Glu
 65 70 75 80

Pro Glu Asp Ser Ala Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro
 85 90 95

Ser Trp Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 782

<211> 492

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 782

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Ile Tyr Tyr Cys Ala Arg Ala Thr Tyr Lys Arg Glu Leu Arg Tyr
115 120 125

Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

_SL

Glu Ile Val Met Thr Gln Ser Pro Gly Thr Val Ser Leu Ser Pro Gly
165 170 175

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser
180 185 190

Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
195 200 205

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
225 230 235 240

Pro Glu Asp Ser Ala Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro
245 250 255

Ser Trp Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

_SL

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu
385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 783

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 783

_SL

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc agctcgtgga atcgggtggc ggactgggtgc agccggggggg ctacttaga	120
ctgtcctgcg cggccagcgg attcactttc tcctcctacg ccatgtcctg ggtcagacag	180
gcccctggaa agggcctgga atgggtgtcc gcaatcagcg gcagcggcgg ctcgacctat	240
tacgcggatt cagtgaaggg cagattcacc atttcccggg acaacgcaa gaactccttg	300
taccttcaaa tgaactccct ccgcgcggaa gataccgcaa tctactactg cgctcgggcc	360
acttacaaga gggaactgcg ctactactac gggatggacg tctggggcca gggaaccatg	420
gtcaccgtgt ccagcggagg aggaggatcg ggaggaggcg gtagcggggg tggagggtcg	480
gagatcgtga tgaccagtc ccccggcact gtgtcgctgt ccccggcga acgggccacc	540
ctgtcatgtc gggccagcca gtcagtgtcg tcaagcttcc tcgcctggta ccagcagaaa	600
ccgggacaag ctccccgcct gctgatctac ggagccagca gccgggccac cggtatctct	660
gaccggttct ccggttcggg gtccgggacc gactttactc tgactatctc tcgcctcgag	720
ccagaggact ccgccgtgta ttactgccag cagtaccact cctccccgtc ctggacgttc	780
ggacagggca caaggctgga gattaagacc actaccccag caccgaggcc acccaccg	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcatgtag accgcagct	900
ggtggggccg tgcatacccg gggctttgac ttcgcctgcg atatctacat ttgggcccct	960
ctggctggta cttgcgggggt cctgctgctt tctctcgtga tctctcttta ctgtaagcgc	1020
ggtcgggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccgttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcgtgaaat tcagccgcag cgcagatgct ccagcctaca agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gactacgacg tgctggacaa gcggagagga	1260
cgggaccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380
agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc	1440

tatgacgctc ttcacatgca ggccctgccg cctcgg _SL

1476

<210> 784

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 784

Glu Val Gln Leu Val Glu Thr 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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Thr Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ala Thr Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp
100 105 110

Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr
130 135 140

_SL

Gln Ser Pro Ser Thr Leu Ser Leu Ser Pro Gly Glu Ser Ala Thr Leu
145 150 155 160

Ser Cys Arg Ala Ser Gln Ser Val Ser Thr Thr Phe Leu Ala Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ser Ser
180 185 190

Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Phe Thr Leu Thr Ile Arg Arg Leu Glu Pro Glu Asp Phe Ala
210 215 220

Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro Ser Trp Thr Phe Gly
225 230 235 240

Gln Gly Thr Lys Val Glu Ile Lys
245

<210> 785

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 785

gaggtgcagc ttgtggaaac cggtagcgga ctggtgcagc ccggaggaag cctcaggctg 60

tcctgcgccg cgtccggctt caccttctcc tcgtacgcca tgcctgggt ccgccaggcc 120

cccggaaagg gcctggaatg ggtgtccgcc atctctggaa gcggagggtt cacgtactac 180

gcggacagcg tcaagggaag gttcacaatc tcccgcgata attcgaagaa cactctgtac 240

_SL

cttcaaatga acaccctgaa ggccgaggac actgctgtgt actactgcgc acgggccacc 300
tacaagagag agctccggta ctactacgga atggacgtct ggggccaggg aactactgtg 360
accgtgtcct cgggaggggg tggctccggg gggggcggct ccggcggagg cggttccgag 420
attgtgctga cccagtcacc ttcaactctg tcgctgtccc cgggagagag cgctactctg 480
agctgccggg ccagccagtc cgtgtccacc accttcctcg cctggatatca gcagaagccg 540
gggcaggcac cacggctctt gatctacggg tcaagcaaca gagcgaccgg aattcctgac 600
cgcttctcgg ggagcggttc aggcaccgac ttcaccctga ctatccggcg cctggaaccc 660
gaagatttcg ccgtgtatta ctgtcaacag taccactcct cgccgtcctg gacctttggc 720
caaggaacca aagtggaaat caag 744

<210> 786

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 786

Glu Val Gln Leu Val Glu Thr 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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr

65 70 75 80

Leu Gln Met Asn Thr Leu Lys Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85 90 95

Ala Arg Ala Thr Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp

100 105 110

Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

115 120

_SL

Ser Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 788

<211> 492

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 788

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Thr Leu Lys Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Ala Thr Tyr Lys Arg Glu Leu Arg Tyr
115 120 125

_SL

Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Glu Ile Val Leu Thr Gln Ser Pro Ser Thr Leu Ser Leu Ser Pro Gly
165 170 175

Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Thr Thr
180 185 190

Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
195 200 205

Ile Tyr Gly Ser Ser Asn Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Arg Arg Leu Glu
225 230 235 240

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr His Ser Ser Pro
245 250 255

Ser Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

_SL

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe
370 375 380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu
385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 789

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 789

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgagggtgc agcttgtgga aaccgggtggc ggactgggtgc agcccggagg aagcctcagg	120
ctgtcctgcg ccgcgtccgg cttcaccttc tcctcgtacg ccatgtcctg ggtccgccag	180
gcccccggaaggggcctgga atgggtgtcc gccatctctg gaagcggagg ttccacgtac	240
tacgcggaca gcgtcaaggg aaggttcaca atctcccgcg ataattcgaa gaacactctg	300
taccttcaaa tgaacaccct gaaggccgag gacactgctg tgtactactg cgcacggggcc	360
acctacaaga gagagctccg gtactactac ggaatggacg tctggggcca gggaactact	420
gtgaccgtgt cctcgggagg ggggtggctcc ggggggggcg gctccggcgg aggcggttcc	480
gagattgtgc tgaccagtc accttcaact ctgtcgtgt ccccgggaga gagcgctact	540
ctgagctgcc gggccagcca gtccgtgtcc accaccttcc tcgcctggta tcagcagaag	600
ccggggcagg caccacggct cttgatctac ggggtcaagca acagagcgac cggaattcct	660
gaccgcttct cgggggagcgg ttcaggcacc gacttcaccc tgactatccg gcgcctggaa	720
cccgaagatt tcgccgtgta ttactgtcaa cagtaccact cctcgccgtc ctggaccttt	780
ggccaaggaa ccaaagtgga aatcaagacc actaccccag caccgaggcc acccaccg	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcatgtag acccgagct	900
ggtggggccg tgcatacccg gggctttgac ttcgcctgcg atatctacat ttggggcccct	960
ctggctggta cttgcgggggt cctgctgctt tctactgtga tctactttta ctgtaagcgc	1020
ggtcggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgcggtgaaat tcagccgcag cgcagatgct ccagcctaca agcaggggca gaaccagctc	1200

						_SL	
tacaacgaac	tcaatcttgg	tcggagagag	gagtacgacg	tgctggacaa	gcggagagga		1260
cgggacccag	aaatgggcgg	gaagccgcgc	agaaagaatc	cccaagaggg	cctgtacaac		1320
gagctccaaa	aggataagat	ggcagaagcc	tatagcgaga	ttggtatgaa	aggggaacgc		1380
agaagaggca	aaggccacga	cggactgtac	cagggactca	gcaccgccac	caaggacacc		1440
tatgacgctc	ttcacatgca	ggccctgccg	cctcgg				1476

<210> 790

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

<221> source

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<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"
```

<400> 790

Glu Val Gln Leu Val Glu Thr 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 Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Ser Trp Asn Ser Gly Ser 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 Asp Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Gly Lys Ala Val Pro Asp Val Trp Gly Gln Gly Thr Thr
100 105 110

_SL

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr Pro Ser Ser Leu Ser
130 135 140

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser
145 150 155 160

Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
165 170 175

Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
195 200 205

Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr
210 215 220

Ser Thr Pro Tyr Ser Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
225 230 235

<210> 791

<211> 717

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 791

gaagtgcagc tcgtggaaac tggaggtgga ctcgtgcagc ctggacgggtc gctgcggctg 60

agctgcgctg catccggcctt caccttcgac gattatgccca tgcactgggt cagacaggcg 120

_SL

ccagggaagg gacttgagtg ggtgtccggt atcagctgga atagcggctc aatcggatac 180
gcggactccg tgaagggaag gttcaccatt tcccgcgaca acgccaagaa ctccctgtac 240
ttgcaaatac acagcctccg ggatgaggac actgccgtgt actactgcgc ccgcgtcggg 300
aaagctgtgc ccgacgtctg gggccaggga accactgtga ccgtgtccag cggcgggggt 360
ggatcgggcg gtggagggtc cgggtggaggg ggctcagata ttgtgatgac ccagaccccc 420
tcgtccctgt ccgcctcggg cggcgaccgc gtgactatca catgtagagc ctcgcagagc 480
atctccagct acctgaactg gtatcagcag aagccgggga aggccccgaa gctcctgata 540
tacgcggcat catcactgca atcgggagtg ccgagccggt tttccgggtc cggctccggc 600
accgacttca cgctgaccat ttcttccctg caacccgagg acttcgccac ttactactgc 660
cagcagtcct actccacccc ttactccttc ggccaaggaa ccaggctgga aatcaag 717

<210> 792

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 792

Glu Val Gln Leu Val Glu Thr 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 Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
50 55 60

_SL

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 Asp Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Gly Lys Ala Val Pro Asp Val Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser
115

<210> 793

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 793

Asp Ile Val Met Thr Gln Thr 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 ^{_SL}Ser Tyr Ser Thr Pro Tyr
85 90 95

Ser Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
100 105

<210> 794

<211> 483

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 794

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Asp Asp Tyr Ala Met His Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Asp Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Val Gly Lys Ala Val Pro Asp Val Trp

115 120 — 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr Gln Thr
145 150 155 160

Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
165 170 175

Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys
180 185 190

Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln
195 200 205

Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
210 215 220

Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr
225 230 235 240

Cys Gln Gln Ser Tyr Ser Thr Pro Tyr Ser Phe Gly Gln Gly Thr Arg
245 250 255

Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
260 265 270

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
275 280 285

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
290 295 300

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu

_SL

<211> 1449

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 795

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc agctcgtgga aactggagggt ggactcgtgc agcctggacg gtcgctgcgg	120
ctgagctgcg ctgcatccgg cttcaccttc gacgattatg ccatgcactg ggtcagacag	180
gcgccaggga agggacttga gtgggtgtcc ggtatcagct ggaatagcgg ctcaatcgga	240
tacgcggact ccgtgaaggg aagggttcacc atttcccgcg acaacgcaa gaactccctg	300
tacttgcaaa tgaacagcct ccgggatgag gacactgccg tgtactactg cgcccgctc	360
ggaaaagctg tgcccgacgt ctggggccag ggaaccactg tgaccgtgtc cagcggcggg	420
ggtggatcgg gcggtggagg gtccggtgga gggggctcag atattgtgat gaccagacc	480
ccctcgtccc tgtccgcctc ggtcggcgac cgcgtgacta tcacatgtag agcctcgcag	540
agcatctcca gctacctgaa ctggtatcag cagaagccgg ggaaggcccc gaagtcctg	600
atctacgcgg catcatcact gcaatcggga gtgccgagcc ggttttccgg gtccggctcc	660
ggcaccgact tcacgtgac catttcttcc ctgcaaccgg aggacttcgc cacttactac	720
tgccagcagt cctactccac cccttactcc ttcggccaag gaaccaggct ggaaatcaag	780
accactaccc cagcaccgag gccaccacc ccggctccta ccatgcctc ccagcctctg	840
tccctgcgtc cggaggcatg tagaccgcga gctggtgggg ccgtgcatac ccggggtctt	900
gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgagg ggtcctgctg	960
ctttcactcg tgatcactct ttactgtaag cgcggtcgga agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcatgccgg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140

_SL

gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcagaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320
gcctatagcg agattggtat gaaaggggaa cgcagaagag gcaaaggcca cgacggactg	1380
taccagggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440
ccgcctcgg	1449

<210> 796

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 796

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	Thr	Ala	Ser	Gly	Phe	Thr	Phe	Asp	Asp	Tyr
		20						25					30		

Ala	Met	His	Trp	Val	Arg	Gln	Arg	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35				40						45			

Ala	Ser	Ile	Asn	Trp	Lys	Gly	Asn	Ser	Leu	Ala	Tyr	Gly	Asp	Ser	Val
	50					55					60				

Lys	Gly	Arg	Phe	Ala	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Thr	Val	Phe
65					70					75					80

Leu	Gln	Met	Asn	Ser	Leu	Arg	Thr	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85					90						95	

Ala Ser His Gln Gly Val Ala Tyr Tyr Asn ^{SL}Tyr Ala Met Asp Val Trp
100 105 110

Gly Arg Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser
130 135 140

Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
145 150 155 160

Arg Ala Thr Gln Ser Ile Gly Ser Ser Phe Leu Ala Trp Tyr Gln Gln
165 170 175

Arg Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Gln Arg
180 185 190

Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Arg Gly Ser Gly Thr Asp
195 200 205

Phe Thr Leu Thr Ile Ser Arg Val Glu Pro Glu Asp Ser Ala Val Tyr
210 215 220

Tyr Cys Gln His Tyr Glu Ser Ser Pro Ser Trp Thr Phe Gly Gln Gly
225 230 235 240

Thr Lys Val Glu Ile Lys
245

<210> 797

<211> 738

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

_SL

polynucleotide"

<400> 797

```
gaagtgcagc tcgtggagag cgggggagga ttggtgcagc ccggaaggtc cctgcggctc      60
tcctgactg  cgtctggctt caccttcgac gactacgcga tgcactgggt cagacagcgc      120
ccgggaaagg gcctggaatg ggtcgcctca atcaactgga agggaaactc cctggcctat      180
ggcgacagcg tgaagggccg cttcgccatt tcgcgcgaca acgccaagaa caccgtgttt      240
ctgcaaatga attccctgcg gaccgaggat accgctgtgt actactgcgc cagccaccag      300
ggcgtggcat actataacta cgccatggac gtgtggggaa gagggacgct cgtcaccgtg      360
tcctccgggg gcggtggatc gggaggagga ggaagcgggt gcgggggcag cgaaatcgtg      420
ctgactcaga gcccgggaac tctttcactg tccccgggag aacggggccac tctctcgtgc      480
cggggccacc agtccatcgg ctctctcttc cttgcctggt accagcagag gccaggacag      540
gcgccccgcc tgctgatcta cggtgcttcc caacgcgcca ctggcattcc tgaccggttc      600
agcggcagag ggtcgggaac cgatttcaca ctgaccattt cccgggtgga gcccgaagat      660
tcggcagtct actactgtca gcattacgag tcctcccctt catggacctt cggtaagggg      720
accaaagtgg agatcaag                                     738
```

<210> 798

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 798

```
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 Thr Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20          25          30
```

_SL

Ala Met His Trp Val Arg Gln Arg Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Ser Ile Asn Trp Lys Gly Asn Ser Leu Ala Tyr Gly Asp Ser Val
50 55 60

Lys Gly Arg Phe Ala Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Phe
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ser His Gln Gly Val Ala Tyr Tyr Asn Tyr Ala Met Asp Val Trp
100 105 110

Gly Arg Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 799

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 799

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 Thr Gln Ser Ile Gly Ser Ser
20 25 30

Phe Leu Ala Trp Tyr Gln Gln Arg Pro Gly Gln Ala Pro Arg Leu Leu
35 40 45

Ile Tyr Gly Ala Ser Gln Arg Ala Thr Gly ^{SL}Ile Pro Asp Arg Phe Ser
50 55 60

Gly Arg Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Val Glu
65 70 75 80

Pro Glu Asp Ser Ala Val Tyr Tyr Cys Gln His Tyr Glu Ser Ser Pro
85 90 95

Ser Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 800

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 800

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe
35 40 45

Thr Phe Asp Asp Tyr Ala Met His Trp Val Arg Gln Arg Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ala Ser Ile Asn Trp Lys Gly Asn Ser Leu Ala
65 70 75 80

Tyr Gly Asp Ser Val Lys Gly Arg Phe Ala Ile Ser Arg Asp Asn Ala

275 280 285

Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala
305 310 315 320

Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys
325 330 335

Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met
340 345 350

Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe
355 360 365

Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg
370 375 380

Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn
385 390 395 400

Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg
405 410 415

Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
420 425 430

Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
435 440 445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp

465	470	<u>SL</u> 475	480
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Ala	Leu	His	Met	Gln	Ala	Leu	Pro	Pro	Arg
				485					490

<210> 801
 <211> 1470
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 801
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccgaagtgc agctcgtgga gagcggggga ggattggtgc agcccgaag gtccctgcgg 120
 ctctcctgca ctgctctgga cttcaccttc gacgactacg cgatgcactg ggtcagacag 180
 cgcccgggaa agggcctgga atgggtcgcc tcaatcaact ggaagggaaa ctccctggcc 240
 tatggcgaca gcgtgaaggg ccgcttcgcc atttcgcgcg acaacgcaa gaacaccgtg 300
 tttctgcaaa tgaattccct gcggaccgag gataccgtg tgtactactg cgccagccac 360
 cagggcgtgg catactataa ctacgccatg gacgtgtggg gaagagggac gctcgtcacc 420
 gtgtcctccg ggggcggtgg atcgggtgga ggaggaagcg gtggcggggg cagcgaaatc 480
 gtgctgactc agagcccggg aactctttca ctgtccccgg gagaacgggc cactctctcg 540
 tgccgggcca ccaggtccat cggctcctcc ttccttgctt ggtaccagca gaggccagga 600
 caggcgcccc gcctgctgat ctacggtgct tcccaacgcg ccactggcat tcctgaccgg 660
 ttcagcggca gagggctcggg aaccgatttc aactgacca tttcccgggt ggagcccga 720
 gattcggcag tctactactg tcagcattac gagtcctccc cttcatggac cttcgggtcaa 780
 gggaccaaag tggagatcaa gaccactacc ccagcaccga ggccaccac cccggctcct 840
 accatcgctt ccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg 900

_SL

```

gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct      960
gggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg      1020
aagaagctgc tgtacatctt taagcaaccc ttcatgaggc ctgtgcagac tactcaagag      1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg      1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac      1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac      1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc      1320
caaaaggata agatggcaga agcctatagc gagattggtg tgaaagggga acgcagaaga      1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac      1440
gctcttcaca tgcaggccct gccgcctcgg      1470

```

<210> 802

<211> 241

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 802

```

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 Phe Ser Ser Tyr
          20          25          30

```

```

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35          40          45

```

```

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
          50          55          60

```

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn ^{_SL}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 Val Val Arg Asp Gly Met Asp Val Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser
130 135 140

Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser
145 150 155 160

Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala
165 170 175

Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro
180 185 190

Asp Arg Phe Ser Gly Asn Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
195 200 205

Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr
210 215 220

Gly Ser Pro Pro Arg Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile
225 230 235 240

Lys

_SL

<210> 803

<211> 723

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 803

```
gaggtgcagt tggtcgaaag cgggggscggg cttgtgcagc ctggcggatc actgcggctg      60
tcctgcgcgg catcaggctt cacgttttct tcctacgcca tgtcctgggt gcgccaggcc      120
cctggaaagg gactggaatg ggtgtccgcg atttcgggggt ccggcgggag cacctactac      180
gccgattccg tgaagggccg cttcactatc tcgcgggaca actccaagaa caccctctac      240
ctccaaatga atagcctgcg ggccgaggat accgccgtct actattgcgc taaggctcgtg      300
cgcgacggaa tggacgtgtg gggacagggt accaccgtga cagtgtcctc ggggggaggc      360
ggtagcggcg gaggaggaag cggtggtgga ggttccgaga ttgtgctgac tcaatcaccc      420
gcgaccctga gcctgtcccc cggcgaaagg gccactctgt cctgtcgggc cagccaatca      480
gtctcctcct cgtacctggc ctggtaccag cagaagccag gacaggctcc gagactcctt      540
atctatggcg catcctcccc cgccaccgga atcccgata ggttctcggg aaacggatcg      600
gggaccgact tcaactctcac catctcccgg ctggaaccgg aggacttcgc cgtgtactac      660
tgccagcagt acggcagccc gcctagattc actttcggcc ccggcaccaa agtggacatc      720
aag                                                                    723
```

<210> 804

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 804

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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Val Val Arg Asp Gly Met Asp Val Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser
115

<210> 805

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 805

Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser ^{SL}Gln Ser Val Ser Ser Ser
 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 Asn Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
 65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Pro Pro
 85 90 95

Arg Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
 100 105

<210> 806

<211> 485

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 806

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys

					50					55					60					_SL				
Gly 65	Leu	Glu	Trp	Val	Ser 70	Ala	Ile	Ser	Gly	Ser 75	Gly	Gly	Ser	Thr	Tyr 80									
Tyr	Ala	Asp	Ser	Val 85	Lys	Gly	Arg	Phe	Thr 90	Ile	Ser	Arg	Asp	Asn 95	Ser									
Lys	Asn	Thr	Leu 100	Tyr	Leu	Gln	Met	Asn 105	Ser	Leu	Arg	Ala	Glu 110	Asp	Thr									
Ala	Val	Tyr 115	Tyr	Cys	Ala	Lys	Val 120	Val	Arg	Asp	Gly	Met 125	Asp	Val	Trp									
Gly	Gln 130	Gly	Thr	Thr	Val	Thr 135	Val	Ser	Ser	Gly	Gly 140	Gly	Gly	Ser	Gly									
Gly 145	Gly	Gly	Ser	Gly	Gly 150	Gly	Gly	Ser	Glu	Ile 155	Val	Leu	Thr	Gln	Ser 160									
Pro	Ala	Thr	Leu	Ser 165	Leu	Ser	Pro	Gly	Glu 170	Arg	Ala	Thr	Leu	Ser 175	Cys									
Arg	Ala	Ser	Gln 180	Ser	Val	Ser	Ser	Ser 185	Tyr	Leu	Ala	Trp	Tyr 190	Gln	Gln									
Lys	Pro	Gly 195	Gln	Ala	Pro	Arg	Leu 200	Leu	Ile	Tyr	Gly	Ala 205	Ser	Ser	Arg									
Ala	Thr 210	Gly	Ile	Pro	Asp	Arg 215	Phe	Ser	Gly	Asn	Gly 220	Ser	Gly	Thr	Asp									
Phe 225	Thr	Leu	Thr	Ile	Ser 230	Arg	Leu	Glu	Pro	Glu 235	Asp	Phe	Ala	Val	Tyr 240									
Tyr	Cys	Gln	Gln	Tyr	Gly	Ser	Pro	Pro	Arg	Phe	Thr	Phe	Gly	Pro	Gly									

435

440

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445

Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln
 450 455 460

Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln
 465 470 475 480

Ala Leu Pro Pro Arg
 485

<210> 807

<211> 1455

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 807

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaggtgc agttggtcga aagcgggggc gggcttgctc agcctggcgg atcactgcgg	120
ctgtcctgcg cggcatcagg cttcacgttt tcttcctacg ccatgtcctg ggtgcgccag	180
gccccctggaa agggactgga atgggtgtcc gcgatttcgg ggtccggcgg gagcacctac	240
tacgccgatt ccgtgaaggg ccgcttcact atctcgcggg acaactccaa gaacaccctc	300
tacctccaaa tgaatagcct gcgggcccag gataccgccg tctactattg cgctaaggtc	360
gtgcgcgacg gaatggacgt gtggggacag ggtaccaccg tgacagtgtc ctcgggggga	420
ggcggtagcg gcggaggagg aagcgggtgg ggaggttccg agattgtgct gactcaatca	480
cccgcgaccc tgagcctgtc ccccggcgaa agggccactc tgtcctgtcg ggccagccaa	540
tcagtctcct cctcgtacct ggccctgttac cagcagaagc caggacaggc tccgagactc	600
cttatctatg gcgcacctc ccgcgccacc ggaatcccgg ataggttctc gggaaacgga	660

_SL

tcggggaccg acttcactct caccatctcc cggctggaac cggaggactt cgccgtgtac	720
tactgccagc agtacggcag cccgcctaga ttacttttcg gccccggcac caaagtggac	780
atcaagacca ctaccccagc accgaggcca cccaccccgg ctcttaccat cgcctcccag	840
cctctgtccc tgcgtccgga ggcatgtaga cccgcagctg gtggggccgt gcatacccgg	900
ggctcttgact tcgcctgcga tatctacatt tgggcccctc tggctggtag ttgcggggtc	960
ctgctgcttt cactcgtgat cactctttac tgtaagcgcg gtcggaagaa gctgctgtac	1020
atctttaagc aacccttcat gaggcctgtg cagactactc aagaggagga cggctgttca	1080
tgccggttcc cagaggagga ggaaggcggc tgcgaactgc gcgtgaaatt cagccgcagc	1140
gcagatgctc cagcctacaa gcagggggcag aaccagctct acaacgaact caatcttggt	1200
cggagagagg agtacgacgt gctggacaag cggagaggac gggacccaga aatgggcggg	1260
aagccgcgca gaaagaatcc ccaagagggc ctgtacaacg agctccaaaa ggataagatg	1320
gcagaagcct atagcgagat tggatatgaaa ggggaacgca gaagaggcaa aggccacgac	1380
ggactgtacc agggactcag caccgccacc aaggacacct atgacgctct tcacatgcag	1440
gccctgccgc ctcgg	1455

<210> 808

<211> 242

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 808

Glu	Val	Gln	Leu	Leu	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	Phe	Ser	Ser	Tyr
			20					25					30		

Ala Met Ser Trp Val Arg Gln Ala Pro Gly ^{SL}Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys Ile Pro Gln Thr Gly Thr Phe Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115 120 125

Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu
 130 135 140

Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
 145 150 155 160

Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Arg Pro Gly Gln
 165 170 175

Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile
 180 185 190

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 195 200 205

Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His
 210 215 220

Tyr	Gly	Ser	Ser	Pro	Ser	Trp	Thr	Phe	Gly	<u>SL</u> Gln	Gly	Thr	Arg	Leu	Glu
225					230					235					240

Ile Lys

<210> 809
 <211> 726
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 809
 gaagtgcagc tgctggagtc cggcgggtgga ttggtgcaac cgggggggatc gctcagactg 60
 tcctgtgcgg cgtcaggctt caccttctcg agctacgcca tgtcatgggt cagacaggcc 120
 cctggaaaagg gtctggaatg ggtgtccgcc atttccggga gcgggggatc tacatactac 180
 gccgatagcg tgaagggccg cttcaccatt tcccgggaca actccaagaa cactctctat 240
 ctgcaaatga actccctccg cgctgaggac actgccgtgt actactgcgc caaaatccct 300
 cagaccggca ccttcgacta ctggggacag gggactctgg tcaccgtcag cagcgggtggc 360
 ggagggttcgg ggggaggagg aagcggcggc ggagggtccg agattgtgct gacccagtca 420
 cccggcactt tgtccctgtc gcctggagaa agggccaccc tttcctgccg ggcatcccaa 480
 tccgtgtcct cctcgtacct ggcctggtac cagcagaggc ccggacaggc cccacggctt 540
 ctgatctacg gagcaagcag ccgcgcgacc ggtatcccgg accggttttc gggctcgggc 600
 tcaggaactg acttcaccct caccatctcc cgcctggaac ccgaagattt cgctgtgtat 660
 tactgccagc actacggcag ctccccgtcc tggacgttcg gccagggaac tcggctggag 720
 atcaag 726

<210> 810
 <211> 118

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 810

Glu Val Gln Leu Leu 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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Ile Pro Gln Thr Gly Thr Phe Asp Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 811

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

_SL

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 811

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 Val Ser Ser Ser
20 25 30

Tyr Leu Ala Trp Tyr Gln Gln Arg Pro Gly Gln Ala Pro Arg Leu Leu
35 40 45

Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Ser Ser Pro
85 90 95

Ser Trp Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
100 105

<210> 812

<211> 486

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 812

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu

_SL

20	25	30
Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe		
35	40	45
Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys		
50	55	60
Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr		
65	70	75
Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser		
85	90	95
Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr		
100	105	110
Ala Val Tyr Tyr Cys Ala Lys Ile Pro Gln Thr Gly Thr Phe Asp Tyr		
115	120	125
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser		
130	135	140
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln		
145	150	155
Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser		
165	170	175
Cys Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln		
180	185	190
Gln Arg Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser		
195	200	205
Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr		

405 410 ^{SL} 415

Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu
420 425 430

Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
435 440 445

Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr
450 455 460

Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met
465 470 475 480

Gln Ala Leu Pro Pro Arg
485

<210> 813
<211> 1458
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 813
atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
cccgaagtgc agctgctgga gtccggcggg ggattgggtgc aaccgggggg atcgctcaga 120
ctgtcctgtg cggcgtcagg cttcaccttc tcgagctacg ccatgtcatg ggtcagacag 180
gcccctggaa aggggtctgga atgggtgtcc gccatttccg ggagcggggg atctacatac 240
tacgccgata gcgtgaaggg ccgcttcacc atttccggg acaactccaa gaacactctc 300
tatctgcaaa tgaactccct ccgcgctgag gacactgccg tgtactactg cgccaaaatc 360
cctcagaccg gcaccttcga ctactgggga caggggactc tggtcaccgt cagcagcggg 420

_SL

ggcggagggtt cggggggagg aggaagcggc ggcggagggt ccgagattgt gctgaccag	480
tcacccggca ctttgtccct gtcgcctgga gaaagggcca ccctttcctg ccgggcatcc	540
caatccgtgt cctcctcgta cctggcctgg taccagcaga ggcccggaca ggccccacgg	600
cttctgatct acggagcaag cagccgcgcg accggtatcc cggaccgggtt ttcgggctcg	660
ggctcaggaa ctgacttcac cctcaccatc tccgcctgg aaccgaaga tttcgtgtg	720
tattactgcc agcactacgg cagctccccg tcctggacgt tcggccaggg aactcggctg	780
gagatcaaga ccactacccc agcaccgagg ccacccaccc cggctcctac catcgcctcc	840
cagcctctgt ccctgcgtcc ggaggcatgt agaccgcag ctggtggggc cgtgcatacc	900
cggggctttg acttcgcctg cgatatctac atttggggcc ctctggctgg tacttgcggg	960
gtcctgctgc tttcactcgt gatcactctt tactgtaagc gcggtcggaa gaagctgctg	1020
tacatcttta agcaaccctt catgaggcct gtgcagacta ctcaagagga ggacggctgt	1080
tcatgccggt tcccagagga ggaggaaggc ggctgcgaac tgcgcgtgaa attcagccgc	1140
agcgcagatg ctccagccta caagcagggg cagaaccagc tctacaacga actcaatctt	1200
ggtcggagag aggagtacga cgtgctggac aagcggagag gacgggaccc agaaatgggc	1260
gggaagccgc gcagaaagaa tccccaagag ggctgtaca acgagctcca aaaggataag	1320
atggcagaag cctatagcga gattggtatg aaaggggaac gcagaagagg caaaggccac	1380
gacggactgt accagggact cagcaccgcc accaaggaca cctatgacgc tcttcacatg	1440
caggccctgc cgcctcgg	1458

<210> 814

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 814

Glu Val Gln Leu Val Glu Thr Gly Gly Gly ^{SL}Leu Val Gln Pro 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
 Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Met Ser Arg Glu Asn Asp Lys Asn Ser Val Phe
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Gly Val Tyr Tyr Cys
 85 90 95
 Ala Arg Ala Asn Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp
 100 105 110
 Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Met Thr
 130 135 140
 Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Ser Ala Thr Leu
 145 150 155 160
 Ser Cys Arg Ala Ser Gln Arg Val Ala Ser Asn Tyr Leu Ala Trp Tyr
 165 170 175
 Gln His Lys Pro Gly Gln Ala Pro Ser Leu Leu Ile Ser Gly Ala Ser
 180 185 190

Ser Arg Ala Thr Gly Val Pro Asp Arg Phe ^{SL}Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Phe Thr Leu Ala Ile Ser Arg Leu Glu Pro Glu Asp Ser Ala
210 215 220

Val Tyr Tyr Cys Gln His Tyr Asp Ser Ser Pro Ser Trp Thr Phe Gly
225 230 235 240

Gln Gly Thr Lys Val Glu Ile Lys
245

<210> 815

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 815

gaagtgaac tgggtggaac cgggtggagga ctcgtgcagc ctggcggcag cctccggctg	60
agctgcgccg cttcgggatt caccttttcc tcctacgcga tgtcttgggt cagacaggcc	120
cccggaaaagg ggctggaatg ggtgtcagcc atctccggct ccggcggatc aacgtactac	180
gccgactccg tgaaaggccg gttcaccatg tcgcgcgaga atgacaagaa ctccgtgttc	240
ctgcaaatga actccctgag ggtggaggac accggagtgt actattgtgc gcgcgccaac	300
tacaagagag agctgcggta ctactacgga atggacgtct ggggacaggg aactatgggtg	360
accgtgtcat ccggtggagg gggaagcggc ggtggaggca gcgggggcgg gggttcagaa	420
attgtcatga ccagatcccc gggaactctt tcctctctcc ccggggaatc cgcgactttg	480
tcctgccggg ccagccagcg cgtggcctcg aactacctcg catggtacca gcataagcca	540
ggccaagccc cttccctgct gatttccggg gctagcagcc gcgccactgg cgtgccggat	600
aggttctcgg gaagcggctc ggggtaccgat ttcaccctgg caatctcgcg gctggaaccg	660

_SL

gaggattcgg ccgtgtacta ctgccagcac tatgactcat cccctcctg gacattcgga 720

cagggcacca aggtcgagat caag 744

<210> 816

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 816

Glu Val Gln Leu Val Glu Thr 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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Met Ser Arg Glu Asn Asp Lys Asn Ser Val Phe
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Gly Val Tyr Tyr Cys
85 90 95

Ala Arg Ala Asn Tyr Lys Arg Glu Leu Arg Tyr Tyr Tyr Gly Met Asp
100 105 110

Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
115 120

_SL

<210> 817
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 817
Glu Ile Val Met Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Val Ala Ser Asn
20 25 30

Tyr Leu Ala Trp Tyr Gln His Lys Pro Gly Gln Ala Pro Ser Leu Leu
35 40 45

Ile Ser Gly Ala Ser Ser Arg Ala Thr Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Ala Ile Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Ser Ala Val Tyr Tyr Cys Gln His Tyr Asp Ser Ser Pro
85 90 95

Ser Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 818
<211> 492
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polypeptide" _SL

<400> 818

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Met Ser Arg Glu Asn Asp
85 90 95

Lys Asn Ser Val Phe Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr
100 105 110

Gly Val Tyr Tyr Cys Ala Arg Ala Asn Tyr Lys Arg Glu Leu Arg Tyr
115 120 125

Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser
130 135 140

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Glu Ile Val Met Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
165 170 175

Glu Ser Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Val Ala Ser Asn

_SL

180

185

190

Tyr Leu Ala Trp Tyr Gln His Lys Pro Gly Gln Ala Pro Ser Leu Leu
195 200 205

Ile Ser Gly Ala Ser Ser Arg Ala Thr Gly Val Pro Asp Arg Phe Ser
210 215 220

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Ala Ile Ser Arg Leu Glu
225 230 235 240

Pro Glu Asp Ser Ala Val Tyr Tyr Cys Gln His Tyr Asp Ser Ser Pro
245 250 255

Ser Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Thr Thr Thr
260 265 270

Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro
275 280 285

Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val
290 295 300

His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro
305 310 315 320

Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu
325 330 335

Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro
340 345 350

Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys
355 360 365

Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe

370

375

_SL

380

Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu
 385 390 395 400

Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp
 405 410 415

Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys
 420 425 430

Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala
 435 440 445

Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys
 450 455 460

Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr
 465 470 475 480

Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

<210> 819

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 819

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

cccgaagtgc aactggtgga aaccggtgga ggactcgtgc agcctggcgg cagcctccgg 120

ctgagctgcg ccgcttcggg attcaccttt tcctcctacg cgatgtcttg ggtcagacag 180

_SL

gcccccggaaggagggtggaatgggtgtcagccatctccggctccggcggatcaacgtac	240
tacgccgactccgtgaaaaggccggttcaccatgtcgcgcgagaatgacaa	300
gaactccgtgttcctgcaaa	360
tgaactccctgaggggtggaggacaccggagtgtactattgtgcgcgcgcc	420
aactacaagagagagctgcgtactactacggaatggacgtctgggggacagggaactatg	480
gtgaccgtgtcatccgggtggaggggggaagcggcgggtggaggcagcgggggcgggggttca	540
gaaattgtcatgacccagtc	600
cccgggaactctttccctctccccgggggaatccgcgact	660
ttgtcctgccgggccagccagcgcgtggcctcgaactacc	720
tcgcatggta	780
ccagcataagccaggccaagccccttccctgctgatttccggggctagcagccgcgccactggcgtgccg	840
gataggttctcgggaagcggctcgggtaccgatttcaccc	900
tggcaatctcgcggctggaa	960
ccggaggattcggccgtgta	1020
ctactgccagcactatgactcatccccctctggacattc	1080
ggacagggcaccaggtcga	1140
gatcaagaccactaccccagcaccgaggcc	1200
acccaccccggctcctacca	1260
tcgcctccagcctctgtccctgcgtccggaggcatgtag	1320
acccgcagctgggtggggccgtgcatacccggggtcttgac	1380
ttcgcctgcgatatctacatttgggcccct	1440
ctggctggta	1476
cttgcggggtcctgctgctttactcgtgatactcttta	
ctgtaagcgcggtcggaaga	
agctgctgta	
catctttaagcaacccttcatgaggcctgt	
gcagactactcaagaggagg	
acggctgttc	
atgccggttc	
ccagaggagg	
aggaaggcgg	
ctgcgaactgcgcgtgaaat	
tcagccgcag	
cgcagatgct	
ccagcctaca	
agcaggggca	
gaaccagctctacaacgaac	
tcaatcttgg	
tcggagagag	
gagtacgacgtgctggacaa	
gcggagagga	
cgggacccag	
aaatgggcgg	
gaagccgcgc	
agaaagaatc	
cccaagagggcctgtacaac	
gagctccaaa	
aggataagat	
ggcagaagcc	
tatagcgagattggtatgaa	
aggggaacgc	
agaagaggca	
aaggccacga	
cggactgtac	
cagggactca	
gcaccgccac	
caaggacacc	
tatgacgctcttcacatgca	
ggccctgccgcctcgg	

<210> 820
 <211> 244
 <212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 820

Glu Val Gln Leu Leu Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Ala Leu Val Gly Ala Thr Gly Ala Phe Asp Ile Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Gly
130 135 140

Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala
145 150 155 160

Ser Gln Ser Leu Ser Ser Asn Phe Leu Ala ^{SL}Trp Tyr Gln Gln Lys Pro
165 170 175

Gly Gln Ala Pro Gly Leu Leu Ile Tyr Gly Ala Ser Asn Trp Ala Thr
180 185 190

Gly Thr Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
195 200 205

Leu Thr Ile Thr Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys
210 215 220

Gln Tyr Tyr Gly Thr Ser Pro Met Tyr Thr Phe Gly Gln Gly Thr Lys
225 230 235 240

Val Glu Ile Lys

<210> 821
<211> 732
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 821
gaagtgcagc tgctcgaaac cgggtggaggg ctggtgcagc cagggggctc cctgaggctt 60
tcatgcgccg ctagcggatt ctctttctcc tcttacgcca tgtcgtgggt ccgccaagcc 120
cctggaaaag gcctggaatg ggtgtccgcg atttccggga gcggagggttc gacctattac 180
gccgactccg tgaagggccg ctttaccatc tcccgggata actccaagaa cactctgtac 240
ctccaaatga actcgtgag agccgaggac accgccgtgt attactgcgc gaaggcgctg 300
gtcggcgcca ctggggcatt cgacatctgg ggacagggaa ctcttgtgac cgtgtcgagc 360
ggaggcggcg gctccggcgg aggagggagc gggggcggtg gttccgaaat cgtgttgact 420

_SL

cagtccccgg gaacctgag cttgtcacc ggggagcggg ccactctctc ctgtcgcgcc 480
tcccaatcgc tctcatcaa tttcctggcc tgggtaccagc agaagcccgg acaggccccg 540
ggcctgctca tctacggcgc ttcaaactgg gcaacgggaa cccctgatcg gttcagcgga 600
agcggatcgg gtactgactt taccctgacc atcaccagac tggaaccgga ggacttcgcc 660
gtgtactact gccagtacta cggcacctcc cccatgtaca cattcggaca gggtaccaag 720
gtcgagatta ag 732

<210> 822

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 822

Glu Val Gln Leu Leu Glu Thr Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

_SL

Ala Lys Ala Leu Val Gly Ala Thr Gly Ala Phe Asp Ile Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 823

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 823

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 Leu Ser Ser Asn
20 25 30

Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gly Leu Leu
35 40 45

Ile Tyr Gly Ala Ser Asn Trp Ala Thr Gly Thr Pro Asp Arg Phe Ser
50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Thr Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Tyr Tyr Gly Thr Ser Pro
85 90 95

Met Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

_SL

<210> 824

<211> 488

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 824

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Thr Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Ser Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Lys Ala Leu Val Gly Ala Thr Gly Ala Phe
115 120 125

Asp Ile Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu

145		150		<u>SL</u> 155		160									
Thr	Gln	Ser	Pro	Gly	Thr	Leu	Ser	Leu	Ser	Pro	Gly	Glu	Arg	Ala	Thr
				165					170					175	
Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Leu	Ser	Ser	Asn	Phe	Leu	Ala	Trp
			180					185					190		
Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Gly	Leu	Leu	Ile	Tyr	Gly	Ala
		195					200					205			
Ser	Asn	Trp	Ala	Thr	Gly	Thr	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser
	210					215					220				
Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Thr	Arg	Leu	Glu	Pro	Glu	Asp	Phe
225					230					235					240
Ala	Val	Tyr	Tyr	Cys	Gln	Tyr	Tyr	Gly	Thr	Ser	Pro	Met	Tyr	Thr	Phe
				245					250					255	
Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Thr	Thr	Thr	Pro	Ala	Pro	Arg
			260					265					270		
Pro	Pro	Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg
		275					280					285			
Pro	Glu	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly
	290					295					300				
Leu	Asp	Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr
305					310					315					320
Cys	Gly	Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu	Tyr	Cys	Lys	Arg
				325					330					335	
Gly	Arg	Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro	Phe	Met	Arg	Pro

_SL

340	345	350
Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu		
355	360	365
Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala		
370	375	380
Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu		
385	390	395
Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly		
405	410	415
Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu		
420	425	430
Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser		
435	440	445
Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly		
450	455	460
Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu		
465	470	475
His Met Gln Ala Leu Pro Pro Arg		
485		

<210> 825
 <211> 1464
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

_SL

<400> 825

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc agctgctcga aaccggtgga gggctgggtgc agccaggggg ctccctgagg	120
ctttcatgcg ccgctagcgg attctccttc tcctcttacg ccatgtcgtg ggtccgccaa	180
gcccctggaa aaggcctgga atgggtgtcc gcgatttccg ggagcggagg ttcgacctat	240
tacgccgact ccgtgaaggg ccgctttacc atctcccggg ataactccaa gaacactctg	300
tacctcaaaa tgaactcgct gagagccgag gacaccgccg tgtattactg cgcgaaaggcg	360
ctggtcggcg cgactggggc attcgacatc tggggacagg gaactcttgt gaccgtgtcg	420
agcggaggcg gcggctccgg cggaggaggg agcgggggcg gtggttccga aatcgtgttg	480
actcagtccc cgggaaccct gagcttgtca cccggggagc gggccactct ctctgtcgc	540
gcctcccaat cgctctcatc caatttcctg gcctgggtacc agcagaagcc cggacaggcc	600
ccgggcctgc tcatctacgg cgcttcaaac tgggcaacgg gaaccctga tcggttcagc	660
ggaagcggat cgggtactga ctttaccctg accatcacca gactggaacc ggaggacttc	720
gccgtgtact actgccagta ctacggcacc tcccccatgt acacattcgg acagggtacc	780
aaggtcgaga ttaagaccac taccacagca ccgaggccac ccaccccggc tcctaccatc	840
gcctcccagc ctctgtccct gcgtccggag gcatgtagac ccgcagctgg tggggccgtg	900
catacccggg gtcttgactt cgcttgcgat atctacattt gggccctctt ggctggtact	960
tgccgggtcc tgctgctttc actcgtgatc actctttact gtaagcgcgg tcggaagaag	1020
ctgctgtaca tctttaagca acccttcattg aggcctgtgc agactactca agaggaggac	1080
ggctgttcat gccggttccc agaggaggag gaaggcggct gcgaactgcg cgtgaaattc	1140
agccgcagcg cagatgctcc agcctacaag caggggcaga accagctcta caacgaactc	1200
aatcttggtc ggagagagga gtacgacgtg ctggacaagc ggagaggacg ggaccagaa	1260
atgggcggga agccgcgcag aaagaatccc caagagggcc tgtacaacga gctccaaaag	1320
gataagatgg cagaagccta tagcgagatt ggtatgaaag gggaacgcag aaggaggcaa	1380

ggccacgacg gactgtacca gggactcagc accgccacca aggacaccta tgacgctctt 1440
 cacatgcagg ccctgccgcc tcgg 1464

<210> 826
 <211> 244
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 826
 Glu Val Gln Leu Leu 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 Phe Ser Ser Tyr
 20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Val Leu Trp Phe Gly Glu Gly Phe Asp Pro Trp Gly Gln Gly Thr Leu
 100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
 115 120 125

Gly Gly Gly Ser Asp Ile Val Leu Thr Gln ^{SL}Ser Pro Leu Ser Leu Pro
 130 135 140

Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser
 145 150 155 160

Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys
 165 170 175

Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala
 180 185 190

Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
 195 200 205

Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr
 210 215 220

Cys Met Gln Ala Leu Gln Thr Pro Leu Thr Phe Gly Gly Gly Thr Lys
 225 230 235 240

Val Asp Ile Lys

<210> 827

<211> 733

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 827

gaagtgcagc tgcttgagag cggtggaggt ctggtgcagc ccgggggatc actgcgcctg 60

tcctgtgccg cgtccggttt cactttctcc tcgtacgcca tgctgtgggt cagacaggca 120

ccgggaaagg gactggaatg ggtgtcagcc atttcgggtt cggggggcag cacctactac 180

_SL

gctgactccg tgaagggccg gttcaccatt tcccgcgaca actccaagaa caccttgtag 240
ctccaaatga actccctgcg ggccgaagat accgccgtgt attactgcgt gctgtgggtc 300
ggagaggggat tcgacccgtg gggacaagga acactcgtga ctgtgtcatc cggcggaggc 360
ggcagcgggtg gcggcgggtc cggcggcggc ggatctgaca tcgtgttgac ccagtcccct 420
ctgagcctgc cggtcactcc tggcgaacca gccagcatct cctgccggtc gagccagtcc 480
ctcctgcact ccaatgggta caactacctc gattgggtatc tgcaaaagcc gggccagagc 540
ccccagctgc tgatctacct tgggtcaaac cgcgcttcg gggcgcctga tagattctcc 600
gggtccggga gcggaaccga ctttacctg aaaatctcga gggcggaggc cgaggacgtc 660
ggagtgtact actgcatgca ggcgtccag actcccctga cttcggagg aggaacgaag 720
gtcgacatca aga 733

<210> 828

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 828

Glu Val Gln Leu Leu 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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

_SL

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

Val Leu Trp Phe Gly Glu Gly Phe Asp Pro Trp Gly Gln Gly Thr Leu
100 105 110

Val Thr Val Ser Ser
115

<210> 829

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 829

Asp Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser
20 25 30

Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala
85 90 95

Leu Gln Thr Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys
100 105 110

<210> 830
<211> 488
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 830
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser
85 90 95

Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Val Leu Trp Phe Gly Glu Gly Phe Asp Pro Trp

_SL

115		120		125											
Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Gly
130						135					140				
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Asp	Ile	Val	Leu	Thr	Gln	Ser
145				150						155					160
Pro	Leu	Ser	Leu	Pro	Val	Thr	Pro	Gly	Glu	Pro	Ala	Ser	Ile	Ser	Cys
				165					170					175	
Arg	Ser	Ser	Gln	Ser	Leu	Leu	His	Ser	Asn	Gly	Tyr	Asn	Tyr	Leu	Asp
			180					185					190		
Trp	Tyr	Leu	Gln	Lys	Pro	Gly	Gln	Ser	Pro	Gln	Leu	Leu	Ile	Tyr	Leu
		195					200					205			
Gly	Ser	Asn	Arg	Ala	Ser	Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser	Gly
210						215					220				
Ser	Gly	Thr	Asp	Phe	Thr	Leu	Lys	Ile	Ser	Arg	Val	Glu	Ala	Glu	Asp
225					230					235					240
Val	Gly	Val	Tyr	Tyr	Cys	Met	Gln	Ala	Leu	Gln	Thr	Pro	Leu	Thr	Phe
				245					250					255	
Gly	Gly	Gly	Thr	Lys	Val	Asp	Ile	Lys	Thr	Thr	Thr	Pro	Ala	Pro	Arg
			260					265					270		
Pro	Pro	Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser	Leu	Arg
		275					280					285			
Pro	Glu	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr	Arg	Gly
290						295					300				
Leu	Asp	Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala	Gly	Thr

305		310		<u>SL</u> 315		320
Cys Gly Val Leu	Leu Leu Ser Leu Val	Ile Thr Leu Tyr Cys	Lys Arg			
	325	330	335			
Gly Arg Lys Lys	Leu Leu Tyr Ile Phe	Lys Gln Pro Phe	Met Arg Pro			
	340	345	350			
Val Gln Thr Thr	Gln Glu Glu Asp	Gly Cys Ser Cys	Arg Phe Pro Glu			
	355	360	365			
Glu Glu Glu Gly	Gly Cys Glu Leu Arg	Val Lys Phe Ser	Arg Ser Ala			
	370	375	380			
Asp Ala Pro Ala	Tyr Lys Gln Gly	Gln Asn Gln Leu	Tyr Asn Glu Leu			
385	390	395	400			
Asn Leu Gly Arg	Arg Glu Glu Tyr	Asp Val Leu Asp	Lys Arg Arg Gly			
	405	410	415			
Arg Asp Pro Glu	Met Gly Gly Lys	Pro Arg Arg Lys	Asn Pro Gln Glu			
	420	425	430			
Gly Leu Tyr Asn	Glu Leu Gln Lys	Asp Lys Met Ala	Glu Ala Tyr Ser			
	435	440	445			
Glu Ile Gly Met	Lys Gly Glu Arg	Arg Arg Gly Lys	Gly His Asp Gly			
	450	455	460			
Leu Tyr Gln Gly	Leu Ser Thr Ala	Thr Lys Asp Thr	Tyr Asp Ala Leu			
465	470	475	480			
His Met Gln Ala	Leu Pro Pro Arg					
	485					

<210> 831

_SL

<211> 1464

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 831

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cccgaagtgc agctgcttga gagcgggtgga ggtctgggtgc agcccggggg atcactgcgc      120
ctgtcctgtg ccgctgccgg tttcactttc tcctcgtacg ccatgtcgtg ggtcagacag      180
gcaccgggaa agggactgga atgggtgtca gccatttcgg gttcgggggg cagcacctac      240
tacgctgact ccgtgaaggg ccggttcacc atttcccgcg acaactccaa gaacaccttg      300
tacctcaaaa tgaactccct gcgggccgaa gataccgccg tgtattactg cgtgctgtgg      360
ttcggagagg gattcgaccc gtggggacaa ggaacactcg tgactgtgtc atccggcgga      420
ggcggcagcg gtggcggcgg ttccggcggc ggcggatctg acatcgtgtt gaccagtc      480
cctctgagcc tgccggtcac tcctggcgaa ccagccagca tctcctgccg gtcgagccag      540
tccctcctgc actccaatgg gtacaactac ctcgattggg atctgcaaaa gccgggccag      600
agcccccagc tgctgatcta ctttgggtca aaccgcgctt ccgggggtgcc tgatagattc      660
tccgggtccg ggagcggaac cgactttacc ctgaaaatct cgagggtgga ggccgaggac      720
gtcggagtgt actactgcat gcaggcgctc cagactcccc tgaccttcgg aggaggaacg      780
aaggtcgaca tcaagaccac taccacagca ccgaggccac ccacccggc tcctaccatc      840
gcctcccagc ctctgtccct gcgtccggag gcatgtagac ccgagctgg tggggccgtg      900
cataccggg gtcttgactt cgcctgcgat atctacattt gggcccctct ggctggtact      960
tgcgggggtcc tgctgctttc actcgtgatc actctttact gtaagcgcgg tcggaagaag     1020
ctgctgtaca tctttaagca acccttcatg aggcctgtgc agactactca agaggaggac     1080
ggctgttcat gccggttccc agaggaggag gaaggcggct gcgaactgcg cgtgaaattc     1140
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agccgcagcg	cagatgctcc	agcctacaag	caggggcaga	accagctcta	caacgaactc	1200
aatcttggtc	ggagagagga	gtacgacgtg	ctggacaagc	ggagaggacg	ggaccagaa	1260
atgggcggga	agccgcgcag	aaagaatccc	caagagggcc	tgtacaacga	gctccaaaag	1320
gataagatgg	cagaagccta	tagcgagatt	ggtatgaaag	gggaacgcag	aagaggcaaa	1380
ggccacgacg	gactgtacca	gggactcagc	accgccacca	aggacaccta	tgacgtcttt	1440
cacatgcagg	ccctgccgcc	tcgg				1464

```
<210> 832
<211> 251
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polypeptide"
```

<400> 832
Gln 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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Val Gly Tyr Asp Ser Ser Gly Tyr Tyr^{SL} Arg Asp Tyr Tyr Gly
100 105 110

Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val
130 135 140

Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly
180 185 190

Thr Ser Ser Arg Ala Thr Gly Ile Ser Asp Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
210 215 220

Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Asn Ser Pro Pro Lys Phe
225 230 235 240

Thr Phe Gly Pro Gly Thr Lys Leu Glu Ile Lys
245 250

<210> 833

<211> 753

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

_SL

polynucleotide"

<400> 833

```
caagtgcagc tcgtggagtc aggcggagga ctggtgcagc ccgggggctc cctgagactt      60
tcctgcgcgg catcgggttt taccttctcc tcctatgcta tgtcctgggt gcgccaggcc      120
ccgggaaagg gactggaatg ggtgtccgca atcagcggta gcgggggctc aacatactac      180
gccgactccg tcaagggtcg cttcactatt tcccgggaca actccaagaa taccctgtac      240
ctccaaatga acagcctcag ggccgaggat actgccgtgt actactgcgc caaagtcgga      300
tacgatagct ccggttacta ccgggactac tacggaatgg acgtgtgggg acagggcacc      360
accgtgaccg tgtcaagcgg cggaggcggg tcaggagggg gaggctccgg cgggtggagg      420
tccgaaatcg tcctgactca gtcgcctggc actctgtcgt tgtccccggg ggagcgcgct      480
accctgtcgt gtcgggcgtc gcagtccgtg tcgagctcct acctcgcgtg gtaccagcag      540
aagcccggac aggcccctag acttctgatc tacggcactt cttcacgcgc caccgggatc      600
agcgacaggt tcagcggctc cggctccggg accgacttca ccctgaccat tagccggctg      660
gagcctgaag atttcgccgt gtattactgc caacactacg gaaactcgcc gccaaagtgc      720
acgttcggac ccggaaccaa gctggaaatc aag                                     753
```

<210> 834

<211> 126

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 834

```
Gln 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 Phe Ser Ser Tyr
20          25          30
```

_SL

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Val Gly Tyr Asp Ser Ser Gly Tyr Tyr Arg Asp Tyr Tyr Gly
100 105 110

Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120 125

<210> 835

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 835

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 Val Ser Ser Ser
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 Thr Ser Ser Arg Ala Thr Gly ^{SL}Ile Ser Asp Arg Phe Ser
50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Asn Ser Pro
85 90 95

Pro Lys Phe Thr Phe Gly Pro Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 836

<211> 495

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 836

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser

_SL

85	90	95
Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr	100	105
Ala Val Tyr Tyr Cys Ala Lys Val Gly Tyr Asp Ser Ser Gly Tyr Tyr	115	120
Arg Asp Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr	130	135
Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly	145	150
Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser	165	170
Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser	180	185
Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg	195	200
Leu Leu Ile Tyr Gly Thr Ser Ser Arg Ala Thr Gly Ile Ser Asp Arg	210	215
Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg	225	230
Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Asn	245	250
Ser Pro Pro Lys Phe Thr Phe Gly Pro Gly Thr Lys Leu Glu Ile Lys	260	265
Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala		

_SL

275

280

285

Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly
290 295 300

Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile
305 310 315 320

Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val
325 330 335

Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe
340 345 350

Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly
355 360 365

Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg
370 375 380

Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln
385 390 395 400

Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp
405 410 415

Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro
420 425 430

Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp
435 440 445

Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg
450 455 460

Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr

465	470	<u>SL</u> 475	480
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Lys	Asp	Thr	Tyr	Asp	Ala	Leu	His	Met	Gln	Ala	Leu	Pro	Pro	Arg
				485					490					495

<210> 837
 <211> 1485
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 837
 atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60
 cccaagtgc agctcgtgga gtcaggcgga ggactgggtgc agcccggggg ctccctgaga 120
 ctttcctgcg cggcacgcgg ttttaccttc tcctcctatg ctatgtcctg ggtgcgccag 180
 gccccgggaa agggactgga atgggtgtcc gcaatcagcg gtagcggggg ctcaacatac 240
 tacgccgact ccgtcaaggg tcgcttcact atttcccggg acaactccaa gaataccctg 300
 tacctcaaaa tgaacagcct cagggccgag gatactgccg tgtactactg cgccaaagtc 360
 ggatacgata gctccgggta ctaccgggac tactacggaa tggacgtgtg gggacagggc 420
 accaccgtga ccgtgtcaag cggcggaggc gggttcaggag ggggaggctc cggcgggtgga 480
 ggggtccgaaa tcgtcctgac tcagtcgcct ggcaactctgt cgttgtcccc gggggagcgc 540
 gctaccctgt cgtgtcgggc gtcgcagtcc gtgtcgagct cctacctgc gtggtaccag 600
 cagaagcccc gacaggcccc tagacttctg atctacggca cttcttcacg cgccaccggg 660
 atcagcgaca gggttcagcgg ctccggctcc gggaccgact tcaccctgac cattagccgg 720
 ctggagcctg aagatttcgc cgtgtattac tgccaacact acggaaactc gccgccaag 780
 ttcacgttcg gacccggaac caagctggaa atcaagacca ctaccccagc accgaggcca 840
 cccaccccg gctcctaccat cgcctcccag cctctgtccc tgcgtccgga ggcatgtaga 900

_SL

```

cccgagctg gtggggccgt gcatacccg ggtcttgact tcgcctgcga tatctacatt      960
tgggcccctc tggctggtac ttgcgggggtc ctgctgcttt cactcgtgat cactctttac    1020
tgtaagcgcg gtcggaagaa gctgctgtac atctttaagc aacccttcat gaggcctgtg     1080
cagactactc aagaggagga cggctgttca tgccggttcc cagaggagga ggaaggcggc      1140
tgcgaactgc gcgtgaaatt cagccgcagc gcagatgctc cagcctacaa gcaggggcag      1200
aaccagctct acaacgaact caatcttggt cggagagagg agtacgacgt gctggacaag      1260
cggagaggac gggaccaga aatgggcggg aagccgcgca gaaagaatcc ccaagagggc      1320
ctgtacaacg agctccaaaa ggataagatg gcagaagcct atagcgagat tggtatgaaa      1380
ggggaacgca gaagaggcaa aggccacgac ggactgtacc agggactcag caccgccacc      1440
aaggacacct atgacgctct tcacatgcag gccctgccgc ctcgg                        1485

```

<210> 838

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 838

```

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 Phe Ser Ser Tyr
          20          25          30

```

```

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35          40          45

```

```

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
          50          55          60

```

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn ^{SL}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 Met Gly Trp Ser Ser Gly Tyr Leu Gly Ala Phe Asp Ile Trp
 100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser
 130 135 140

Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
 145 150 155 160

Arg Ala Ser Gln Ser Val Ala Ser Ser Phe Leu Ala Trp Tyr Gln Gln
 165 170 175

Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Gly Arg
 180 185 190

Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
 195 200 205

Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr
 210 215 220

Tyr Cys Gln His Tyr Gly Gly Ser Pro Arg Leu Thr Phe Gly Gly Gly
 225 230 235 240

Thr Lys Val Asp Ile Lys
 245

_SL

<210> 839

<211> 739

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 839

gaagtccaac tgggtggagtc cgggggaggg ctcgtgcagc ccggaggcag ccttcggctg	60
tcgtgcgccg cctccgggtt cacgttctca tcctacgcga tgcgtgggt cagacaggca	120
ccaggaaagg gactggaatg ggtgtccgcc attagcggct ccggcggtag cacctactat	180
gccgactcag tgaagggaag gttcactatc tcccgcgaca acagcaagaa caccctgtac	240
ctccaaatga actctctgcg ggccgaggat accgcggtgt actattgcgc caagatgggt	300
tgggtccagcg gatacttggg agccttcgac atttggggac agggcactac tgtgaccgtg	360
tcctccgggg gtggcggatc gggaggcggc ggctcgggtg gagggggttc cgaaatcgtg	420
ttgacccagt caccgggaac cctctcgctg tccccgggag aacgggctac actgtcatgt	480
agagcgtccc agtccgtggc ttcctcgttc ctggcctggt accagcagaa gccgggacag	540
gcaccccgcc tgctcatcta cggagccagc ggccgggcga ccggcatccc tgaccgcttc	600
tccggttccg gctcgggcac cgactttact ctgaccatta gcaggcttga gcccaggat	660
tttgccgtgt actactgcca aactacggg gggagccctc gcctgacctt cggaggcgga	720
actaaggtcg atatcaaaa	739

<210> 840

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

_SL

<400> 840

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 Phe Ser Ser Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ala Ile Ser Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Met Gly Trp Ser Ser Gly Tyr Leu Gly Ala Phe Asp Ile Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 841

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 841

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 ^{SL}Gln Ser Val Ala Ser Ser
 20 25 30

Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
 35 40 45

Ile Tyr Gly Ala Ser Gly Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
 50 55 60

Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
 65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Gly Gly Ser Pro
 85 90 95

Arg Leu Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys
 100 105

<210> 842
 <211> 490
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 842
 Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys

435

440

445

Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
450 455 460

Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
465 470 475 480

Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 843

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 843

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtcc aactggtgga gtccggggga gggctcgtgc agcccgagg cagccttcgg	120
ctgtcgtgcg ccgcctccgg gttcacgttc tcacctacg cgatgtcgtg ggtcagacag	180
gcaccaggaa agggactgga atgggtgtcc gccattagcg gctccggcgg tagcacctac	240
tatgccgact cagtgaaggg aaggttcact atctccgcg acaacagcaa gaacaccctg	300
tacctcaaaa tgaactctct gcgggccgag gataccgcgg tgtactattg cgccaagatg	360
ggttggtcca gcggatactt gggagccttc gacatttggg gacagggcac tactgtgacc	420
gtgtcctccg ggggtggcgg atcgggaggc ggcggctcgg gtggaggggg ttccgaaatc	480
gtgttgaccc agtcaccggg aacctctcgt ctgtccccgg gagaacgggc tacactgtca	540
tgtagagcgt ccaggtccgt ggcttcctcg ttcctggcct ggtaccagca gaagccggga	600
caggcacccc gcctgctcat ctacggagcc agcggccggg cgaccggcat ccctgaccgc	660

_SL

ttctccggtt ccggctcggg caccgacttt actctgacca ttagcaggct tgagcccgag	720
gattttgccg tgtactactg ccaacactac ggggggagcc ctgcctgac cttcggaggc	780
ggaactaagg tcgatatcaa aaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaacc ttcatgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggtg tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 844

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 844

Gln	Ile	Gln	Leu	Val	Gln	Ser	Gly	Pro	Asp	Leu	Lys	Lys	Pro	Gly	Glu
1				5				10						15	

Thr	Val	Lys	Leu	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr	Asn	Phe
			20					25					30		

Gly Met Asn Trp Val Lys Gln Ala Pro Gly ^{SL}Lys Gly Phe Lys Trp Met
 35 40 45

Ala Trp Ile Asn Thr Tyr Thr Gly Glu Ser Tyr Phe Ala Asp Asp Phe
 50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Thr Thr Ala Tyr
 65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Thr Glu Asp Thr Ala Thr Tyr Phe Cys
 85 90 95

Ala Arg Gly Glu Ile Tyr Tyr Gly Tyr Asp Gly Gly Phe Ala Tyr Trp
 100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ala
 115 120

<210> 845

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 845

Asp Val Val Met Thr Gln Ser His Arg Phe Met Ser Thr Ser Val Gly
 1 5 10 15

Asp Arg Val Ser Ile Thr Cys Arg Ala Ser Gln Asp Val Asn Thr Ala
 20 25 30

Val Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
 35 40 45

Phe Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly

50

55

_SL

60

Ser Gly Ser Gly Ala Asp Phe Thr Leu Thr Ile Ser Ser Val Gln Ala
65 70 75 80

Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln His Tyr Ser Thr Pro Trp
85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Asp Ile Lys
100 105

<210> 846

<211> 244

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 846

Gln Ile Gln Leu Val Gln Ser Gly Pro Asp Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Phe
20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Phe Lys Trp Met
35 40 45

Ala Trp Ile Asn Thr Tyr Thr Gly Glu Ser Tyr Phe Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Thr Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Thr Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

_SL

Ala Arg Gly Glu Ile Tyr Tyr Gly Tyr Asp Gly Gly Phe Ala Tyr Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ala Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser
130 135 140

His Arg Phe Met Ser Thr Ser Val Gly Asp Arg Val Ser Ile Thr Cys
145 150 155 160

Arg Ala Ser Gln Asp Val Asn Thr Ala Val Ser Trp Tyr Gln Gln Lys
165 170 175

Pro Gly Gln Ser Pro Lys Leu Leu Ile Phe Ser Ala Ser Tyr Arg Tyr
180 185 190

Thr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Ala Asp Phe
195 200 205

Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr
210 215 220

Cys Gln Gln His Tyr Ser Thr Pro Trp Thr Phe Gly Gly Gly Thr Lys
225 230 235 240

Leu Asp Ile Lys

<210> 847

<211> 467

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 847

Gln Ile Gln Leu Val Gln Ser Gly Pro Asp Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Phe
20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Phe Lys Trp Met
35 40 45

Ala Trp Ile Asn Thr Tyr Thr Gly Glu Ser Tyr Phe Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Thr Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Thr Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

Ala Arg Gly Glu Ile Tyr Tyr Gly Tyr Asp Gly Gly Phe Ala Tyr Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ala Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Val Val Met Thr Gln Ser
130 135 140

His Arg Phe Met Ser Thr Ser Val Gly Asp Arg Val Ser Ile Thr Cys
145 150 155 160

Arg Ala Ser Gln Asp Val Asn Thr Ala Val Ser Trp Tyr Gln Gln Lys
165 170 175

_SL

Pro Gly Gln Ser Pro Lys Leu Leu Ile Phe Ser Ala Ser Tyr Arg Tyr
180 185 190

Thr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Ala Asp Phe
195 200 205

Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr
210 215 220

Cys Gln Gln His Tyr Ser Thr Pro Trp Thr Phe Gly Gly Gly Thr Lys
225 230 235 240

Leu Asp Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
245 250 255

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
260 265 270

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
275 280 285

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
290 295 300

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
305 310 315 320

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
325 330 335

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
340 345 350

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
355 360 365

_SL

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
370 375 380

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
385 390 395 400

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
405 410 415

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
420 425 430

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
435 440 445

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
450 455 460

Pro Pro Arg
465

<210> 848
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 848
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
20 25 30

Ser Ile Asn Trp Val Lys Arg Ala Pro Gly ^{SL}Lys Gly Leu Lys Trp Met
35 40 45

Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr Ala Tyr Asp Phe
50 55 60

Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
100 105 110

Val Thr Val Ser Ser
115

<210> 849

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 849

Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Met Ser Leu Gly
1 5 10 15

Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Ser Val Ile
20 25 30

Gly Ala His Leu Ile His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Lys Leu Leu Ile Tyr Leu Ala Ser Asn Leu Glu Thr Gly Val Pro Ala

50

55

_SL

60

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asp
65 70 75 80

Pro Val Glu Glu Asp Asp Val Ala Ile Tyr Ser Cys Leu Gln Ser Arg
85 90 95

Ile Phe Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 850

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 850

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
20 25 30

Ser Ile Asn Trp Val Lys Arg Ala Pro Gly Lys Gly Leu Lys Trp Met
35 40 45

Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr Ala Tyr Asp Phe
50 55 60

Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

_SL

Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys
130 135 140

Lys Pro Gly Glu Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr
145 150 155 160

Phe Thr Asp Tyr Ser Ile Asn Trp Val Lys Arg Ala Pro Gly Lys Gly
165 170 175

Leu Lys Trp Met Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr
180 185 190

Ala Tyr Asp Phe Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala
195 200 205

Ser Thr Ala Tyr Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala
210 215 220

Thr Tyr Phe Cys Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly
225 230 235 240

Gln Gly Thr Ser Val Thr Val Ser Ser
245

<210> 851

<211> 472

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 851

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
20 25 30

Ser Ile Asn Trp Val Lys Arg Ala Pro Gly Lys Gly Leu Lys Trp Met
35 40 45

Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr Ala Tyr Asp Phe
50 55 60

Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala Thr Tyr Phe Cys
85 90 95

Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys
130 135 140

Lys Pro Gly Glu Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr
145 150 155 160

Phe Thr Asp Tyr Ser Ile Asn Trp Val Lys Arg Ala Pro Gly Lys Gly
165 170 175

_SL

Leu Lys Trp Met Gly Trp Ile Asn Thr Glu Thr Arg Glu Pro Ala Tyr
180 185 190

Ala Tyr Asp Phe Arg Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala
195 200 205

Ser Thr Ala Tyr Leu Gln Ile Asn Asn Leu Lys Tyr Glu Asp Thr Ala
210 215 220

Thr Tyr Phe Cys Ala Leu Asp Tyr Ser Tyr Ala Met Asp Tyr Trp Gly
225 230 235 240

Gln Gly Thr Ser Val Thr Val Ser Ser Thr Thr Thr Pro Ala Pro Arg
245 250 255

Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg
260 265 270

Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly
275 280 285

Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr
290 295 300

Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg
305 310 315 320

Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro
325 330 335

Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu
340 345 350

Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala
355 360 365

_SL

Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu
370 375 380

Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly
385 390 395 400

Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu
405 410 415

Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser
420 425 430

Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly
435 440 445

Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
450 455 460

His Met Gln Ala Leu Pro Pro Arg
465 470

<210> 852

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 852

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Arg His Tyr
20 25 30

Ser Met Asn Trp Val Lys Gln Ala Pro Gly ^{SL}Lys Gly Leu Lys Trp Met
35 40 45

Gly Arg Ile Asn Thr Glu Ser Gly Val Pro Ile Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asp Glu Asp Thr Ala Ser Tyr Phe Cys
85 90 95

Ser Asn Asp Tyr Leu Tyr Ser Leu Asp Phe Trp Gly Gln Gly Thr Ala
100 105 110

Leu Thr Val Ser Ser
115

<210> 853

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 853

Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala Met Ser Leu Gly
1 5 10 15

Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Thr Ile Leu
20 25 30

Gly Ser His Leu Ile Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr Gly Val Pro Ala

50

55

_SL

60

Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Asp
65 70 75 80

Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys Leu Gln Ser Arg
85 90 95

Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 854

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 854

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Arg His Tyr
20 25 30

Ser Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Leu Lys Trp Met
35 40 45

Gly Arg Ile Asn Thr Glu Ser Gly Val Pro Ile Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asp Glu Asp Thr Ala Ser Tyr Phe Cys
85 90 95

_SL

Ser Asn Asp Tyr Leu Tyr Ser Leu Asp Phe Trp Gly Gln Gly Thr Ala
100 105 110

Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala
130 135 140

Met Ser Leu Gly Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser
145 150 155 160

Val Thr Ile Leu Gly Ser His Leu Ile Tyr Trp Tyr Gln Gln Lys Pro
165 170 175

Gly Gln Pro Pro Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr
180 185 190

Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr
195 200 205

Leu Thr Ile Asp Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys
210 215 220

Leu Gln Ser Arg Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu
225 230 235 240

Glu Ile Lys

<210> 855

<211> 466

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 855

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Arg His Tyr
20 25 30

Ser Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Leu Lys Trp Met
35 40 45

Gly Arg Ile Asn Thr Glu Ser Gly Val Pro Ile Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Val Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asp Glu Asp Thr Ala Ser Tyr Phe Cys
85 90 95

Ser Asn Asp Tyr Leu Tyr Ser Leu Asp Phe Trp Gly Gln Gly Thr Ala
100 105 110

Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala
130 135 140

Met Ser Leu Gly Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser
145 150 155 160

Val Thr Ile Leu Gly Ser His Leu Ile Tyr Trp Tyr Gln Gln Lys Pro
165 170 175

_SL

Gly Gln Pro Pro Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr
180 185 190

Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr
195 200 205

Leu Thr Ile Asp Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys
210 215 220

Leu Gln Ser Arg Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu
225 230 235 240

Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
245 250 255

Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
260 265 270

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
275 280 285

Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
290 295 300

Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu
305 310 315 320

Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu
325 330 335

Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys
340 345 350

Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys
355 360 365

_SL

Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu
370 375 380

Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly
385 390 395 400

Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu
405 410 415

Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly
420 425 430

Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser
435 440 445

Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro
450 455 460

Pro Arg
465

<210> 856
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 856
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr His Tyr
20 25 30

Ser Met Asn Trp Val Lys Gln Ala Pro Gly ^{SL}Lys Gly Leu Lys Trp Met
 35 40 45

Gly Arg Ile Asn Thr Glu Thr Gly Glu Pro Leu Tyr Ala Asp Asp Phe
 50 55 60

Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
 65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Phe Phe Cys
 85 90 95

Ser Asn Asp Tyr Leu Tyr Ser Cys Asp Tyr Trp Gly Gln Gly Thr Thr
 100 105 110

Leu Thr Val Ser Ser
 115

<210> 857

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 857

Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala Met Ser Leu Gly
 1 5 10 15

Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Thr Ile Leu
 20 25 30

Gly Ser His Leu Ile Tyr Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
 35 40 45

Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr Gly Val Pro Ala

50

55

_SL

60

Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Asp
65 70 75 80

Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys Leu Gln Ser Arg
85 90 95

Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 858

<211> 243

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 858

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr His Tyr
20 25 30

Ser Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Leu Lys Trp Met
35 40 45

Gly Arg Ile Asn Thr Glu Thr Gly Glu Pro Leu Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Phe Phe Cys
85 90 95

_SL

Ser Asn Asp Tyr Leu Tyr Ser Cys Asp Tyr Trp Gly Gln Gly Thr Thr
100 105 110

Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala
130 135 140

Met Ser Leu Gly Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser
145 150 155 160

Val Thr Ile Leu Gly Ser His Leu Ile Tyr Trp Tyr Gln Gln Lys Pro
165 170 175

Gly Gln Pro Pro Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr
180 185 190

Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr
195 200 205

Leu Thr Ile Asp Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys
210 215 220

Leu Gln Ser Arg Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu
225 230 235 240

Glu Ile Lys

<210> 859

<211> 466

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 859

Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

Thr Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr His Tyr
20 25 30

Ser Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Leu Lys Trp Met
35 40 45

Gly Arg Ile Asn Thr Glu Thr Gly Glu Pro Leu Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Val Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Phe Phe Cys
85 90 95

Ser Asn Asp Tyr Leu Tyr Ser Cys Asp Tyr Trp Gly Gln Gly Thr Thr
100 105 110

Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Ser Pro Pro Ser Leu Ala
130 135 140

Met Ser Leu Gly Lys Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser
145 150 155 160

Val Thr Ile Leu Gly Ser His Leu Ile Tyr Trp Tyr Gln Gln Lys Pro
165 170 175

_SL

Gly Gln Pro Pro Thr Leu Leu Ile Gln Leu Ala Ser Asn Val Gln Thr
180 185 190

Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr
195 200 205

Leu Thr Ile Asp Pro Val Glu Glu Asp Asp Val Ala Val Tyr Tyr Cys
210 215 220

Leu Gln Ser Arg Thr Ile Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu
225 230 235 240

Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro
245 250 255

Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro
260 265 270

Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp
275 280 285

Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu
290 295 300

Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu
305 310 315 320

Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu
325 330 335

Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys
340 345 350

Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys
355 360 365

_SL

Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu
370 375 380

Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly
385 390 395 400

Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu
405 410 415

Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly
420 425 430

Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser
435 440 445

Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro
450 455 460

Pro Arg
465

<210> 860
<211> 246
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 860
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Glu Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Pro Ala Asn Thr Phe Ser Asp His
20 25 30

Val Met His Trp Val Arg Gln Ala Pro Gly ^{SL}Gln Arg Phe Glu Trp Met
 35 40 45

Gly Tyr Ile His Ala Ala Asn Gly Gly Thr His Tyr Ser Gln Lys Phe
 50 55 60

Gln Asp Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Asn Thr Val 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 Gly Gly Tyr Asn Ser Asp Ala Phe Asp Ile Trp Gly Gln Gly
 100 105 110

Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met Thr
 130 135 140

Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly Asp Arg Val Thr Ile
 145 150 155 160

Thr Cys Arg Ala Ser Gln Asp Ile Ser Ser Trp Leu Ala Trp Tyr Gln
 165 170 175

Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser
 180 185 190

Leu Gln Ser Gly Val Pro Ser Arg Phe Asn Gly Ser Gly Ser Gly Thr
 195 200 205

Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr
 210 215 220

Tyr	Tyr	Cys	Gln	Gln	Ser	Tyr	Ser	Thr	Pro	<u>SL</u> Leu	Thr	Phe	Gly	Gly	Gly
225					230					235					240

Thr Lys Val Glu Ile Lys
245

<210> 861
 <211> 738
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 861
 caagtgaac tcgtccagtc cgggtgcagaa gtcaaggaac ccggagcctc cgtgaaagtg 60
 tcctgcaaag ctctgcaa cactttctcg gaccacgtga tgcactgggt gcgccaggcg 120
 ccgggccagc gcttcgaatg gatgggatac attcatgccg ccaatggcgg taccactac 180
 tcccaaaagt tccaggatag agtcaccatc acccgggaca ccagcgccaa caccgtgtat 240
 atggatctgt ccagcctgag gtccgaggat accgccgtgt actactgcgc ccggggcgga 300
 tacaactcag acgcgttcga catttgggga cagggtacta tggtcaccgt gtcacccggg 360
 ggcgggtggca gcggggggcgg aggctctggc ggaggcggat cagggggagg aggggtccgac 420
 atcgtgatga ccagtcgcc gtcacccgtg tccgcgtccg tgggagacag agtgaccatc 480
 acgtgtcgcg ccagccagga catctcctcg tggttggcat ggtaccagca gaagcctgga 540
 aaggccccga agctgctcat ctacgccgcc tcctcccttc aatcgggagt gccctcgcgg 600
 ttcaacggaa gcggaagcgg gacagatccc accctgacta ttagctcgct gcagcccgag 660
 gacttcgcta cttactactg ccaacagagc tactccaccc cactgacttt cggcgggggt 720
 accaaggtcg agatcaag 738

<210> 862
 <211> 119

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 862

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Glu Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Pro Ala Asn Thr Phe Ser Asp His
20 25 30

Val Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Phe Glu Trp Met
35 40 45

Gly Tyr Ile His Ala Ala Asn Gly Gly Thr His Tyr Ser Gln Lys Phe
50 55 60

Gln Asp Arg Val Thr Ile Thr Arg Asp Thr Ser Ala Asn Thr Val 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 Gly Gly Tyr Asn Ser Asp Ala Phe Asp Ile Trp Gly Gln Gly
100 105 110

Thr Met Val Thr Val Ser Ser
115

<210> 863

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

_SL

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 863

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Ser Trp
20 25 30

Leu Ala 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 Asn 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 Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 864

<211> 490

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 864

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val

_SL

20	25	30
Lys Glu Pro Gly Ala Ser Val	Lys Val Ser Cys Lys Ala Pro Ala Asn	
35	40	45
Thr Phe Ser Asp His Val Met His Trp Val Arg Gln Ala Pro Gly Gln		
50	55	60
Arg Phe Glu Trp Met Gly Tyr Ile His Ala Ala Asn Gly Gly Thr His		
65	70	75
Tyr Ser Gln Lys Phe Gln Asp Arg Val Thr Ile Thr Arg Asp Thr Ser		
85	90	95
Ala Asn Thr Val Tyr Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr		
100	105	110
Ala Val Tyr Tyr Cys Ala Arg Gly Gly Tyr Asn Ser Asp Ala Phe Asp		
115	120	125
Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly		
130	135	140
Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser		
145	150	155
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly		
165	170	175
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Ser Trp		
180	185	190
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile		
195	200	205
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Asn Gly		

405 410 _SL 415
 Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro
 420 425 430
 Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala
 435 440 445
 Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His
 450 455 460
 Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp
 465 470 475 480
 Ala Leu His Met Gln Ala Leu Pro Pro Arg
 485 490

_SL

gggggcggtg gcagcggggg cggaggctct ggcgaggcg gatcagggg aggagggtcc	480
gacatcgtga tgacccagtc cccgtcatcg gtgtccgcgt ccgtgggaga cagagtgacc	540
atcacgtgtc gcgccagcca ggacatctcc tcgtggttgg catggtacca gcagaagcct	600
ggaaaggccc cgaagctgct catctacgcc gcctcctccc ttcaatcggg agtgcctctg	660
cggttcaacg gaagcggaag cgggacagat tttaccctga ctattagctc gctgcagccc	720
gaggacttcg ctacttacta ctgccaacag agctactcca cccactgac tttcggcggg	780
ggtaccaagg tcgagatcaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgctt cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccgggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggctctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaaccc ttcattgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggaggaag gcggctgcga actgcgcgtg	1140
aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 866

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 866

Gln Val Gln Leu Gln Glu Ser Gly Ala Gly ^{SL}Leu Leu Lys Pro Ser Glu
 1 5 10 15
 Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr
 20 25 30
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Gly Glu Ile Asn His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
 50 55 60
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
 65 70 75 80
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
 85 90 95
 Arg Gly Ser Gly Leu Val Val Tyr Ala Ile Arg Val Gly Ser Gly Trp
 100 105 110
 Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly
 115 120 125
 Gly Gly Ser Gly Gly Gly Asp Ser Gly Gly Gly Gly Ser Asp Ile Gln
 130 135 140
 Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
 145 150 155 160
 Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp
 165 170 175
 Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Met Tyr Ala Ala
 180 185 190

Ser Ser Leu Gln Ser Gly Val Pro Ser Arg ^{_SL}Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
210 215 220

Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro Trp Thr Phe
225 230 235 240

Gly Gln Gly Thr Lys Val Asp Ile Lys
245

<210> 867

<211> 747

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 867

caagtgaac ttcaagaatc aggcgcagga cttctcaagc catccgaaac actctccctc	60
acttgcgcggtgtacggggg aagcttctcg ggatactact ggtcctggat taggcagcct	120
cccggcaaag gcctggaatg ggtcgggggag atcaaccact ccggttcaac caactacaac	180
ccgtcgctga agtcccgcgt gaccatttcc gtggacacct ctaagaatca gttcagcctg	240
aagctctcgt ccgtgaccgc ggcggacacc gccgtctact actgcgctcg gggatcagga	300
ctgggtggtgt acgcatccg cgtgggctcg ggctgggttcg attactgggg ccagggaacc	360
ctggtcactg tgtcgtccgg cggaggaggt tcggggggcg gagacagcgg tggagggggt	420
agcgacatcc agatgacca gtccccgtcc tcgctgtccg cctccgtggg agatagagtg	480
accatcacct gtcgggcatc ccagagcatt tccagctacc tgaactggta tcagcagaag	540
cccggaaagg cccctaagct gttgatgtac gccgccagca gcttgagtc gggcgtgccg	600
agccgggtttt ccggttccgg ctccgggact gacttcaccc tgactatctc atccctgcaa	660

_SL

cccgaggact tcgccactta ttactgccag cagtcctact caaccctcc ctggacgttc 720

ggacagggca ccaaggtcga tatcaag 747

<210> 868

<211> 126

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 868

Gln Val Gln Leu Gln Glu Ser Gly Ala Gly Leu Leu Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly Ser Phe Ser Gly Tyr
20 25 30

Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Glu Ile Asn His Ser Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
50 55 60

Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu
65 70 75 80

Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Arg Gly Ser Gly Leu Val Val Tyr Ala Ile Arg Val Gly Ser Gly Trp
100 105 110

Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

_SL

<210> 869
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 869
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 Met
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

Trp Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

<210> 870
<211> 493
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

_SL

polypeptide"

<400> 870

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Ala Gly Leu
20 25 30

Leu Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Ala Val Tyr Gly Gly
35 40 45

Ser Phe Ser Gly Tyr Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Gly Glu Ile Asn His Ser Gly Ser Thr Asn Tyr
65 70 75 80

Asn Pro Ser Leu Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys
85 90 95

Asn Gln Phe Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala
100 105 110

Val Tyr Tyr Cys Ala Arg Gly Ser Gly Leu Val Val Tyr Ala Ile Arg
115 120 125

Val Gly Ser Gly Trp Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
130 135 140

Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Asp Ser Gly Gly Gly
145 150 155 160

Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
165 170 175

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser

_SL

180

185

190

Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
195 200 205

Leu Met Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
210 215 220

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
225 230 235 240

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr
245 250 255

Pro Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys Thr Thr
260 265 270

Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln
275 280 285

Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala
290 295 300

Val His Thr Arg Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala
305 310 315 320

Pro Leu Ala Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr
325 330 335

Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln
340 345 350

Pro Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser
355 360 365

Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys

370

375

_SL

380

Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln
385 390 395 400

Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
405 410 415

Asp Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg
420 425 430

Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met
435 440 445

Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly
450 455 460

Lys Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp
465 470 475 480

Thr Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 871

<211> 1479

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 871

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg 60

ccccaagtgc aacttcaaga atcaggcgca ggactttctca agccatccga aacactctcc 120

ctcacttgcg cgggtgtacgg gggaagcttc tcgggatact actggtcctg gattaggcag 180

_SL

cctccccggca aaggcctgga atgggtcggg gagatcaacc actccggttc aaccaactac	240
aacccgtcgc tgaagtcccg cgtgaccatt tccgtggaca cctctaagaa tcagttcagc	300
ctgaagctct cgtccgtgac cgcggcggac accgccgtct actactgcgc tcgggggatca	360
ggactggtgg tgtacgcat ccgcgtgggc tcgggctggt tcgattactg gggccaggga	420
accctggtca ctgtgtcgtc cggcggagga gggtcggggg gcggagacag cgggtggagg	480
ggtagcgaca tccagatgac ccagtccccg tcctcgctgt ccgcctccgt gggagataga	540
gtgaccatca cctgtcgggc atcccagagc atttccagct acctgaactg gtatcagcag	600
aagccccgaa agggcccctaa gctgttgatg tacgccgcca gcagcttgca gtcgggcgtg	660
ccgagccggt tttccgggttc cggctccggg actgacttca ccctgactat ctcatccctg	720
caacccgagg acttcgccac ttattactgc cagcagtcct actcaacccc tccctggacg	780
ttcggacagg gcaccaaggt cgatatcaag accactaccc cagcaccgag gccacccacc	840
ccggctccta ccatcgctc ccagcctctg tccctgcgtc cggaggcatg tagacccgca	900
gctggtgggg ccgtgcatac ccgggggtctt gacttcgcct gcgatatcta catttgggcc	960
cctctggctg gtacttgcgg ggtcctgctg ctttcactcg tgatcactct ttactgtaag	1020
cgcggtcggga agaagctgct gtacatcttt aagcaaccct tcatgaggcc tgtgcagact	1080
actcaagagg aggacggctg ttcatgccgg ttcccagagg aggaggaagg cggctgcgaa	1140
ctgcgcgtga aattcagccg cagcgcagat gctccagcct acaagcaggg gcagaaccag	1200
ctctacaacg aactcaatct tggtcggaga gaggagtacg acgtgctgga caagcggaga	1260
ggacgggacc cagaaatggg cgggaagccg cgcagaaaga atccccaaga gggcctgtac	1320
aacgagctcc aaaaggataa gatggcagaa gcctatagcg agattggtat gaaaggggaa	1380
cgcagaagag gcaaaggcca cgacggactg taccagggac tcagcaccgc caccaaggac	1440
acctatgacg ctcttcacat gcaggccctg ccgcctcgg	1479

<210> 872
 <211> 248
 <212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 872

Gln Val Gln Leu Val Gln 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 Phe Ser Ser Tyr
20 25 30

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Tyr Ile Ser Ser Ser Ser Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Leu Ser Val Arg Ala Ile Asp Ala Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val
130 135 140

Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val
145 150 155 160

Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile ^{SL}Ser Asn Tyr Leu Asn Trp
165 170 175

Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Asp Ala
180 185 190

Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser
195 200 205

Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe
210 215 220

Ala Thr Tyr Tyr Cys Gln Gln Ala Tyr Ser Thr Pro Phe Thr Phe Gly
225 230 235 240

Pro Gly Thr Lys Val Glu Ile Lys
245

<210> 873
<211> 744
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 873
caagtgaac ttgttcaatc cgggtggaggt cttgtgcagc ccggaggatc actcagactg 60
tcgtgcgccg cctctggggt cactttctcc tcatactcga tgaactgggt gcgccaggcg 120
ccgggaaagg gcctggaatg ggtgtcatac atctcctcct catcctccac catctactac 180
gccgattccg tgaagggccg cttcactatt tcccgggaca acgcgaaaaa ctcgctctat 240
ctgcaaatga actccctgcg cgccgaggac accgccgtgt actactgcgc ccgggacctg 300
agcgtgcggg ctattgatgc gttcgacatc tggggacagg gcaccatggt cacagtgtcc 360
agcggaggcg gcggcagcgg tggaggagga tcagggggag gaggttcggg gggcgggtggc 420

_SL

tccgatatcg tgctgaccca gagcccgctg agcctctccg cctccgctcg cgacagagtg 480
accatcacgt gtcaggcatc ccaggacatt agcaactacc tgaattggta ccagcagaag 540
cctggaaagg cacccaagtt gctgatctac gacgcctcca acctggaaac cggagtgcc 600
tccaggttct cgggcagcgg ctcgggaacc gacttcactt ttactatctc ctccctgcaa 660
cccgaggatt tcgcgaccta ctactgccag caggcctaca gcaccccttt caccttcggg 720
ccgggaacta aggtcgaaat caag 744

<210> 874

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 874

Gln Val Gln Leu Val Gln 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 Phe Ser Ser Tyr
20 25 30

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Tyr Ile Ser Ser Ser Ser Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95

_SL

Ala Arg Asp Leu Ser Val Arg Ala Ile Asp Ala Phe Asp Ile Trp Gly
100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 875

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 875

Asp Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Ser 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 Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ala Tyr Ser Thr Pro Phe
85 90 95

Thr Phe Gly Pro Gly Thr Lys Val Glu Ile Lys
100 105

_SL

<210> 876

<211> 492

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 876

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Tyr Ile Ser Ser Ser Ser Ser Thr Ile Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Leu Ser Val Arg Ala Ile Asp Ala
115 120 125

Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly
130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly

145		150		<u>SL</u> 155		160									
Gly	Ser	Asp	Ile	Val	Leu	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser
				165					170					175	
Val	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys	Gln	Ala	Ser	Gln	Asp	Ile	Ser
			180					185					190		
Asn	Tyr	Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu
		195					200					205			
Leu	Ile	Tyr	Asp	Ala	Ser	Asn	Leu	Glu	Thr	Gly	Val	Pro	Ser	Arg	Phe
	210					215					220				
Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Phe	Thr	Ile	Ser	Ser	Leu
225					230					235					240
Gln	Pro	Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Ala	Tyr	Ser	Thr
				245					250					255	
Pro	Phe	Thr	Phe	Gly	Pro	Gly	Thr	Lys	Val	Glu	Ile	Lys	Thr	Thr	Thr
			260					265					270		
Pro	Ala	Pro	Arg	Pro	Pro	Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro
		275					280					285			
Leu	Ser	Leu	Arg	Pro	Glu	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val
	290					295					300				
His	Thr	Arg	Gly	Leu	Asp	Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro
305					310					315					320
Leu	Ala	Gly	Thr	Cys	Gly	Val	Leu	Leu	Leu	Ser	Leu	Val	Ile	Thr	Leu
				325					330					335	
Tyr	Cys	Lys	Arg	Gly	Arg	Lys	Lys	Leu	Leu	Tyr	Ile	Phe	Lys	Gln	Pro

_SL

340	345	350
Phe Met Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys		
355	360	365
Arg Phe Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe		
370	375	380
Ser Arg Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu		
385	390	395
Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp		
405	410	415
Lys Arg Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys		
420	425	430
Asn Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala		
435	440	445
Glu Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys		
450	455	460
Gly His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr		
465	470	475
Tyr Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg		
485	490	

<210> 877

<211> 1476

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

_SL

<400> 877

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aacttggtca atccgggtgga ggtcttgtgc agcccggagg atcactcaga	120
ctgtcgtgcg ccgcctctgg gttcactttc tcctcatact cgatgaactg ggtgcgccag	180
gcgccgggaa agggcctgga atgggtgtca tacatctcct cctcatcctc caccatctac	240
tacgccgatt ccgtgaaggg ccgcttcact atttcccggg acaacgcgaa aaactcgctc	300
tatctgcaaa tgaactccct gcgcgccgag gacaccgccg tgtactactg cgcccgggac	360
ctgagcgtgc gggctattga tgcgttcgac atctggggac agggcaccat ggtcacagt	420
tccagcggag gcggcggcag cggtggagga ggatcagggg gaggagggtt ggggggcggt	480
ggctccgata tcgtgctgac ccagagcccc tcgagcctct ccgcctccgt cggcgacaga	540
gtgaccatca cgtgtcaggc atcccaggac attagcaact acctgaattg gtaccagcag	600
aagcctggaa aggcacccaa gttgctgac tacgacgcct ccaacctgga aaccggagt	660
ccatccaggt tctcgggcag cggctcggga accgacttca cttttactat ctctccctg	720
caaccgagg atttcgcgac ctactactgc cagcaggcct acagcacccc tttcaccttc	780
gggccgggaa ctaaggtcga aatcaagacc actaccccag caccgaggcc acccaccg	840
gctcctacca tcgcctcca gcctctgtcc ctgcgtccgg aggcatgtag acccgagct	900
ggtggggccg tgcatacccg gggctttgac ttcgcctgcg atatctacat ttgggcccct	960
ctggctggta cttgcggggt cctgctgctt tctctcgtga tctctttta ctgtaagcgc	1020
ggtcggaaga agctgctgta catctttaag caacccttca tgaggcctgt gcagactact	1080
caagaggagg acggctgttc atgccggttc ccagaggagg aggaaggcgg ctgcgaactg	1140
cgctgaaat tcagccgcag cgcagatgct ccagcctaca agcaggggca gaaccagctc	1200
tacaacgaac tcaatcttgg tcggagagag gtagtacgac tgctggacaa gcggagagga	1260
cgggacccag aaatgggcgg gaagccgcgc agaaagaatc cccaagaggg cctgtacaac	1320
gagctccaaa aggataagat ggcagaagcc tatagcgaga ttggtatgaa aggggaacgc	1380

agaagaggca aaggccacga cggactgtac cagggactca gcaccgccac caaggacacc 1440
 tatgacgctc ttcacatgca ggccctgccg cctcgg 1476

<210> 878
 <211> 246
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 878
 Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Arg Ser Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asn Ser Tyr
 20 25 30
 Gly Leu His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ala Leu Ile Glu Tyr Asp Gly Ser Asn Lys Tyr Tyr Gly Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Lys Ser Lys Ser Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asp Asn Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Glu Gly Asn Glu Asp Leu Ala Phe Asp Ile Trp Gly Gln Gly
 100 105 110
 Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly ^{SL}Ser Glu Ile Val Leu Thr
 130 135 140

Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile
 145 150 155 160

Thr Cys Gln Ala Ser Gln Phe Ile Lys Lys Asn Leu Asn Trp Tyr Gln
 165 170 175

His Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Asp Ala Ser Ser
 180 185 190

Leu Gln Thr Gly Val Pro Ser Arg Phe Ser Gly Asn Arg Ser Gly Thr
 195 200 205

Thr Phe Ser Phe Thr Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr
 210 215 220

Tyr Tyr Cys Gln Gln His Asp Asn Leu Pro Leu Thr Phe Gly Gly Gly
 225 230 235 240

Thr Lys Val Glu Ile Lys
 245

<210> 879
 <211> 738
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 879
 gaagtgcaat tgggtgcaatc aggaggagga gtggtcagat ctggaagaag cctgagactg 60
 tcatgcgcgg cttcgggctt taccttcaac tcctacggcc tccactgggt gcgccaggcc 120
 cccggaaaag gcctcgaatg ggtcgcactg attgagtacg acgggtccaa caagtactac 180

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ggagatagcg tgaagggccg cttcaccatc tcacgggaca agtccaagtc caccctgtat 240
ctgcaaatgg acaacctgag ggccgaggat actgccgtgt actactgcgc ccgcgaagga 300
aacgaagatc tggccttcga tatttggggc caggggtactc ttgtgaccgt gtcgagcgga 360
ggcggaggct ccggtggagg aggatcgggg ggtggtggtt ccggcggcgg ggggagcgaa 420
atcgtgctga cccagtcgcc ttcctccctc tccgcttcg tgggggaccg ggtcactatt 480
acgtgtcagg cgtcccaatt catcaagaag aatctgaact ggtaccagca caagccggga 540
aaggcccca aactgctcat ctacgacgcc agctcgctgc agactggcgt gccttcccgg 600
ttttccggga accggtcggg aaccaccttc tcattcacca tcagcagcct ccagccggag 660
gacgtggcga cctactactg ccagcagcat gacaaccttc cactgacttt cggcgggggc 720
accaaggtcg agattaag 738

<210> 880

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 880

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Arg Ser Gly Arg
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asn Ser Tyr
20 25 30

Gly Leu His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Leu Ile Glu Tyr Asp Gly Ser Asn Lys Tyr Tyr Gly Asp Ser Val
50 55 60

_SL

Lys Gly Arg Phe Thr Ile Ser Arg Asp Lys Ser Lys Ser Thr Leu Tyr
65 70 75 80

Leu Gln Met Asp Asn Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Glu Gly Asn Glu Asp Leu Ala Phe Asp Ile Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 881

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 881

Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Phe Ile Lys Lys Asn
20 25 30

Leu Asn Trp Tyr Gln His Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Asp Ala Ser Ser Leu Gln Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Asn Arg Ser Gly Thr Thr Phe Ser Phe Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln His^{_SL} Asp Asn Leu Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 882
<211> 490
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 882
Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val
20 25 30

Val Arg Ser Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Asn Ser Tyr Gly Leu His Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ala Leu Ile Glu Tyr Asp Gly Ser Asn Lys Tyr
65 70 75 80

Tyr Gly Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Lys Ser
85 90 95

Lys Ser Thr Leu Tyr Leu Gln Met Asp Asn Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Glu Gly Asn Glu Asp Leu Ala Phe Asp

_SL

115		120		125											
Ile	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly	Gly
	130					135					140				
Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser
145					150					155					160
Glu	Ile	Val	Leu	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
				165					170					175	
Asp	Arg	Val	Thr	Ile	Thr	Cys	Gln	Ala	Ser	Gln	Phe	Ile	Lys	Lys	Asn
			180					185					190		
Leu	Asn	Trp	Tyr	Gln	His	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
		195					200					205			
Tyr	Asp	Ala	Ser	Ser	Leu	Gln	Thr	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	210					215					220				
Asn	Arg	Ser	Gly	Thr	Thr	Phe	Ser	Phe	Thr	Ile	Ser	Ser	Leu	Gln	Pro
225					230					235					240
Glu	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	His	Asp	Asn	Leu	Pro	Leu
				245					250					255	
Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys	Thr	Thr	Thr	Pro	Ala
			260					265						270	
Pro	Arg	Pro	Pro	Thr	Pro	Ala	Pro	Thr	Ile	Ala	Ser	Gln	Pro	Leu	Ser
		275					280					285			
Leu	Arg	Pro	Glu	Ala	Cys	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Val	His	Thr
	290					295					300				
Arg	Gly	Leu	Asp	Phe	Ala	Cys	Asp	Ile	Tyr	Ile	Trp	Ala	Pro	Leu	Ala

305		310		<u>SL</u> 315		320
Gly Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys		325		330		335
Lys Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met		340		345		350
Arg Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe		355		360		365
Pro Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg		370		375		380
Ser Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn		385		390		395
						400
Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg		405		410		415
Arg Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro		420		425		430
Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala		435		440		445
Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His		450		455		460
Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp		465		470		475
						480
Ala Leu His Met Gln Ala Leu Pro Pro Arg		485		490		

<210> 883

_SL

<211> 1470

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 883

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aattggtgca atcaggagga ggagtgggtca gatctggaag aagcctgaga	120
ctgtcatgcg cggcttcggg ctttaccttc aactcctacg gcctccactg ggtgcgccag	180
gcccccgga aaggcctcga atgggtcgca ctgattgagt acgacgggtc caacaagtac	240
tacggagata gcgtgaaggg ccgcttcacc atctcacggg acaagtcaa gtccaccctg	300
tatctgcaaa tggacaacct gagggccgag gatactgccg tgtactactg cgcccgcgaa	360
ggaaacgaag atctggcctt cgatatattg ggccagggtg ctcttgtagc cgtgtcgagc	420
ggaggcggag gctccggtgg aggaggatcg ggggggtggtg gttccggcgg cggggggagc	480
gaaatcgtgc tgaccagtc gccttcctcc ctctccgctt ccgtggggga ccgggtcact	540
attacgtgtc aggcgtccca attcatcaag aagaatctga actggtacca gcacaagccg	600
ggaaaaggccc ccaaactgct catctacgac gccagctcgc tgcagactgg cgtgccttcc	660
cggttttccg ggaaccggtc gggaaccacc ttctcattca ccatcagcag cctccagccg	720
gaggacgtgg cgacctacta ctgccagcag catgacaacc ttccactgac tttcggcggg	780
ggcaccaagg tcgagattaa gaccactacc ccagcaccga ggccaccac cccggctcct	840
accatcgcct cccagcctct gtccctgcgt ccggaggcat gtagaccgc agctggtggg	900
gccgtgcata cccggggtct tgacttcgcc tgcgatatct acatttgggc ccctctggct	960
ggtacttgcg gggtcctgct gctttcactc gtgatcactc tttactgtaa gcgcggtcgg	1020
aagaagctgc tgtacatctt taagcaaccc ttcatgaggc ctgtgcagac tactcaagag	1080
gaggacggct gttcatgccg gttcccagag gaggagggaag gcggctgcga actgcgcgtg	1140

_SL

aaattcagcc gcagcgcaga tgctccagcc tacaagcagg ggcagaacca gctctacaac	1200
gaactcaatc ttggtcggag agaggagtac gacgtgctgg acaagcggag aggacgggac	1260
ccagaaatgg gcgggaagcc gcgcagaaag aatccccaag agggcctgta caacgagctc	1320
caaaaggata agatggcaga agcctatagc gagattggta tgaaagggga acgcagaaga	1380
ggcaaaggcc acgacggact gtaccaggga ctcagcaccg ccaccaagga cacctatgac	1440
gctcttcaca tgcaggccct gccgcctcgg	1470

<210> 884

<211> 255

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 884

Gln	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	Asn	Val	Ser	Ser	Asn
			20					25					30		

Tyr	Met	Thr	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
			35				40					45			

Ser	Val	Ile	Tyr	Ser	Gly	Gly	Ala	Thr	Tyr	Tyr	Gly	Asp	Ser	Val	Lys
	50					55					60				

Gly	Arg	Phe	Thr	Val	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Val	Tyr	Leu
65					70					75					80

Gln	Met	Asn	Arg	Leu	Thr	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala
				85					90					95	

Arg Asp Arg Leu Tyr Cys Gly Asn Asn Cys Tyr Leu Tyr Tyr Tyr Tyr
100 105 110

Gly Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
130 135 140

Gly Gly Ser Asp Ile Gln Val Thr Gln Ser Pro Ser Ser Leu Ser Ala
145 150 155 160

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile
165 170 175

Ser Ser Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
180 185 190

Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg
195 200 205

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser
210 215 220

Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser
225 230 235 240

Thr Pro Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
245 250 255

<210> 885

<211> 765

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic

_SL

polynucleotide"

<400> 885
caagtgcaac tcgtggaatc aggcggagga ctcgtgcaac ccggagggtc ccttagactg 60
tcatgtgccg cttccgggtt caatgtgtcc agcaactaca tgacctgggt cagacaggcg 120
ccgggaaagg gacttgaatg ggtgtccgtg atctactccg gtggagcaac atactacgga 180
gactccgtga aaggccgctt taccgtgtcc cgcgataact cgaagaacac cgtgtacttg 240
cagatgaaca ggctgactgc cgaggacacc gccgtgtatt attgcgcccg ggacaggctg 300
tactgtggaa acaactgcta cctgtactac tactacggga tggacgtgtg gggacagggc 360
actctcgtca ctgtgtcatc cggggggggc ggtagcgggt gcggagggtc cggcggagga 420
ggctcagggg gaggcggaag cgatatccag gtcacccagt ctccctcctc gctgtccgcc 480
tccgtgggcg accgcgtcac cattacttgc cgggcgtcgc agtcgatcag ctcctacctg 540
aactggtacc agcagaagcc tggaaaggcc ccgaagctgc tgatctacgc ggcctcgtcc 600
ctgcaaagcg gcgtcccgtc gcggttcagc ggttccgggt cggaaccga cttcaccttg 660
actatttcct ccctgcaacc cgaggatttc gccacttact actgccagca gtcctactcc 720
acccacctc tgaccttcgg ccaaggaacc aaggtcgaaa tcaag 765

<210> 886

<211> 127

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 886

Gln 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 Asn Val Ser Ser Asn
20 25 30

_SL

Tyr Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Val Ile Tyr Ser Gly Gly Ala Thr Tyr Tyr Gly Asp Ser Val Lys
50 55 60

Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys Asn Thr Val Tyr Leu
65 70 75 80

Gln Met Asn Arg Leu Thr Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
85 90 95

Arg Asp Arg Leu Tyr Cys Gly Asn Asn Cys Tyr Leu Tyr Tyr Tyr Tyr
100 105 110

Gly Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 887

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 887

Asp Ile Gln Val 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 ^{SL}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

Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

<210> 888

<211> 499

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 888

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Asn Val Ser Ser Asn Tyr Met Thr Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Val Ile Tyr Ser Gly Gly Ala Thr Tyr Tyr
65 70 75 80

Gly Asp Ser Val Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys

_SL

275

280

285

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
290 295 300

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
305 310 315 320

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
325 330 335

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
340 345 350

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
355 360 365

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
370 375 380

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
385 390 395 400

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
405 410 415

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
420 425 430

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
435 440 445

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
450 455 460

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu

_SL

tccacccac ctctgacctt cggccaagga accaaggtcg aaatcaagac cactaccca	840
gcaccgaggc caccacccc ggctcctacc atcgctccc agcctctgtc cctgcgtccg	900
gaggcatgta gacccgcagc tgggtggggcc gtgcataccc ggggtcttga cttcgcctgc	960
gatatctaca tttgggcccc tctggctggg acttgcgggg tcctgctgct ttcactcgtg	1020
atcactcttt actgtaagcg cggtcggaag aagctgctgt acatctttaa gcaacccttc	1080
atgaggcctg tgcagactac tcaagaggag gacggctgtt catgccggtt cccagaggag	1140
gaggaaggcg gctgcgaact gcgcgtgaaa ttcagccgca gcgcagatgc tccagcctac	1200
aagcaggggc agaaccagct ctacaacgaa ctcaatcttg gtcggagaga ggagtacgac	1260
gtgctggaca agcggagagg acgggaccca gaaatgggcg ggaagccgcg cagaaagaat	1320
ccccaagagg gcctgtacaa cgagctcaa aaggataaga tggcagaagc ctatagcgag	1380
attggtatga aaggggaacg cagaagaggc aaaggccacg acggactgta ccagggactc	1440
agcaccgcca ccaaggacac ctatgacgct cttcacatgc aggccctgcc gcctcgg	1497

<210> 890

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 890

Glu	Val	Gln	Leu	Gln	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	Ser	Ser	Tyr
			20					25					30		

Ala	Ile	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met
			35				40					45			

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala ^{SL}Asn Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Asp Leu Glu Met Ala Thr Ile Met Gly Gly Tyr Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gln Ser Ala Leu Thr Gln Pro Ala Ser
 130 135 140

Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr
 145 150 155 160

Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His
 165 170 175

Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp Val Ser Asn Arg Pro
 180 185 190

Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala
 195 200 205

Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr
 210 215 220

Cys Ser Ser Tyr Thr Ser Ser Ser Thr Leu Asp Val Val Phe Gly Gly
 225 230 235 240

_SL

Gly Thr Lys Leu Thr Val Leu
245

<210> 891

<211> 741

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 891

gaagtgaac tccaacagtc aggcgcagaa gtcaagaagc ccggatcgtc agtgaaagtg	60
tcctgcaaag cctccggcgg aaccttcagc tcctacgcaa tcagctgggt gcggcaggcg	120
cccggacagg gactggagtg gatgggcggg atcattccga tctttggcac cgccaattac	180
gcccagaagt tccagggacg cgtcacaatc accgccgacg aatcgacttc caccgcctac	240
atggagctgt cgtccttgag gagcgaagat accgccgtgt actactgcgc tcgggatctg	300
gagatggcca ctatcatggg gggttactgg ggccagggga ccctggtcac tgtgtcctcg	360
ggaggagggg gatcaggcgg cggcgggttc gggggaggag gaagccagtc cgcgctgact	420
cagccagctt ccgtgtctgg ttcgccggga cagtccatca ctattagctg taccggcacc	480
agcagcgacg tgggcggcta caactatgtg tcatggtacc agcagcacc ggggaaggcg	540
cctaagctga tgatctacga cgtgtccaac cgccctagcg gagtgtcaa cagattctcc	600
ggttcgaagt cagggaacac tgcctccctc acgattagcg ggctgcaagc cgaggatgaa	660
gccgactact actgctcctc ctatacctcc tcctcgaccc tggacgtggg gttcggagga	720
ggcaccaagc tcaccgtcct t	741

<210> 892

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 892

Glu Val Gln Leu Gln 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 Ser Ser Tyr
20 25 30

Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Leu Glu Met Ala Thr Ile Met Gly Gly Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 893

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 893

Gln Ser Ala Leu Thr Gln Pro Ala Ser Val ^{SL}Ser Gly Ser Pro Gly Gln
 1 5 10 15

Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr
 20 25 30

Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu
 35 40 45

Met Ile Tyr Asp Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg Phe
 50 55 60

Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu
 65 70 75 80

Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser Ser
 85 90 95

Ser Thr Leu Asp Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105 110

<210> 894

<211> 491

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 894

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Val
 20 25 30

Lys Lys Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly

35 40 45

Gly Leu Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn
65 70 75 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser
85 90 95

Thr Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Leu Glu Met Ala Thr Ile Met Gly
115 120 125

Gly Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Ala Leu
145 150 155 160

Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile
165 170 175

Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser
180 185 190

Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Asp
195 200 205

Val	Ser	Asn	Arg	Pro	Ser	Gly	Val	Ser	Asn	Arg	Phe	Ser	Gly	Ser	Lys
	210					215					220				

Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp

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420

425

430

Pro Gln Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu
435 440 445

Ala Tyr Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly
450 455 460

His Asp Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr
465 470 475 480

Asp Ala Leu His Met Gln Ala Leu Pro Pro Arg
485 490

<210> 895

<211> 1473

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 895

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aactccaaca gtcaggcgca gaagtcaaga agcccggatc gtcagtga	120
gtgtcctgca aagcctccgg cggaaccttc agctcctacg caatcagctg ggtgcggcag	180
gcgcccggac agggactgga gtggatgggc ggtatcattc cgatctttgg caccgccaat	240
tacgcccaga agttccaggg acgcgtcaca atcaccgccg acgaatcgac ttccaccgcc	300
tacatggagc tgtcgtcctt gaggagcgaa gataccgccg tgtactactg cgctcgggat	360
ctggagatgg ccactatcat ggggggttac tggggccagg ggaccctggt cactgtgtcc	420
tcgggaggag ggggatcagg cggcggcggg tccgggggag gaggaagcca gtccgcgctg	480
actcagccag cttccgtgtc tggttcgccg ggacagtcca tcactattag ctgtaccggc	540

_SL

accagcagcg acgtgggcgg ctacaactat gtgtcatggt accagcagca cccggggaag	600
gcgccctaagc tgatgatcta cgacgtgtcc aaccgcccta gcggagtgtc caacagattc	660
tccggttcga agtcagggaa cactgcctcc ctcacgatta gcgggctgca agccgaggat	720
gaagccgact actactgctc ctcctatacc tcctcctcga ccctggacgt ggtgttcgga	780
ggaggcacca agctcaccgt ccttaccact accccagcac cgaggccacc caccgccgct	840
cctaccatcg cctcccagcc tctgtccctg cgtccggagg catgtagacc cgcagctggt	900
ggggccgtgc ataccggggg tcttgacttc gcctgcgata tctacatttg ggccccctctg	960
gctggtactt gcggggtcct gctgctttca ctcgtgatca ctctttactg taagcgcggt	1020
cggaagaagc tgctgtacat ctttaagcaa cccttcatga ggcctgtgca gactactcaa	1080
gaggaggacg gctgttcatg ccggttccca gaggaggagg aaggcggctg cgaactgcgc	1140
gtgaaattca gccgcagcgc agatgctcca gcctacaagc aggggcagaa ccagctctac	1200
aacgaactca atcttggtcg gagagaggag tacgacgtgc tggacaagcg gagaggacgg	1260
gaccagaaaa tgggcgggaa gccgcgcaga aagaatcccc aagagggcct gtacaacgag	1320
ctccaaaagg ataagatggc agaagcctat agcgagattg gtatgaaagg ggaacgcaga	1380
agaggcaaag gccacgacgg actgtaccag ggactcagca ccgccaccaa ggacacctat	1440
gacgctcttc acatgcaggc cctgccgcct cgg	1473

<210> 896

<211> 245

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 896

Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Val	Val	Gln	Pro	Gly	Gly
1				5						10				15	

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly ^{SL}Phe Thr Phe Asp Asp Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Leu Ile Ser Gly Asp Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Val Phe Asp Ser Tyr Tyr Met Asp Val Trp Gly Lys Gly Thr
 100 105 110
 Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115 120 125
 Gly Ser Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Leu Ser Leu
 130 135 140
 Pro Val Thr Pro Gly Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln
 145 150 155 160
 Ser Leu Val Tyr Thr Asp Gly Asn Thr Tyr Leu Asn Trp Phe Gln Gln
 165 170 175
 Arg Pro Gly Gln Ser Pro Arg Arg Leu Ile Tyr Lys Val Ser Asn Arg
 180 185 190
 Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Asp Thr Asp
 195 200 205

Phe	Thr	Leu	Lys	Ile	Ser	Arg	Val	Glu	Ala	<u>SL</u> Glu	Asp	Val	Gly	Ile	Tyr
210						215					220				

Tyr	Cys	Met	Gln	Gly	Thr	His	Trp	Ser	Phe	Thr	Phe	Gly	Gln	Gly	Thr
225					230					235					240

Arg	Leu	Glu	Ile	Lys
				245

<210> 897
 <211> 735
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 897

gaagtgcaat tgggtggaaaag cggaggagga gtggtgcaac ctggagggaag cctgagactg	60
tcatgtgccg cctcgggatt cactttcgat gactacgcaa tgcactgggt ccgccaggcc	120
cccggaaagg gtctggaatg ggtgtccctc atctccggcg atgggggttc cacttactat	180
gcggattctg tgaagggccg cttcacaatc tcccgggaca attccaagaa cactctgtac	240
cttcaaatga actccctgag ggtggaggac accgctgtgt actactgcgc gagagtgttt	300
gactcgtact atatggacgt ctggggaaaag ggcaccaccg tgaccgtgtc cagcgggtggc	360
ggtggatcgg ggggcggcgg ctccgggagc ggaggttccg agattgtgct gactcagtcg	420
ccgttgtcac tgcctgtcac ccccgggcag ccggcctcca tttcatgccg gtccagccag	480
tccctggtct acaccgatgg gaacacttac ctcaactggt tccagcagcg cccaggacag	540
tccccgcgga ggctgatcta caaagtgtca aaccgggact ccggcgtccc cgatcggttc	600
tcgggaagcg gcagcgacac cgacttcacg ctgaagattt cccgcgtgga agccgaggac	660
gtgggcatct actactgtat gcagggcacc cactggtcgt ttaccttcgg acaaggaact	720
aggctcgaga tcaag	735

_SL

<210> 898
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 898
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln 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

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Leu Ile Ser Gly Asp Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Val Phe Asp Ser Tyr Tyr Met Asp Val Trp Gly Lys Gly Thr
100 105 110

Thr Val Thr Val Ser Ser
115

<210> 899
<211> 112
<212> PRT

_SL

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 899

Glu Ile Val Leu Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val Tyr Thr
20 25 30

Asp Gly Asn Thr Tyr Leu Asn Trp Phe Gln Gln Arg Pro Gly Gln Ser
35 40 45

Pro Arg Arg Leu Ile Tyr Lys Val Ser Asn Arg Asp Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Asp Thr Asp Phe Thr Leu Lys Ile
65 70 75 80

Ser Arg Val Glu Ala Glu Asp Val Gly Ile Tyr Tyr Cys Met Gln Gly
85 90 95

Thr His Trp Ser Phe Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
100 105 110

<210> 900

<211> 489

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 900

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu

_SL

195		200		205
Lys Val Ser Asn Arg Asp Ser Gly Val Pro Asp Arg Phe Ser Gly Ser				
210		215		220
Gly Ser Asp Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu				
225		230		235
Asp Val Gly Ile Tyr Tyr Cys Met Gln Gly Thr His Trp Ser Phe Thr				
	245		250	255
Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro				
	260		265	270
Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu				
	275		280	285
Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg				
	290		295	300
Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly				
305		310		315
Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys				
	325		330	335
Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg				
	340		345	350
Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro				
	355		360	365
Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser				
	370		375	380
Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu				

_SL

taccttcaaa tgaactccct gaggggtggag gacaccgctg tgtactactg cgcgagagtg	360
tttgactcgt actatatgga cgtctgggga aagggcacca ccgtgaccgt gtccagcggg	420
ggcgggtggat cggggggcg cggctccggg agcggagggtt ccgagattgt gctgactcag	480
tcgccgttgt cactgcctgt cacccccggg cagccggcct ccatttcatg ccggtccagc	540
cagtccctgg tctacaccga tgggaacact tacctcaact ggttccagca gcgcccagga	600
cagtccccgc ggaggctgat ctacaaagtg tcaaaccggg actccggcgt ccccgatcgg	660
ttctcgggaa gcggcagcga caccgacttc acgctgaaga tttcccgct ggaagccgag	720
gacgtgggca tctactactg tatgcagggc acccactggt cgtttacctt cggacaagga	780
actaggctcg agatcaagac cactacccca gcaccgaggc caccaccccc ggctcctacc	840
atgcctccc agcctctgtc cctgcgtccg gaggcattga gacccgcagc tgggtggggcc	900
gtgcataccc ggggtcttga cttgcctgc gatattaca tttgggcccc tctggctggt	960
acttgccggg tcctgctgct ttcactcgtg atcactcttt actgtaagcg cggtcggaag	1020
aagctgctgt acatctttta gcaacccttc atgaggcctg tgcagactac tcaagaggag	1080
gacggctgtt catgccggtt cccagaggag gaggaaggcg gctgcgaact gcgcgtgaaa	1140
ttcagccgca gcgcagatgc tccagcctac aagcaggggc agaaccagct ctacaacgaa	1200
ctcaatcttg gtcggagaga ggagtacgac gtgctggaca agcggagagg acgggaccca	1260
gaaatgggcg ggaagccgcg cagaaagaat cccaagagg gcctgtacaa cgagctccaa	1320
aaggataaga tggcagaagc ctatagcgag attggtatga aaggggaacg cagaagaggc	1380
aaaggccacg acggactgta ccagggactc agcaccgcca ccaaggacac ctatgacgct	1440
cttcacatgc aggccctgcc gcctcgg	1467

<210> 902

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

_SL

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 902

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Ser
20 25 30

Ser Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
35 40 45

Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
50 55 60

Leu Lys Ser Arg Val Ser Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
65 70 75 80

Ser Leu Lys Leu Lys Tyr Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
85 90 95

Cys Ala Thr Pro Gly Thr Tyr Tyr Asp Phe Leu Ser Gly Tyr Tyr Pro
100 105 110

Phe Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Met
130 135 140

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
145 150 155 160

Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Tyr Leu Ala Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu ^{SL}Leu Ile Tyr Ala Ala Ser
180 185 190

Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
195 200 205

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
210 215 220

Thr Tyr Tyr Cys Gln Gln Leu Asn Ser Tyr Pro Tyr Thr Phe Gly Gln
225 230 235 240

Gly Thr Lys Leu Glu Ile Lys
245

<210> 903

<211> 741

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 903

caagtgcagc ttcaagaaag cgggtccagga ctcgtcaagc catcagaaac tctttccctc	60
acttgtaccg tgtcgggagg cagcatctcc tcgagctcct actactgggg ttggattaga	120
cagcccccg gaaaggggtt ggagtggatc ggttccatct actactccgg gtcgacctac	180
tacaaccctt ccctgaaatc tcgggtgtcc atctccgtcg acacctcaa gaaccagttc	240
agcctgaagc tgaaatatgt gaccgcggcc gatactgccg tgtactattg cgccaccccg	300
ggaacctact acgacttcct ctcgggttac taccgtttt actggggaca ggggactctc	360
gtgaccgtgt cctcgggcgg cggaggttca ggcgggtggcg gatcgggggg aggaggctca	420
gacattgtga tgacccagag cccgtccagc ctgagcgcct ccgtgggcga tagggtcacg	480
attacttgcc gggcgtccca gggaatctca agctacctgg cctggtacca acagaagccc	540

_SL

ggaaaggcac ccaagttgct gatctatgcc gctagcactc tgcagtccgg ggtgccttcc 600
cgcttctccg gctccggctc gggcaccgac ttcaccctga ccatttcctc actgcaaccc 660
gaggacttcg ccacttacta ctgccagcag ctgaactcct acccttacac attcggacag 720
ggaaccaagc tggaaatcaa g 741

<210> 904
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 904
Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Ser Ile Ser Ser Ser
20 25 30

Ser Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu
35 40 45

Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser
50 55 60

Leu Lys Ser Arg Val Ser Ile Ser Val Asp Thr Ser Lys Asn Gln Phe
65 70 75 80

Ser Leu Lys Leu Lys Tyr Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr
85 90 95

Cys Ala Thr Pro Gly Thr Tyr Tyr Asp Phe Leu Ser Gly Tyr Tyr Pro
100 105 110

_SL

Phe Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

<210> 905

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 905

Asp Ile Val 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 Ser Ser Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys 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 Phe Ala Thr Tyr Tyr Cys Gln Gln Leu Asn Ser Tyr Pro Tyr
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 906

<211> 491

<212> PRT

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 906

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu
20 25 30

Val Lys Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly
35 40 45

Ser Ile Ser Ser Ser Ser Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro
50 55 60

Gly Lys Gly Leu Glu Trp Ile Gly Ser Ile Tyr Tyr Ser Gly Ser Thr
65 70 75 80

Tyr Tyr Asn Pro Ser Leu Lys Ser Arg Val Ser Ile Ser Val Asp Thr
85 90 95

Ser Lys Asn Gln Phe Ser Leu Lys Leu Lys Tyr Val Thr Ala Ala Asp
100 105 110

Thr Ala Val Tyr Tyr Cys Ala Thr Pro Gly Thr Tyr Tyr Asp Phe Leu
115 120 125

Ser Gly Tyr Tyr Pro Phe Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
130 135 140

Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val

										_SL					
		355					360					365			
Phe	Pro 370	Glu	Glu	Glu	Glu	Gly 375	Gly	Cys	Glu	Leu	Arg 380	Val	Lys	Phe	Ser
Arg 385	Ser	Ala	Asp	Ala	Pro 390	Ala	Tyr	Lys	Gln	Gly 395	Gln	Asn	Gln	Leu	Tyr 400
Asn	Glu	Leu	Asn	Leu 405	Gly	Arg	Arg	Glu	Glu 410	Tyr	Asp	Val	Leu	Asp 415	Lys
Arg	Arg	Gly	Arg 420	Asp	Pro	Glu	Met	Gly 425	Gly	Lys	Pro	Arg 430	Arg	Lys	Asn
Pro	Gln	Glu 435	Gly	Leu	Tyr	Asn	Glu 440	Leu	Gln	Lys	Asp	Lys 445	Met	Ala	Glu
Ala	Tyr 450	Ser	Glu	Ile	Gly	Met 455	Lys	Gly	Glu	Arg	Arg 460	Arg	Gly	Lys	Gly
His 465	Asp	Gly	Leu	Tyr	Gln 470	Gly	Leu	Ser	Thr	Ala 475	Thr	Lys	Asp	Thr	Tyr 480
Asp	Ala	Leu	His	Met 485	Gln	Ala	Leu	Pro	Pro	Arg 490					

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<210> 907
<211> 1473
<212> DNA
<213> Artificial Sequence
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<211> 1473

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 907

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg

_SL

ccccaagtgc agcttcaaga aagcgggtcca ggactcgtca agccatcaga aactctttcc	120
ctcacttgta ccgtgtcggg aggcagcatc tcctcgagct cctactactg gggttggatt	180
agacagcccc cgggaaaggg gttggagtgg atcgggtcca tctactactc cgggtcgacc	240
tactacaacc cttccctgaa atctcgggtg tccatctccg tcgacacctc caagaaccag	300
ttcagcctga agctgaaata tgtgaccgcg gccgatactg ccgtgtacta ttgcgccacc	360
ccgggaacct actacgactt cctctcgggg tactacccgt tttactgggg acaggggact	420
ctcgtgaccg tgtcctcggg cggcggaggt tcaggcgggtg gcggatcggg gggaggaggc	480
tcagacattg tgatgacca gagccgtcc agcctgagcg cctccgtggg cgatagggtc	540
acgattactt gccgggcgtc ccagggaatc tcaagctacc tggcctggta ccaacagaag	600
cccggaaagg cacccaagtt gctgatctat gccgctagca ctctgcagtc cgggggtgcct	660
tcccgcttct ccggctccgg ctccggcacc gacttcaccc tgaccatttc ctactgcaa	720
cccgaggact tcgccactta ctactgccag cagctgaact cctaccctta cacattcgga	780
cagggaacca agctggaaat caagaccact accccagcac cgaggccacc caccgccgct	840
cctaccatcg cctcccagcc tctgtccctg cgtccggagg catgtagacc cgcagctggt	900
ggggccgtgc ataccgggg tcttgacttc gcctgcgata tctacatttg ggcccccttg	960
gctgggtactt gcgggggcct gctgctttca ctcgtgatca ctctttactg taagcgcggt	1020
cggaagaagc tgctgtacat ctttaagcaa cccttcatga ggctgtgca gactactcaa	1080
gaggaggacg gctgttcatg ccggttccca gaggaggagg aaggcggctg cgaactgcgc	1140
gtgaaattca gccgcagcgc agatgctcca gcctacaagc aggggcagaa ccagctctac	1200
aacgaactca atcttggtcg gagagaggag tacgacgtgc tggacaagcg gagaggacgg	1260
gaccagaaa tgggcgggaa gccgcgcaga aagaatcccc aagagggcct gtacaacgag	1320
ctccaaaagg ataagatggc agaagcctat agcgagattg gtatgaaagg ggaacgcaga	1380
agaggcaaag gccacgacgg actgtaccag ggactcagca ccgccaccaa ggacacctat	1440
gacgctcttc acatgcaggc cctgccgcct cgg	1473

_SL

<210> 908

<211> 239

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 908

Gln 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 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 Asn Glu Asp Gly Ser Ala Lys Phe 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 Phe Cys
85 90 95

Ala Arg Asp Leu Arg Ser Gly Arg Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
115 120 125

Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu
130 135 140

Ser Pro Gly Gly Arg Ala Thr Leu Ser Cys ^{_SL} Arg Ala Ser Gln Ser Ile
 145 150 155 160

Ser Gly Ser Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
 165 170 175

Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp
 180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
 195 200 205

Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly
 210 215 220

Ser Ser Pro Pro Thr Phe Gly Leu Gly Thr Lys Leu Glu Ile Lys
 225 230 235

<210> 909
 <211> 717
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 909
 caagtgaac tcgtggaatc tgggtggagga ctcgtgcaac ccggaggatc attgcgactc 60
 tcgtgtgcgg catccggctt taccttttca tcctactgga tgtcctgggt cagacaggcc 120
 cccgggaagg gactggaatg ggtcgcgaac atcaacgagg acggctcggc caagttctac 180
 gtggactccg tgaagggccg cttcacgatc tcacgggata acgccaagaa ttccctgtat 240
 ctgcaaatga acagcctgag ggccgaggac actgcggtgt acttctgcgc acgcgacctg 300
 aggtccggga gatactgggg acagggcacc ctcgtgaccg tgtcgagcgg aggagggggg 360
 tcgggcggcg gcggttccgg tggcggcggg agcgaaattg tgttgaccca gtcccctgga 420

_SL

accctgagcc tgtcacctgg aggacgcgcc accctgtcct gccgggccag ccagagcatc 480
tcagggtcct tcctggcttg gtaccagcag aagccgggac aggctccgag acttctgac 540
tacggcgcct cctcgcgggc gaccggaatc ccggatcggg tctccggctc gggaagcggg 600
actgacttca ctcttaccat ttccgcctg gagccggaag atttcgccgt gtactactgc 660
cagcagtacg ggtcatcccc tccaaccttc ggcctgggaa ctaagctgga aatcaaa 717

<210> 910

<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 910

Gln 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 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 Asn Glu Asp Gly Ser Ala Lys Phe 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 Phe Cys
85 90 95

Ala Arg Asp Leu Arg Ser Gly Arg Tyr Trp Gly Gln Gly Thr Leu Val

100

105

_SL

110

Thr Val Ser Ser
115

<210> 911

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 911

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Gly Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Gly Ser
20 25 30

Phe 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 Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
85 90 95

Pro Thr Phe Gly Leu Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 912

<211> 483

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 912

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ala Asn Ile Asn Glu Asp Gly Ser Ala Lys Phe
65 70 75 80

Tyr Val Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Phe Cys Ala Arg Asp Leu Arg Ser Gly Arg Tyr Trp Gly
115 120 125

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
130 135 140

Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile Val Leu Thr Gln Ser Pro
145 150 155 160

_SL

Gly Thr Leu Ser Leu Ser Pro Gly Gly Arg Ala Thr Leu Ser Cys Arg
165 170 175

Ala Ser Gln Ser Ile Ser Gly Ser Phe Leu Ala Trp Tyr Gln Gln Lys
180 185 190

Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala
195 200 205

Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
210 215 220

Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr
225 230 235 240

Cys Gln Gln Tyr Gly Ser Ser Pro Pro Thr Phe Gly Leu Gly Thr Lys
245 250 255

Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
260 265 270

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
275 280 285

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
290 295 300

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
305 310 315 320

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
325 330 335

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
340 345 350

_SL

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Glu Gly Gly
355 360 365

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
370 375 380

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
385 390 395 400

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
405 410 415

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
420 425 430

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
435 440 445

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
450 455 460

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
465 470 475 480

Pro Pro Arg

<210> 913

<211> 1449

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 913

_SL

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaagtgc aactcgtgga atctgggtgga ggactcgtgc aaccggagg atcattgcga	120
ctctcgtgtg cggcatccgg ctttaccttt tcacctact ggatgtcctg ggtcagacag	180
gccccggga agggactgga atgggtcgcg aacatcaacg aggacggctc ggccaagttc	240
tacgtggact ccgtgaaggg ccgcttcacg atctcacggg ataacgcaa gaattccctg	300
tatctgcaaa tgaacagcct gagggccgag gacactgcgg tgtacttctg cgcacgcgac	360
ctgagggtccg ggagatactg gggacagggc accctcgtga ccgtgtcgag cggaggagg	420
gggtcgggcg gcggcggttc cgggtggcggc ggtagcgaat ttgtgttgac ccagtcccct	480
ggaacctga gcctgtcacc tggaggacgc gccaccctgt cctgccgggc cagccagagc	540
atctcagggt ccttcctggc ttggtaccag cagaagccgg gacaggctcc gagacttctg	600
atctacggcg cctcctcgcg ggcgaccgga atcccggatc ggttctccgg ctcggaagc	660
ggaactgact tcactcttac catttccgc ctggagccgg aagatttcgc cgtgtactac	720
tgccagcagt acgggtcatc ccctccaacc ttccgcctgg gaactaagct ggaaatcaaa	780
accactacc cagcaccgag gccaccacc ccggctccta ccatcgctc ccagcctctg	840
tccctgcgtc cggaggcatg tagaccgca gctgggtggg ccgtgcatac ccgggtctt	900
gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgcg ggctctgtg	960
ctttcactcg tgatcactct ttactgtaag cgcggtcgga agaagctgct gtacatcttt	1020
aagcaacct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcatgccgg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgagat	1140
gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcaaaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320
gcctatagcg agattggtat gaaaggggaa cgcaagag gcaaaggcca cgacggactg	1380
taccagggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440

ccgcctcgg

1449

<210> 914

<211> 245

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 914

Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Arg Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Pro Val Arg Ser Gly
20 25 30

Ser His Tyr Trp Asn Trp Ile Arg Gln Pro Pro Gly Arg Gly Leu Glu
35 40 45

Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser
50 55 60

Leu Glu Asn Arg Val Thr Ile Ser Ile Asp Thr Ser Asn Asn His Phe
65 70 75 80

Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Leu Tyr Phe
85 90 95

Cys Ala Arg Gly Thr Ala Thr Phe Asp Trp Asn Phe Pro Phe Asp Ser
100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Gly Ser Gly Gly Ser Asp Ile Gln Met Thr Gln
130 135 140

_SL

Ser Pro Ser Ser Leu Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr
145 150 155 160

Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Asn Trp Tyr Gln Gln
165 170 175

Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Ser Leu
180 185 190

Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
195 200 205

Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr
210 215 220

Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp Thr Phe Gly Gln Gly Thr
225 230 235 240

Lys Leu Glu Ile Lys
245

<210> 915
<211> 735
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 915
gaagtgaac tccaacaatc cgggtccagga ctcgtcagac cctccgaaac tctctcgctt 60
acatgcactg tgtccggcgg ccctgtgcgg tccggctctc attactggaa ctggattcgc 120
cagcccccg gacgcggact ggagtggatc ggctacatct attactcggg gtcgactaac 180
tacaacccga gcctggaaaa tagagtgacc atctcaatcg acacgtccaa caaccattc 240

_SL

tcgctgaagt tgcctccgt gactgccgcc gatactgccc tgtacttctg tgctcgcgga 300
accgccacct tcgactggaa cttccctttt gactcatggg gccaggggac ctttgtgacc 360
gtgtccagcg gaggaggagg ctccggtggt ggcgggagcg gtagcggcgg aagcgacatc 420
cagatgaccc agtcaccgtc ctcgctgtcc gcatccattg gggatcgggt cactattact 480
tgccgggctg cccagtccat ctcgtcctac ctgaactggt atcagcagaa gccagggaaa 540
gcccccaagc tgctgatcta cgcggccagc agcctgcagt caggagtgcc ttcaagggtt 600
agcggcagcg gatcgggaac cgacttcacc ctgaccattt cctccctcca acccgaggat 660
ttcgccacct actactgcca gcagtcctac tccaccccgt ggaccttcgg acaggaacc 720
aagctggaga tcaag 735

<210> 916

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 916

Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Arg Pro Ser Glu
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Pro Val Arg Ser Gly
20 25 30

Ser His Tyr Trp Asn Trp Ile Arg Gln Pro Pro Gly Arg Gly Leu Glu
35 40 45

Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser
50 55 60

Leu Glu Asn Arg Val Thr Ile Ser Ile Asp Thr Ser Asn Asn His Phe

65		70		<u>SL</u> 75		80									
Ser	Leu	Lys	Leu	Ser	Ser	Val	Thr	Ala	Ala	Asp	Thr	Ala	Leu	Tyr	Phe
				85					90					95	
Cys	Ala	Arg	Gly	Thr	Ala	Thr	Phe	Asp	Trp	Asn	Phe	Pro	Phe	Asp	Ser
			100					105					110		
Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser					
			115					120							

<210> 917
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source
 <223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 917
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ile 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 Trp
 85 90 95

_SL

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 918

<211> 489

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 918

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu
20 25 30

Val Arg Pro Ser Glu Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly
35 40 45

Pro Val Arg Ser Gly Ser His Tyr Trp Asn Trp Ile Arg Gln Pro Pro
50 55 60

Gly Arg Gly Leu Glu Trp Ile Gly Tyr Ile Tyr Tyr Ser Gly Ser Thr
65 70 75 80

Asn Tyr Asn Pro Ser Leu Glu Asn Arg Val Thr Ile Ser Ile Asp Thr
85 90 95

Ser Asn Asn His Phe Ser Leu Lys Leu Ser Ser Val Thr Ala Ala Asp
100 105 110

Thr Ala Leu Tyr Phe Cys Ala Arg Gly Thr Ala Thr Phe Asp Trp Asn
115 120 125

_SL

Phe Pro Phe Asp Ser Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
130 135 140

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Ser Gly Gly Ser Asp
145 150 155 160

Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ile Gly Asp
165 170 175

Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu
180 185 190

Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
195 200 205

Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
210 215 220

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
225 230 235 240

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp Thr
245 250 255

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Thr Thr Thr Pro Ala Pro
260 265 270

Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
275 280 285

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
290 295 300

Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
305 310 315 320

_SL

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys
325 330 335

Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg
340 345 350

Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro
355 360 365

Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser
370 375 380

Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu
385 390 395 400

Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg
405 410 415

Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln
420 425 430

Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr
435 440 445

Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp
450 455 460

Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala
465 470 475 480

Leu His Met Gln Ala Leu Pro Pro Arg
485

<210> 919

<211> 1467

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 919

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aactccaaca atccgggtcca ggactcgtca gaccctccga aactctctcg	120
cttacatgca ctgtgtccgg cggccctgtg cgggtccggct ctcattactg gaactggatt	180
cgccagcccc cgggacgcgg actggagtgg atcggttaca tctattactc ggggtcgact	240
aactacaacc cgagcctgga aaatagagtg accatctcaa tcgacacgtc caacaaccac	300
ttctcgctga agttgtcctc cgtgactgcc gccgatactg ccctgtactt ctgtgctcgc	360
ggaaccgcca ctttcgactg gaacttcctt ttgactcat ggggccaggg gacccttggtg	420
accgtgtcca gcggaggagg aggctccggt ggtggcggga gcggtagcgg cggaagcgac	480
atccagatga ccagtcacc gtcctcgctg tccgcatcca ttggggatcg ggtcactatt	540
acttgccggg cgtcccagtc catctcgctc tacctgaact ggtatcagca gaagccaggg	600
aaagcccca agctgctgat ctacgcggcc agcagcctgc agtcaggagt gccttcaagg	660
tttagcggca gcggatcggg aaccgacttc accctgacca ttctctccct ccaaccgag	720
gatttcgcca cctactactg ccagcagtcc tactccaccc cgtggacctt cggacaggga	780
accaagctgg agatcaagac cactaccca gcaccgaggc caccacccc ggctcctacc	840
atgcctccc agcctctgtc cctgcgtccg gaggcagtga gaccgcagc tgggtggggcc	900
gtgcataccc ggggtcttga cttgcctgc gatattctaca ttggggcccc tctggctggt	960
acttgccggg tcctgctgct ttactcgtg atcactcttt actgtaagcg cggtcggaag	1020
aagctgctgt acatcttta gcaacccttc atgaggcctg tgcagactac tcaagaggag	1080
gacggctgtt catgccggtt cccagaggag gaggaaggcg gctgcgaact gcgcgtgaaa	1140
ttcagccgca gcgcagatgc tccagcctac aagcaggggc agaaccagct ctacaacgaa	1200

						_SL	
ctcaatcttg	gtcggagaga	ggagtacgac	gtgctggaca	agcggagagg	acgggaccca		1260
gaaatgggcg	ggaagccgcg	cagaaagaat	ccccaagagg	gcctgtacaa	cgagctccaa		1320
aaggataaga	tggcagaagc	ctatagcgag	attggtatga	aaggggaacg	cagaagaggc		1380
aaaggccacg	acggactgta	ccagggactc	agcaccgcca	ccaaggacac	ctatgacgct		1440
cttcacatgc	aggccctgcc	gcctcgg					1467

$\langle 210 \rangle$ 920

<212> PRT

<213> Artificial Sequence

 $\langle 220 \rangle$

```
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"
```

<400> 920

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20 25 30

Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Ser Ile Ser Ser Ser Ser Ser Tyr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95

Ala Arg Asp Pro Ser Ser Ser Gly Ser Tyr Tyr Met Glu Asp Ser Tyr
100 105 110

_SL

Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
130 135 140

Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys
145 150 155 160

Thr Val Thr Ile Ser Cys Thr Gly Ser Ser Gly Ser Ile Ala Ser Asn
165 170 175

Tyr Val Gln Trp Tyr Gln Gln Arg Pro Gly Ser Ala Pro Thr Thr Val
180 185 190

Ile Tyr Glu Asp Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
195 200 205

Gly Ser Ile Asp Ser Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly
210 215 220

Leu Lys Thr Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser
225 230 235 240

Ser Asn Gln Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
245 250 255

<210> 921

<211> 765

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

_SL

<400> 921

```
gaagtgcaat tgggtggaatc tggaggagga cttgtgaaac ctggtggaag cctgagactt      60
tcctgtgcgg cctcgggatt cactttctcc tcctactcca tgaactgggt cagacaggcc      120
cctgggaagg gactggaatg ggtgtcatcc atctcctcct catcgtcgta catctactac      180
gccgatagcg tgaaggggcg gttcaccatt tcccgggaca acgctaagaa cagcctctat      240
ctgcaaatga attccctccg cgccgaggac actgccgtgt actactgcgc gagggacccc      300
tcatcaagcg gcagctacta catggaggac tcgtattact acggaatgga cgtctggggc      360
cagggaaacca ctgtgacggt gtcctccggt ggagggggct ccggggggcg gggatctggc      420
ggaggaggct ccaacttcat gctgaccag ccgcactccg tgtccgaaag ccccggaaag      480
accgtgacaa tttcctgcac cgggtcctcc ggctcgatcg catcaaacta cgtgcagtgg      540
taccagcagc gcccgggcag cgccccacc actgtcatct acgaggataa ccagcggccg      600
tcgggtgtcc cagaccggtt ttccggttcg atcgatagca gcagcaacag cgcctccctg      660
accatttccg gcctcaagac cgaggatgag gctgactact actgccagtc gtatgactcc      720
tcgaaccaag tgggtgttcgg tggcggcacc aagctgactg tgctg                        765
```

<210> 922

<211> 129

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 922

```
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 Ser Tyr
20           25           30
```

```
Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
```


_SL

Ile Tyr Glu Asp Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Ile Asp Ser Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly
65 70 75 80

Leu Lys Thr Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser
85 90 95

Ser Asn Gln Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
100 105 110

<210> 924

<211> 499

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 924

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

Gly Leu Glu Trp Val Ser Ser Ile Ser Ser Ser Ser Tyr Ile Tyr
65 70 75 80

_SL

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Pro Ser Ser Ser Gly Ser Tyr Tyr
115 120 125

Met Glu Asp Ser Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr
130 135 140

Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
145 150 155 160

Gly Gly Gly Gly Ser Asn Phe Met Leu Thr Gln Pro His Ser Val Ser
165 170 175

Glu Ser Pro Gly Lys Thr Val Thr Ile Ser Cys Thr Gly Ser Ser Gly
180 185 190

Ser Ile Ala Ser Asn Tyr Val Gln Trp Tyr Gln Gln Arg Pro Gly Ser
195 200 205

Ala Pro Thr Thr Val Ile Tyr Glu Asp Asn Gln Arg Pro Ser Gly Val
210 215 220

Pro Asp Arg Phe Ser Gly Ser Ile Asp Ser Ser Ser Asn Ser Ala Ser
225 230 235 240

Leu Thr Ile Ser Gly Leu Lys Thr Glu Asp Glu Ala Asp Tyr Tyr Cys
245 250 255

Gln Ser Tyr Asp Ser Ser Asn Gln Val Val Phe Gly Gly Gly Thr Lys
260 265 270

_SL

Leu Thr Val Leu Thr Thr Thr Pro Ala Pro Arg Pro Pro Thr Pro Ala
275 280 285

Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu Arg Pro Glu Ala Cys Arg
290 295 300

Pro Ala Ala Gly Gly Ala Val His Thr Arg Gly Leu Asp Phe Ala Cys
305 310 315 320

Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly Thr Cys Gly Val Leu Leu
325 330 335

Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys Arg Gly Arg Lys Lys Leu
340 345 350

Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg Pro Val Gln Thr Thr Gln
355 360 365

Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro Glu Glu Glu Gly Gly
370 375 380

Cys Glu Leu Arg Val Lys Phe Ser Arg Ser Ala Asp Ala Pro Ala Tyr
385 390 395 400

Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu Leu Asn Leu Gly Arg Arg
405 410 415

Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg Gly Arg Asp Pro Glu Met
420 425 430

Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln Glu Gly Leu Tyr Asn Glu
435 440 445

Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile Gly Met Lys
450 455 460

_SL

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
465 470 475 480

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
485 490 495

Pro Pro Arg

<210> 925

<211> 1497

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 925

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aattggtgga atctggagga ggacttgtga aacctggtgg aagcctgaga	120
ctttcctgtg cggcctcggg attcactttc tcctcctact ccatgaactg ggtcagacag	180
gccccctggga agggactgga atgggtgtca tccatctcct cctcatcgtc gtacatctac	240
tacgccgata gcgtgaaggg gcggttcacc atttcccggg acaacgctaa gaacagcctc	300
tatctgcaaa tgaattccct ccgcgccgag gacactgccg tgtactactg cgcgaggggac	360
ccctcatcaa gcggcagcta ctacatggag gactcgtatt actacggaat ggacgtctgg	420
ggccaggga ccaactgtgac ggtgtcctcc ggtggagggg gctccggggg cgggggatct	480
ggcggaggag gctccaactt catgctgacc cagccgcact ccgtgtccga aagccccgga	540
aagaccgtga caatttcctg caccgggtcc tccggctcga tcgcatcaaa ctacgtgcag	600
tggtaccagc agcgccccgg cagcgcccc accactgtca tctacgagga taaccagcgg	660
ccgtcgggtg tcccagaccg gttttccggt tcgatcgata gcagcagcaa cagcgctcc	720

_SL

ctgaccat	ttt ccggcctcaa gaccgaggat gaggctgact actactgcc	gtcgtatgac	780
tcctcgaacc	aagtgggtgtt cggtggcggc accaagctga ctgtgctgac cactacccca		840
gcaccgaggc	cacccacccc ggctcctacc atcgctctccc agcctctgtc cctgcgtccg		900
gaggcatgta	gacccgcagc tgggtggggcc gtgcataccc ggggtcttga cttcgcctgc		960
gatatctaca	tttgggcccc tctggctggg acttgcgggg tcctgctgct ttcactcgtg		1020
atcactcttt	actgtaagcg cggtcggaag aagctgctgt acatcttta gcaacccttc		1080
atgaggcctg	tgcagactac tcaagaggag gacggctgtt catgccgggt cccagaggag		1140
gaggaaggcg	gctgcgaact gcgcgtgaaa ttcagccgca gcgcagatgc tccagcctac		1200
aagcaggggc	agaaccagct ctacaacgaa ctcaatcttg gtcggagaga ggagtacgac		1260
gtgctggaca	agcggagagg acgggaccca gaaatgggcg ggaagccgcg cagaaagaat		1320
ccccaagagg	gcctgtacaa cgagctcaa aaggataaga tggcagaagc ctatagcgag		1380
attggtatga	aaggggaacg cagaagaggc aaaggccacg acggactgta ccagggactc		1440
agcaccgcca	ccaaggacac ctatgacgct cttcacatgc aggccctgcc gcctcgg		1497

<210> 926

<211> 239

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 926

Gln	Val	Asn	Leu	Arg	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	Phe	Ser	Ser	Tyr
			20					25					30		

Glu	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			

_SL

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95

Ala Arg Glu Ala Leu Gly Ser Ser Trp Glu Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser
130 135 140

Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp
145 150 155 160

Ile Ser Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro
165 170 175

Lys Leu Leu Ile Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser
180 185 190

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser
195 200 205

Ser Leu Gln Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp
210 215 220

Asn Leu Pro Leu Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
225 230 235

_SL

<210> 927
<211> 717
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 927
caagtgaacc tgagagaaag cggcggagga cttgtgcaac ctggaggaag cctgagactg 60
tcatgtgccg cgtccggctt caccttctcg tcctacgaga tgaactgggt ccgccaggca 120
ccgggcaaag gactggaatg ggtgtcctac atttcctcgt ccgggtccac catctattac 180
gccgactccg tgaagggacg gttcaccatc tcccgggaca acgccaagaa ctccctctac 240
ctccaaatga actcactgag ggagaggac actgcggtct actactgcgc ccgcgaagct 300
ttgggtagct cctgggagtg gggccaggga accactgtga ccgtgtcctc ggggtggaggg 360
ggctccggtg gcgggggttc aggggggtggc ggaagcgata tccagatgac tcagtcacca 420
agctccctga gcgcctcagt gggagatcgg gtcacaatca cgtgccaggc gtcccaggac 480
atttctaact acctcaattg gtaccagcag aagccgggga agggccccc aa gcttctgatc 540
tacgatgcct ccaacctgga aaccggcgtg ccctcccgct tctcgggatc gggcagcggc 600
actgacttca cctttaccat ctcgccctg caacctgagg acatcgccac ctattactgc 660
cagcagtacg ataacctccc gctgactttc ggaggcggaa ctaagctgga gattaag 717

<210> 928
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

_SL

<400> 928

Gln Val Asn Leu Arg 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 Phe Ser Ser Tyr
20 25 30

Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
85 90 95

Ala Arg Glu Ala Leu Gly Ser Ser Trp Glu Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser
115

<210> 929

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 929

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 Gln Ala Ser ^{SL}Gln Asp Ile Ser 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 Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80

Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Asn Leu Pro Leu
 85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
 100 105

<210> 930

<211> 483

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 930

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
 1 5 10 15

His Ala Ala Arg Pro Gln Val Asn Leu Arg Glu Ser Gly Gly Gly Leu
 20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
 35 40 45

Thr Phe Ser Ser Tyr Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys

50					55					_SL 60					
Gly 65	Leu	Glu	Trp	Val	Ser 70	Tyr	Ile	Ser	Ser	Ser 75	Gly	Ser	Thr	Ile	Tyr 80
Tyr	Ala	Asp	Ser	Val 85	Lys	Gly	Arg	Phe	Thr 90	Ile	Ser	Arg	Asp	Asn 95	Ala
Lys	Asn	Ser	Leu 100	Tyr	Leu	Gln	Met	Asn 105	Ser	Leu	Arg	Ala	Glu 110	Asp	Thr
Ala	Val	Tyr 115	Tyr	Cys	Ala	Arg	Glu 120	Ala	Leu	Gly	Ser 125	Ser	Trp	Glu	Trp
Gly 130	Gln	Gly	Thr	Thr	Val	Thr 135	Val	Ser	Ser	Gly	Gly 140	Gly	Gly	Ser	Gly
Gly 145	Gly	Gly	Ser	Gly	Gly 150	Gly	Gly	Ser	Asp	Ile 155	Gln	Met	Thr	Gln	Ser 160
Pro	Ser	Ser	Leu	Ser 165	Ala	Ser	Val	Gly	Asp 170	Arg	Val	Thr	Ile	Thr 175	Cys
Gln	Ala	Ser	Gln 180	Asp	Ile	Ser	Asn	Tyr 185	Leu	Asn	Trp	Tyr	Gln 190	Gln	Lys
Pro	Gly	Lys 195	Ala	Pro	Lys	Leu	Leu 200	Ile	Tyr	Asp	Ala	Ser 205	Asn	Leu	Glu
Thr	Gly 210	Val	Pro	Ser	Arg	Phe 215	Ser	Gly	Ser	Gly	Ser 220	Gly	Thr	Asp	Phe
Thr 225	Phe	Thr	Ile	Ser	Ser 230	Leu	Gln	Pro	Glu	Asp 235	Ile	Ala	Thr	Tyr	Tyr 240
Cys	Gln	Gln	Tyr	Asp	Asn	Leu	Pro	Leu	Thr	Phe	Gly	Gly	Gly	Thr	Lys

435

440

_SL

445

Gly Glu Arg Arg Arg Gly Lys Gly His Asp Gly Leu Tyr Gln Gly Leu
 450 455 460

Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu His Met Gln Ala Leu
 465 470 475 480

Pro Pro Arg

<210> 931

<211> 1449

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polynucleotide"

<400> 931

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
ccccaaagtga acctgagaga aagcggcgga ggacttgtgc aacctggagg aagcctgaga	120
ctgtcatgtg ccgcgtccgg cttcaccttc tcgtcctacg agatgaactg ggtccgccag	180
gcaccgggca aaggactgga atgggtgtcc tacatttcct cgtccgggtc caccatctat	240
tacgccgact ccgtgaaggg acggttcacc atctcccggg acaacgcaa gaactccctc	300
tacctcaaaa tgaactcact gagggcagag gacactgcgg tctactactg cgcccgcgaa	360
gctttgggta gtcctggga gtggggccag ggaaccactg tgaccgtgtc ctcgggtgga	420
gggggctccg gtggcggggg ttcagggggg ggcggaagcg atatccagat gactcagtca	480
ccaagctccc tgagcgctc agtgggagat cgggtcacia tcacgtgcca ggcgtcccag	540
gacatttcta actacctcaa ttggtaccag cagaagccgg ggaaggcccc caagcttctg	600
atctacgatg cctccaacct ggaaaccggc gtgccctccc gcttctcggg atcgggcagc	660

_SL

ggcactgact tcacctttac catctcgtcc ctgcaacctg aggacatcgc cacctattac	720
tgccagcagt acgataacct cccgctgact ttcggaggcg gaactaagct ggagattaag	780
accactaccc cagcaccgag gccacccacc ccggctccta ccatcgcctc ccagcctctg	840
tccctgcgtc cggaggcatg tagacccgca gctgggtgggg ccgtgcatac ccgggggtctt	900
gacttcgcct gcgatatcta catttgggcc cctctggctg gtacttgagg ggtcctgctg	960
ctttcactcg tgatcactct ttactgtaag cgcggctcga agaagctgct gtacatcttt	1020
aagcaaccct tcatgaggcc tgtgcagact actcaagagg aggacggctg ttcatgccgg	1080
ttcccagagg aggaggaagg cggctgcgaa ctgcgcgtga aattcagccg cagcgcagat	1140
gctccagcct acaagcaggg gcagaaccag ctctacaacg aactcaatct tggtcggaga	1200
gaggagtacg acgtgctgga caagcggaga ggacgggacc cagaaatggg cgggaagccg	1260
cgcagaaaga atccccaaga gggcctgtac aacgagctcc aaaaggataa gatggcagaa	1320
gcctatagcg agattggtat gaaaggggaa cgcagaagag gcaaaggcca cgacggactg	1380
taccagggac tcagcaccgc caccaaggac acctatgacg ctcttcacat gcaggccctg	1440
ccgcctcgg	1449

<210> 932

<211> 247

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 932

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Ser	Gly	Ala
1				5					10					15	

Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Pro	Phe	Thr	Gly	Tyr
			20					25					30		

Tyr Ile Gln Trp Val Arg Gln Ala Pro Gly ^{SL}Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Ile Asp Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Ser Asp Ser Tyr Gly Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln
 100 105 110

Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met
 130 135 140

Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr
 145 150 155 160

Phe Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Ala Leu Ala Trp Tyr
 165 170 175

Gln Gln Lys Pro Gly Lys Pro Pro Lys Leu Leu Ile Tyr Asp Ala Ser
 180 185 190

Ser Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
 195 200 205

Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala
 210 215 220

Thr	Tyr	Tyr	Cys	Gln	Gln	Phe	Asn	Asn	Tyr	<u>SL</u> Pro	Leu	Thr	Phe	Gly	Gly
225					230					235					240

Gly Thr Lys Val Glu Ile Lys
245

<210> 933
<211> 741
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 933
caagtgcaac tcgtccagtc cgggtgcagaa gtgaaaaaga gcggagcctc agtgaaagtg 60
tcctgcaagg cctccggtta ccccttcact ggatactaca ttcagtgggt ccgccaagcc 120
ccgggacagg gtctggagtg gatgggggtgg attgacccta actcgggaaa tacgggatac 180
gcgcagaagt tccagggccg cgtgaccatg accaggaaca cctcgatcag caccgcctac 240
atggaactgt cctccctgcg gtcggaggat actgccgtgt actactgcgc ctccgattcc 300
tatgggtact actacggaat ggacgtctgg ggacagggca ccctcgtgac cgtgtcctcg 360
ggaggcggag ggagcggcgg ggggtggatcg ggaggaggcg gctccggcgg cggcggtagc 420
gacatccaga tgaccagtc accatcaagc cttagcgcct ccgtgggcga cagagtgaca 480
ttcacttgtc gggcgtccca gggaatctcc tccgctctgg cttggtatca gcagaagcct 540
gggaagcctc cgaagctgtt gatctacgac gcgagcagcc tggaatcagg ggtgccctcc 600
cggttttccg ggtccggttc tggcaccgat ttcaccctga ccatttcgtc cctccaaccc 660
gaggacttcg ccacttacta ctgccagcag ttcaacaact acccgctgac cttcggagga 720
ggcactaagg tcgagatcaa g 741

<210> 934
<211> 120

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 934

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Ser Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Pro Phe Thr Gly Tyr
20 25 30

Tyr Ile Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Trp Ile Asp Pro Asn Ser Gly Asn Thr Gly Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser Ile Ser Thr Ala Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Ser Asp Ser Tyr Gly Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 935

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<221> source

_SL

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 935

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Phe Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Ala
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Pro Pro Lys Leu Leu Ile
35 40 45

Tyr Asp Ala Ser Ser Leu Glu 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 Phe Asn Asn Tyr Pro Leu
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 936

<211> 491

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 936

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val

20 25 — 30

Pro Phe Thr Gly Tyr Tyr Ile Gln Trp Val Arg Gln Ala Pro Gly Gln
50 55 60

Gly 65 Leu Glu Trp Met Gly 70 Trp Ile Asp Pro Asn 75 Ser Gly Asn Thr Gly 80

Tyr Ala Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asn Thr Ser
85 90 95

Ile Ser Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Ser Asp Ser Tyr Gly Tyr Tyr Tyr Gly Met
115 120 125

Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly
130 135 140

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly
145 150 155 160

Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
165 170 175

Gly Asp Arg Val Thr Phe Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser
180 185 190

Ala Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Pro Pro Lys Leu Leu
195 200 205

Ile Tyr Asp Ala Ser Ser Leu Glu Ser Gly Val Pro Ser Arg Phe Ser

[illegible]

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<210> 937
<211> 1473
<212> DNA
<213> Artificial Sequence
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<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
      polynucleotide"
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<400>	937					
atggccctcc	ctgtcaccgc	cctgctgctt	ccgctggctc	ttctgctcca	cgccgctcgg	60
ccccaagtgc	aactcgtcca	gtccggtgca	gaagtgaaaa	agagcggagc	ctcagtgaaa	120
gtgtcctgca	aggcctccgg	ttacccttc	actggatact	acattcagtg	gggccgcaa	180
gccccgggac	agggtctgga	gtggatgggg	tggattgacc	ctaactcggg	aaatacggga	240
tacgcgcaga	agttccaggg	ccgcgtgacc	atgaccagga	acacctcgat	cagcaccgcc	300
tacatggaac	tgtcctccct	gcggtcggag	gatactgccg	tgtactactg	cgctccgat	360
tcctatgggt	actactacgg	aatggacgtc	tggggacagg	gcaccctcgt	gaccgtgtcc	420

_SL

tcgggaggcg gagggagcgg cgggggtgga tcgggaggag gcggctccgg cggcggcgg	480
agcgacatcc agatgaccca gtcaccatca agccttagcg cctccgtggg cgacagagtg	540
acattcactt gtcgggcgtc ccagggaatc tcctccgctc tggcttggtg tcagcagaag	600
cctgggaagc ctccgaagct gttgatctac gacgcgagca gcctggaatc aggggtgccc	660
tcccggtttt ccgggtccgg ttctggcacc gatttcaccc tgaccatttc gtccctccaa	720
cccgaggact tcgccactta ctactgccag cagttcaaca actacccgct gaccttcgga	780
ggaggcacta aggtcgagat caagaccact accccagcac cgaggccacc cccccggct	840
cctaccatcg cctcccagcc tctgtccctg cgtccggagg catgtagacc cgcagctggt	900
ggggccgtgc ataccggggg tcttgacttc gcctgcgata tctacatttg ggccccctg	960
gctggtactt gcgggggtcct gctgctttca ctcgtgatca ctctttactg taagcgcggt	1020
cggaagaagc tgctgtacat ctttaagcaa cccttcatga ggctgtgca gactactcaa	1080
gaggaggacg gctgttcatg ccggttccca gaggaggagg aaggcggctg cgaactgcgc	1140
gtgaaattca gccgcagcgc agatgctcca gcctacaagc aggggcagaa ccagctctac	1200
aacgaactca atcttggtcg gagagaggag tacgacgtgc tggacaagcg gagaggacgg	1260
gaccagaaa tgggcgggaa gccgcgcaga aagaatcccc aagagggcct gtacaacgag	1320
ctccaaaagg ataagatggc agaagcctat agcgagattg gtatgaaagg ggaacgcaga	1380
agaggcaaag gccacgacgg actgtaccag ggactcagca ccgccaccaa ggacacctat	1440
gacgtcttc acatgcaggc cctgccgcct cgg	1473

<210> 938

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 938

Glu Val Gln Leu Val Glu Ser Gly Gly Gly ^{SL}Leu Val Gln Pro 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
 Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr 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 Val Tyr Tyr Cys
 85 90 95
 Ala Arg Asp Pro Tyr Ser Ser Ser Trp His Asp Ala Phe Asp Ile Trp
 100 105 110
 Gly Gln Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 939

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 939

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 Val Ser Ser Ser

_SL

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 Ser Arg Leu Glu
65 70 75 80

Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
85 90 95

Leu Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys
100 105

<210> 940

<211> 489

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 940

Met Ala Leu Pro Val Thr Ala Leu Leu Leu Pro Leu Ala Leu Leu Leu
1 5 10 15

His Ala Ala Arg Pro Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu
20 25 30

Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe
35 40 45

Thr Phe Ser Ser Tyr Glu Met Asn Trp Val Arg Gln Ala Pro Gly Lys
50 55 60

_SL

Gly Leu Glu Trp Val Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr
65 70 75 80

Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala
85 90 95

Lys Asn Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr
100 105 110

Ala Val Tyr Tyr Cys Ala Arg Asp Pro Tyr Ser Ser Ser Trp His Asp
115 120 125

Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly
130 135 140

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Ile
145 150 155 160

Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg
165 170 175

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu
180 185 190

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
195 200 205

Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser
210 215 220

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
225 230 235 240

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro Leu Thr
245 250 255

_SL

Phe Gly Gly Gly Thr Lys Val Asp Ile Lys Thr Thr Thr Pro Ala Pro
260 265 270

Arg Pro Pro Thr Pro Ala Pro Thr Ile Ala Ser Gln Pro Leu Ser Leu
275 280 285

Arg Pro Glu Ala Cys Arg Pro Ala Ala Gly Gly Ala Val His Thr Arg
290 295 300

Gly Leu Asp Phe Ala Cys Asp Ile Tyr Ile Trp Ala Pro Leu Ala Gly
305 310 315 320

Thr Cys Gly Val Leu Leu Leu Ser Leu Val Ile Thr Leu Tyr Cys Lys
325 330 335

Arg Gly Arg Lys Lys Leu Leu Tyr Ile Phe Lys Gln Pro Phe Met Arg
340 345 350

Pro Val Gln Thr Thr Gln Glu Glu Asp Gly Cys Ser Cys Arg Phe Pro
355 360 365

Glu Glu Glu Glu Gly Gly Cys Glu Leu Arg Val Lys Phe Ser Arg Ser
370 375 380

Ala Asp Ala Pro Ala Tyr Lys Gln Gly Gln Asn Gln Leu Tyr Asn Glu
385 390 395 400

Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu Asp Lys Arg Arg
405 410 415

Gly Arg Asp Pro Glu Met Gly Gly Lys Pro Arg Arg Lys Asn Pro Gln
420 425 430

Glu Gly Leu Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr
435 440 445

_SL

Ser Glu Ile Gly Met Lys Gly Glu Arg Arg Arg Gly Lys Gly His Asp
450 455 460

Gly Leu Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala
465 470 475 480

Leu His Met Gln Ala Leu Pro Pro Arg
485

<210> 941

<211> 1467

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 941

atggccctcc ctgtcaccgc cctgctgctt ccgctggctc ttctgctcca cgccgctcgg	60
cccgaagtgc aactcgtgga aagcgggtgga ggtcttgtgc aacctggagg ttccttgctc	120
ctgtcatgtg cagcttccgg cttcactttc tcctcgtagc agatgaattg ggtgcggcag	180
gcgccctggaa aggggctgga atgggtgtcc tacatctcaa gctccggctc gaccatctac	240
tacgcggaca gcgtgaaggg gcggttcacg atttcgaggg acaacgcaa gaactcgctc	300
tatctgcaaa tgaactccct gagagccgag gacaccgtg tgtattactg cgccggggac	360
ccctactcct cctcatggca cgacgccttt gatatctggg gccagggaac catggtcacc	420
gtcagcagcg ggggcggagg ttccggggga gggggctccg gcggaggagg ctccgagatt	480
gtgttgactc agagcccggg taccctgtcg ctgagccccg gagagcgggc caccctttca	540
tgccgcgcca gccagtccgt gtcctcatcc tacctcgcgt ggtaccagca gaaacctggc	600
caggccccgc ggctgctgat ctacggcgcc tcctcgcgcg caaccggaat ccccgaccgg	660
ttctccgggt ctggcagcgg aaccgacttc actctcacca ttctgaggct ggagccggaa	720

_SL

gatttcgccg tgtactactg ccagcagtac ggctcctcgc cactgacttt cggcggagga 780
accaaggtcg atatcaagac cactacccca gcaccgaggc caccaccccc ggctcctacc 840
atcgctccc agcctctgtc cctgcgtccg gaggcattgta gacccgcagc tgggtggggcc 900
gtgcataccc ggggtcttga cttgcctgc gatatttaca tttgggcccc tctggctggt 960
acttgccggg tcctgctgct ttcactcgtg atcactcttt actgtaagcg cggtcgggaag 1020
aagctgctgt acatctttta gcaacccttc atgaggcctg tgcagactac tcaagaggag 1080
gacggctgtt catgccggtt cccagaggag gaggaaggcg gctgcgaact gcgcgtgaaa 1140
ttcagccgca gcgcagatgc tccagcctac aagcaggggc agaaccagct ctacaacgaa 1200
ctcaatcttg gtcggagaga ggagtacgac gtgctggaca agcggagagg acgggaccca 1260
gaaatgggcg ggaagccgcg cagaaagaat cccaagagg gcctgtacaa cgagctccaa 1320
aaggataaga tggcagaagc ctatagcgag attggtatga aaggggaaacg cagaagaggc 1380
aaaggccacg acggactgta ccagggactc agcaccgcca ccaaggacac ctatgacgct 1440
cttcacatgc aggccctgcc gcctcgg 1467

<210> 942

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 942

gagcagctga aggagtccgg gggagggtctc ttcaagccaa cggataccct gacactcacc 60
tgcacagtct ctggattctc cctcagttac tatggagtga actgggtccg ccaggctcca 120
gggaacgggc tggaatggat cggaaccatt ggtggtagtg gtgacacata ctacgcgagc 180
tgggcgaaga gccgatccac catcatcaga aacaccaacg agaacacggt gactctgaaa 240
atgaccagtc tgacagccgc ggacacggcc acctatttct gtgtgagata tgctaattatt 300

_SL

ggttatgagt actttaacgt ctgggggtcca ggcaccctgg tcaccgtctc ttca

354

<210> 943

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 943

Glu Gln Leu Lys Glu Ser Gly Gly Gly Leu Phe Lys Pro Thr Asp Thr
1 5 10 15

Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Tyr Tyr Gly
20 25 30

Val Asn Trp Val Arg Gln Ala Pro Gly Asn Gly Leu Glu Trp Ile Gly
35 40 45

Thr Ile Gly Gly Ser Gly Asp Thr Tyr Tyr Ala Ser Trp Ala Lys Ser
50 55 60

Arg Ser Thr Ile Ile Arg Asn Thr Asn Glu Asn Thr Val Thr Leu Lys
65 70 75 80

Met Thr Ser Leu Thr Ala Ala Asp Thr Ala Thr Tyr Phe Cys Val Arg
85 90 95

Tyr Ala Asn Ile Gly Tyr Glu Tyr Phe Asn Val Trp Gly Pro Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 944

_SL

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 944
ggattctccc tcagttacta tgga

24

<210> 945
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 945
Gly Phe Ser Leu Ser Tyr Tyr Gly
1 5

<210> 946
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 946
attggtggta gtggtgacac a

21

<210> 947
<211> 7
<212> PRT
<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 947

Ile Gly Gly Ser Gly Asp Thr
1 5

<210> 948

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 948

gtgagatatg ctaatattgg ttatgagtac tttaacgtc

39

<210> 949

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 949

Val Arg Tyr Ala Asn Ile Gly Tyr Glu Tyr Phe Asn Val
1 5 10

<210> 950

<211> 333

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

_SL

<400> 950
cagtttgtgc tgactcagtc gccctctgca tctgctgccc tgggagcctc ggccaagctc 60
acctgcaccc tgagcagtc ccacaagacc tacaccattg actggtatca gcagcagaaa 120
gggaaggccc ctcgctacct gatacaagtt aagagtgatg gaacctacac caaggcgacc 180
ggggtccctg atcgcttctc gggctccagc tctggggctg accgctacct gatcatcccc 240
agcgtccagg ctgatgacga agccgactac tattgtggta cagattatac cggtgggtat 300
gtgttcggcg gggggaccca gctgaccgtc aca 333

<210> 951
<211> 111
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 951
Gln Phe Val Leu Thr Gln Ser Pro Ser Ala Ser Ala Ala Leu Gly Ala
1 5 10 15

Ser Ala Lys Leu Thr Cys Thr Leu Ser Ser Ala His Lys Thr Tyr Thr
20 25 30

Ile Asp Trp Tyr Gln Gln Gln Lys Gly Lys Ala Pro Arg Tyr Leu Ile
35 40 45

Gln Val Lys Ser Asp Gly Thr Tyr Thr Lys Ala Thr Gly Val Pro Asp
50 55 60

Arg Phe Ser Gly Ser Ser Ser Gly Ala Asp Arg Tyr Leu Ile Ile Pro
65 70 75 80

Ser Val Gln Ala Asp Asp Glu Ala Asp Tyr Tyr Cys Gly Thr Asp Tyr
85 90 95

_SL

Thr Gly Gly Tyr Val Phe Gly Gly Gly Thr Gln Leu Thr Val Thr
100 105 110

<210> 952
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 952
agtgtcccaca agacctacac c

21

<210> 953
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 953
Ser Ala His Lys Thr Tyr Thr
1 5

<210> 954
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 954
gttaagagtg atggaacctta c

21

_SL

<210> 955

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 955

Val Lys Ser Asp Gly Thr Tyr

1 5

<210> 956

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 956

ggtacagatt ataccggtgg gtatgtg

27

<210> 957

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 957

Gly Thr Asp Tyr Thr Gly Gly Tyr Val

1 5

<210> 958

<211> 744

<212> DNA

<213> Artificial Sequence

_SL

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 958

ggatccgagc agctgaagga gtccggggga ggtctcttca agccaacgga taccctgaca	60
ctcacctgca cagtctctgg attctccctc agttactatg gagtgaactg ggtccgccag	120
gctccaggga acgggctgga atggatcgga accattgggtg gtagtggtga cacatactac	180
gcgagctggg cgaagagccg atccaccatc atcagaaaca ccaacgagaa cacggtgact	240
ctgaaaatga ccagtctgac agccgcggac acggccacct atttctgtgt gagatatgct	300
aatattgggtt atgagtactt taacgtctgg ggtccaggca ccctggtcac cgtctcttca	360
ggtggaggcg gttcaggcgg cggtaggctct agcggtggtg gatcgcagtt tgtgctgact	420
cagtcgccct ctgcatctgc tgccctggga gcctcggcca agctcacctg caccctgagc	480
agtgtcccaca agacctacac cattgactgg tatcagcagc agaaaggga ggccccctgc	540
tacctgatac aagttaagag tgatggaacc tacaccaagg cgaccgggggt ccctgatcgc	600
ttctcgggct ccagctctgg ggctgaccgc tacctgatca tccccagcgt ccaggctgat	660
gacgaagccg actactattg tggtagat tataccggtg ggtatgtgtt cggcgggggg	720
acccagctga ccgtcacagc tagc	744

<210> 959

<211> 744

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 959

ggatccgagc agctgaagga gtccggcgga ggctgttta agcccaccga caccctgaca	60
ctgacctgca cagtgtccgg cttcagcctg agctactatg gcgtgaactg ggtgagacag	120

_SL

gccccctggca acggactgga gtggatcggc accattggcg gcagcggaga cacctactac 180
gccagctggg ccaagtccag gagcaccatc atcagaaaca ccaacgagaa caccgtgacc 240
ctgaagatga cctccctgac agccgccgac accgccacct acttctgcgt gaggtacgcc 300
aacatcggct acgagtactt caacgtgtgg ggccctggca ccctggtgac agtgtccagc 360
ggcggaggag gaagcggcgg cggcggctcc agcggaggcg gcagccagtt tgtgctgacc 420
cagagcccta gcgcttccgc cgccctgggc gccagcgcca agctcacctg taccctgagc 480
agcggccaca agacctatac catcgactgg taccagcagc agaagggcaa ggccccagg 540
tacctgatcc aggtgaagtc cgacggcacc tacaccaaag ccaccggcgt gcccgacaga 600
tttagcggca gcagctccgg cgccgacagg tatctgatca tcccttccgt gcaggccgac 660
gacgaggccg actactactg cggaaccgac tacaccggcg gatacgtgtt cggaggcggc 720
accagctga ccgtgaccgc tagc 744

<210> 960

<211> 248

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 960

Gly Ser Glu Gln Leu Lys Glu Ser Gly Gly Gly Leu Phe Lys Pro Thr
1 5 10 15

Asp Thr Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Tyr
20 25 30

Tyr Gly Val Asn Trp Val Arg Gln Ala Pro Gly Asn Gly Leu Glu Trp
35 40 45

Ile Gly Thr Ile Gly Gly Ser Gly Asp Thr Tyr Tyr Ala Ser Trp Ala

<210> 961
<211> 244
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 961
Glu Gln Leu Lys Glu Ser Gly Gly Gly Leu Phe Lys Pro Thr Asp Thr
1 5 10 15

Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Tyr Tyr Gly
20 25 30

Val Asn Trp Val Arg Gln Ala Pro Gly Asn Gly Leu Glu Trp Ile Gly
35 40 45

Thr Ile Gly Gly Ser Gly Asp Thr Tyr Tyr Ala Ser Trp Ala Lys Ser
50 55 60

Arg Ser Thr Ile Ile Arg Asn Thr Asn Glu Asn Thr Val Thr Leu Lys
65 70 75 80

Met Thr Ser Leu Thr Ala Ala Asp Thr Ala Thr Tyr Phe Cys Val Arg
85 90 95

Tyr Ala Asn Ile Gly Tyr Glu Tyr Phe Asn Val Trp Gly Pro Gly Thr
100 105 110

Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
115 120 125

Ser Gly Gly Gly Ser Gln Phe Val Leu Thr Gln Ser Pro Ser Ala Ser
130 135 140

_SL

Ala Ala Leu Gly Ala Ser Ala Lys Leu Thr Cys Thr Leu Ser Ser Ala
145 150 155 160

His Lys Thr Tyr Thr Ile Asp Trp Tyr Gln Gln Gln Lys Gly Lys Ala
165 170 175

Pro Arg Tyr Leu Ile Gln Val Lys Ser Asp Gly Thr Tyr Thr Lys Ala
180 185 190

Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Ala Asp Arg
195 200 205

Tyr Leu Ile Ile Pro Ser Val Gln Ala Asp Asp Glu Ala Asp Tyr Tyr
210 215 220

Cys Gly Thr Asp Tyr Thr Gly Gly Tyr Val Phe Gly Gly Gly Thr Gln
225 230 235 240

Leu Thr Val Thr

<210> 962

<211> 369

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 962

cagtcagtga aggagtccga gggaggtctc ttcaagccaa cggataccct gacactcacc 60

tgcacggtct ctggattctc cctcagtaga catgcactga cctgggtccg ccaggctcca 120

gggaacgggc tggaatggat cggagccatt gataacgctg gtaccacata ctacgcgagc 180

tgggcgaaaa gccgctccac catcaccaga aacaccgacc tgcacacggt gactctgaaa 240

_SL

atgaccagtc tgacagcctc ggacacggct acctatttct gtgcgagagt cttttatgat 300
attaatagtg gttattatct ggacggcatg gacctctggg gcccagggac cctcgtcacc 360
gtctcttca 369

<210> 963

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 963

Gln Ser Val Lys Glu Ser Glu Gly Gly Leu Phe Lys Pro Thr Asp Thr
1 5 10 15

Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Arg His Ala
20 25 30

Leu Thr Trp Val Arg Gln Ala Pro Gly Asn Gly Leu Glu Trp Ile Gly
35 40 45

Ala Ile Asp Asn Ala Gly Thr Thr Tyr Tyr Ala Ser Trp Ala Lys Ser
50 55 60

Arg Ser Thr Ile Thr Arg Asn Thr Asp Leu His Thr Val Thr Leu Lys
65 70 75 80

Met Thr Ser Leu Thr Ala Ser Asp Thr Ala Thr Tyr Phe Cys Ala Arg
85 90 95

Val Phe Tyr Asp Ile Asn Ser Gly Tyr Tyr Leu Asp Gly Met Asp Leu
100 105 110

Trp Gly Pro Gly Thr Leu Val Thr Val Ser Ser

115

120

<210> 964
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 964
ggattctccc tcagtagaca tgca

24

<210> 965
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 965
Gly Phe Ser Leu Ser Arg His Ala
1 5

<210> 966
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 966
attgataacg ctggtaccac a

21

<210> 967
<211> 7

_SL

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 967

Ile Asp Asn Ala Gly Thr Thr

1 5

<210> 968

<211> 54

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic oligonucleotide"

<400> 968

gcgagagtct tttatgatat taatagtggg tattatctgg acggcatgga cctc

54

<210> 969

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic peptide"

<400> 969

Ala Arg Val Phe Tyr Asp Ile Asn Ser Gly Tyr Tyr Leu Asp Gly Met

1 5 10 15

Asp Leu

<210> 970

<211> 333

_SL

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 970

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acctgcaccc tgagcagtcg ccacaagacc tacaccattg actggtatca gcagcagcaa      120
ggggaggccc ctcggtacct gatgcaagtt aagagtgatg gaagctacac caaggggacc      180
gggggtccctg atcgcttctc gggctccagc tctggggctg accgctactt gatcatcccc      240
agcgtccagg ctgatgacga agccggctac gtttgtgggtg cagatgataa cggtgggtat      300
gtgttcggcg gagggaccca gctgaccgtc aca                                333
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<210> 971

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 971

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Gln Phe Val Leu Thr Gln Ser Pro Ser Val Ser Ala Ala Leu Gly Ala
1           5           10          15

Ser Ala Lys Leu Thr Cys Thr Leu Ser Ser Ala His Lys Thr Tyr Thr
          20          25          30

Ile Asp Trp Tyr Gln Gln Gln Gln Gly Glu Ala Pro Arg Tyr Leu Met
          35          40          45

Gln Val Lys Ser Asp Gly Ser Tyr Thr Lys Gly Thr Gly Val Pro Asp
          50          55          60
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_SL

Arg Phe Ser Gly Ser Ser Ser Gly Ala Asp Arg Tyr Leu Ile Ile Pro
65 70 75 80

Ser Val Gln Ala Asp Asp Glu Ala Gly Tyr Val Cys Gly Ala Asp Asp
85 90 95

Asn Gly Gly Tyr Val Phe Gly Gly Gly Thr Gln Leu Thr Val Thr
100 105 110

<210> 972

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 972

agtgcccaca agacctacac c

21

<210> 973

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 973

Ser Ala His Lys Thr Tyr Thr
1 5

<210> 974

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

_SL

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 974
gttaagagtg atggaagcta c

21

<210> 975
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 975
Val Lys Ser Asp Gly Ser Tyr
1 5

<210> 976
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
oligonucleotide"

<400> 976
gggtgcagatg ataacggtgg gtatgtg

27

<210> 977
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
peptide"

<400> 977

_SL

Gly Ala Asp Asp Asn Gly Gly Tyr Val
1 5

<210> 978

<211> 759

<212> DNA

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 978

ggatcccagt cagtgaagga gtccgaggga ggtctcttca agccaacgga taccctgaca	60
ctcacctgca cgggtctctgg attctccctc agtagacatg cactgacctg ggtccgccag	120
gctccaggga acgggctgga atggatcgga gccattgata acgctggtag cacatactac	180
gcgagctggg cgaaaagccg ctccaccatc accagaaaca ccgacctgca cacggtgact	240
ctgaaaatga ccagtctgac agcctcggac acggctacct atttctgtgc gagagtcttt	300
tatgatatta atagtgggta ttatctggac ggcatggacc tctggggccc agggaccctc	360
gtcaccgtct cttcaggtgg aggcgggttca ggcgggcggg gctctagcgg tgggtggatcg	420
cagtttgtgc tgactcagtc gccctctgtg tctgccgccc tgggagcctc tgccaagctc	480
acctgcaccc tgagcagtc ccacaagacc tacaccattg actggtatca gcagcagcaa	540
ggggaggccc ctcggtacct gatgcaagtt aagagtgatg gaagctacac caaggggacc	600
gggggtccctg atcgcttctc gggctccagc tctggggctg accgctactt gatcatcccc	660
agcgtccagg ctgatgacga agccggctac gtttgtgggtg cagatgataa cggtgggtat	720
gtgttcggcg gagggaccca gctgaccgtc acagctagc	759

<210> 979

<211> 759

<212> DNA

<213> Artificial Sequence

<220>

_SL

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 979

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ggatcccagt ccgtgaagga gagcgagggc ggcctgttca agcccaccga caccctgacc      60
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gcccctggca acggcctgga atggatcggc gccatcgaca acgccggcac cacctactac      180
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ggcgtgcctg acaggttcag cggcagctcc agcggagccg acaggtacct gatcatcccc      660
tccgtgcagg ccgacgacga ggctggctac gtgtgtggcg ccgacgacaa tggcggctac      720
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<210> 980

<211> 253

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic polypeptide"

<400> 980

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Gly Ser Gln Ser Val Lys Glu Ser Glu Gly Gly Leu Phe Lys Pro Thr
1           5           10          15
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Asp Thr Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Arg
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_SL

20	25	30
His Ala Leu Thr Trp Val Arg Gln Ala Pro Gly Asn Gly Leu Glu Trp		
35	40	45
Ile Gly Ala Ile Asp Asn Ala Gly Thr Thr Tyr Tyr Ala Ser Trp Ala		
50	55	60
Lys Ser Arg Ser Thr Ile Thr Arg Asn Thr Asp Leu His Thr Val Thr		
65	70	75
Leu Lys Met Thr Ser Leu Thr Ala Ser Asp Thr Ala Thr Tyr Phe Cys		
85	90	95
Ala Arg Val Phe Tyr Asp Ile Asn Ser Gly Tyr Tyr Leu Asp Gly Met		
100	105	110
Asp Leu Trp Gly Pro Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly		
115	120	125
Gly Ser Gly Gly Gly Gly Ser Ser Gly Gly Gly Ser Gln Phe Val Leu		
130	135	140
Thr Gln Ser Pro Ser Val Ser Ala Ala Leu Gly Ala Ser Ala Lys Leu		
145	150	155
Thr Cys Thr Leu Ser Ser Ala His Lys Thr Tyr Thr Ile Asp Trp Tyr		
165	170	175
Gln Gln Gln Gln Gly Glu Ala Pro Arg Tyr Leu Met Gln Val Lys Ser		
180	185	190
Asp Gly Ser Tyr Thr Lys Gly Thr Gly Val Pro Asp Arg Phe Ser Gly		
195	200	205
Ser Ser Ser Gly Ala Asp Arg Tyr Leu Ile Ile Pro Ser Val Gln Ala		

210

215

_SL

220

Asp Asp Glu Ala Gly Tyr Val Cys Gly Ala Asp Asp Asn Gly Gly Tyr
 225 230 235 240

Val Phe Gly Gly Gly Thr Gln Leu Thr Val Thr Ala Ser
 245 250

<210> 981

<211> 249

<212> PRT

<213> Artificial Sequence

<220>

<221> source

<223> /note="Description of Artificial Sequence: Synthetic
 polypeptide"

<400> 981

Gln Ser Val Lys Glu Ser Glu Gly Gly Leu Phe Lys Pro Thr Asp Thr
 1 5 10 15

Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Arg His Ala
 20 25 30

Leu Thr Trp Val Arg Gln Ala Pro Gly Asn Gly Leu Glu Trp Ile Gly
 35 40 45

Ala Ile Asp Asn Ala Gly Thr Thr Tyr Tyr Ala Ser Trp Ala Lys Ser
 50 55 60

Arg Ser Thr Ile Thr Arg Asn Thr Asp Leu His Thr Val Thr Leu Lys
 65 70 75 80

Met Thr Ser Leu Thr Ala Ser Asp Thr Ala Thr Tyr Phe Cys Ala Arg
 85 90 95

Val Phe Tyr Asp Ile Asn Ser Gly Tyr Tyr Leu Asp Gly Met Asp Leu
 100 105 110

_SL

Trp Gly Pro Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser
115 120 125

Gly Gly Gly Gly Ser Ser Gly Gly Gly Ser Gln Phe Val Leu Thr Gln
130 135 140

Ser Pro Ser Val Ser Ala Ala Leu Gly Ala Ser Ala Lys Leu Thr Cys
145 150 155 160

Thr Leu Ser Ser Ala His Lys Thr Tyr Thr Ile Asp Trp Tyr Gln Gln
165 170 175

Gln Gln Gly Glu Ala Pro Arg Tyr Leu Met Gln Val Lys Ser Asp Gly
180 185 190

Ser Tyr Thr Lys Gly Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Ser
195 200 205

Ser Gly Ala Asp Arg Tyr Leu Ile Ile Pro Ser Val Gln Ala Asp Asp
210 215 220

Glu Ala Gly Tyr Val Cys Gly Ala Asp Asp Asn Gly Gly Tyr Val Phe
225 230 235 240

Gly Gly Gly Thr Gln Leu Thr Val Thr
245

<210> 982

<211> 521

<212> DNA

<213> Homo sapiens

<400> 982

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 <211> 118
 <212> DNA
 <213> Homo sapiens

<400> 983	
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<210> 984
 <211> 221
 <212> DNA
 <213> Homo sapiens

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gggcggaggg cgtggcgggg aagggccggc gacgagagcc gcgcgggacg actcgtcggc	180
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<210> 985
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 985	
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gataaccggt gtcgggtagc gccagccgcg cgacggtaac gagggaccgc gacaggcaga	240
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<210> 986

<211> 422

<212> DNA

<213> Homo sapiens

<400> 986

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cg	422