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<151> 2015-06-19

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35 40 45

Arg Ala Cys Arg Glu Leu Gly Gly Asp Leu Ala Thr Pro Arg Thr Pro
50 55 60

Glu Glu Ala Gln Arg Val Asp Ser Leu Val Gly Ala Gly Pro Ala Ser
65 70 75 80

Arg Leu Leu Trp Ile Gly Leu Gln Arg Gln Ala Arg Gln Cys Gln Leu
85 90 95

Gln Arg Pro Leu Arg Gly Phe Thr Trp Thr Thr Gly Asp Gln Asp Thr
100 105 110

Ala Phe Thr Asn Trp Ala Gln Pro Ala Ser Gly Gly Pro Cys Pro Ala
115 120 125

Gln Arg Cys Val Ala Leu Glu Ala Ser Gly Glu His Arg Trp Leu Glu
130 135 140

Gly Ser Cys Thr Leu Ala Val Asp Gly Tyr Leu Cys Gln Phe Gly Phe
145 150 155 160

Glu Gly Ala Cys Pro Ala Leu Gln Asp Glu Ala Gly Gln Ala Gly Pro
165 170 175

Ala Val Tyr Thr Thr Pro Phe His Leu Val Ser Thr Glu Phe Glu Trp
180 185 190

Leu Pro Phe Gly Ser Val Ala Ala Val Gln Cys Gln Ala Gly Arg Gly
195 200 205

Ala Ser Leu Leu Cys Val Lys Gln Pro Glu Gly Gly Val Gly Trp Ser
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Arg Ala Gly Pro Leu Cys Leu Gly Thr Gly Cys Ser Pro Asp Asn Gly
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Asp	Asp	Pro	His	Arg	Cys	Val	Asp	Thr	Asp	Glu	Cys	Gln	Ile	Ala	Gly	
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Val	Cys	Gln	Gln	Met	Cys	Val	Asn	Tyr	Val	Gly	Gly	Phe	Glu	Cys	Tyr	
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Cys	Ser	Glu	Gly	His	Glu	Leu	Glu	Ala	Asp	Gly	Ile	Ser	Cys	Ser	Pro	
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Ala	Gly	Ala	Met	Gly	Ala	Gln	Ala	Ser	Gln	Asp	Leu	Gly	Asp	Glu	Leu	
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	370					375					380					
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Arg	Ile	Thr	Asp	Cys	Tyr	Arg	Trp	Val	Ile	His	Ala	Gly	Ser	Lys	Ser
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cagatccccg tgatcgcagc caactatcca gatctgcctt ctgcctacca acccggtatt 1500
ctctctgtct ctcatcagc acagcctcct gccaccagc cccctatgat ctcaacccaa 1560
tatccggagc tcttccttgc ccaccagtcc cccatgtttc cagacacccg ggtcgctggc 1620
accagacca ccactcattt gcctggaatc ccacctaacc atgcccctct ggtcaccacc 1680
ctcgggtgcc agctaccccc tcaagcccca gatgcccttg tcctcagaac ccaggccacc 1740
cagcttccca ttatcccaac tgcccagccc tctctgacca ccacctccag gtcccctgtg 1800
tctcctgccc atcaaatctc tgtgcctgct gccaccagc ccgcagccct cccaccctc 1860
ctgcccctctc agagccccac taaccagacc tcacccatca gccctacaca tccccattcc 1920
aaagccccc aaatcccaag ggaagatggc cccagtccca agttggccct gtggctgccc 1980
tcaccagctc ccacagcagc cccaacagcc ctgggggagg ctggtcttgc cgagcacagc 2040
cagagggatg accgggttaa cgacgacgac gacaaagagc ccagcggacc aatttcaaca 2100
atcaacccct ctctccatc caaggagtct cacaaaagcc cagctcctaa cctcgagggt 2160
ggaccatccg tcttcatctt ccctccaaat atcaaggatg tactcatgat ctccctgaca 2220
cccaaggcca cgtgtgtggt ggtggatgtg agcgaggatg acccagacgt ccagatcagc 2280
tggtttgtga acaacgtgga agtacacaca gcycagacac aaacccatag agaggattac 2340
aacagtacta tccgggtggt cagcaccctc cccatccagc accaggactg gatgagtggc 2400
aaggagtcca aatgcaaggc caacaacaaa gacctccat caccatcga gagaaccatc 2460
tcaaaaatta aagggttagt cagagctcca caagtataca tcttgccgcc accagcagag 2520
cagttgtcca ggaaagatgt cagtctcact tgcctggctg tgggcttcaa ccctggagac 2580
atcagtgtgg agtggaccag caatgggcat acagaggaga actacaagga caccgcacca 2640
gtcctggact ctgacggttc ttacttcata tatagcaagc tcaatatgaa aacaagcaag 2700
tgggagaaaa cagattcctt ctcatgcaac gtgagacacg agggctctgaa aaattactac 2760
ctgaagaaga ccatctcccg gtctccgggt aaatga 2796

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<210> 44

<211> 931

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 44

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Met Leu Leu Arg Leu Leu Leu Ala Trp Ala Ala Ala Gly Pro Thr Leu
1           5           10          15

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Gly Gln Asp Pro Trp Ala Ala Glu Pro Arg Ala Ala Cys Gly Pro Ser

```

20

25

30

Ser Cys Tyr Ala Leu Phe Pro Arg Arg Arg Thr Phe Leu Glu Ala Trp
 35 40 45

Arg Ala Cys Arg Glu Leu Gly Gly Asp Leu Ala Thr Pro Arg Thr Pro
 50 55 60

Glu Glu Ala Gln Arg Val Asp Ser Leu Val Gly Ala Gly Pro Ala Ser
 65 70 75 80

Arg Leu Leu Trp Ile Gly Leu Gln Arg Gln Ala Arg Gln Cys Gln Leu
 85 90 95

Gln Arg Pro Leu Arg Gly Phe Thr Trp Thr Thr Gly Asp Gln Asp Thr
 100 105 110

Ala Phe Thr Asn Trp Ala Gln Pro Ala Ser Gly Gly Pro Cys Pro Ala
 115 120 125

Gln Arg Cys Val Ala Leu Glu Ala Ser Gly Glu His Arg Trp Leu Glu
 130 135 140

Gly Ser Cys Thr Leu Ala Val Asp Gly Tyr Leu Cys Gln Phe Gly Phe
 145 150 155 160

Glu Gly Ala Cys Pro Ala Leu Gln Asp Glu Ala Gly Gln Ala Gly Pro
 165 170 175

Ala Val Tyr Thr Thr Pro Phe His Leu Val Ser Thr Glu Phe Glu Trp
 180 185 190

Leu Pro Phe Gly Ser Val Ala Ala Val Gln Cys Gln Ala Gly Arg Gly
 195 200 205

Ala Ser Leu Leu Cys Val Lys Gln Pro Glu Gly Gly Val Gly Trp Ser
 210 215 220

Arg Ala Gly Pro Leu Cys Leu Gly Thr Gly Cys Ser Pro Asp Asn Gly
 225 230 235 240

Gly Cys Glu His Glu Cys Val Glu Glu Val Asp Gly His Val Ser Cys
 245 250 255

Arg Cys Thr Glu Gly Phe Arg Leu Ala Ala Asp Gly Arg Ser Cys Glu
 260 265 270

Asp Pro Cys Ala Gln Ala Pro Cys Glu Gln Gln Cys Glu Pro Gly Gly

275

280

285

Pro Gln Gly Tyr Ser Cys His Cys Arg Leu Gly Phe Arg Pro Ala Glu
 290 295 300

Asp Asp Pro His Arg Cys Val Asp Thr Asp Glu Cys Gln Ile Ala Gly
 305 310 315 320

Val Cys Gln Gln Met Cys Val Asn Tyr Val Gly Gly Phe Glu Cys Tyr
 325 330 335

Cys Ser Glu Gly His Glu Leu Glu Ala Asp Gly Ile Ser Cys Ser Pro
 340 345 350

Ala Gly Ala Met Gly Ala Gln Ala Ser Gln Asp Leu Gly Asp Glu Leu
 355 360 365

Leu Asp Asp Gly Glu Asp Glu Glu Asp Glu Asp Glu Ala Trp Lys Ala
 370 375 380

Phe Asn Gly Gly Trp Thr Glu Met Pro Gly Ile Leu Trp Met Glu Pro
 385 390 395 400

Thr Gln Pro Pro Asp Phe Ala Leu Ala Tyr Arg Pro Ser Phe Pro Glu
 405 410 415

Asp Arg Glu Pro Gln Ile Pro Tyr Pro Glu Pro Thr Trp Pro Pro Pro
 420 425 430

Leu Ser Ala Pro Arg Val Pro Tyr His Ser Ser Val Leu Ser Val Thr
 435 440 445

Arg Pro Val Val Val Ser Ala Thr His Pro Thr Leu Pro Ser Ala His
 450 455 460

Gln Pro Pro Val Ile Pro Ala Thr His Pro Ala Leu Ser Arg Asp His
 465 470 475 480

Gln Ile Pro Val Ile Ala Ala Asn Tyr Pro Asp Leu Pro Ser Ala Tyr
 485 490 495

Gln Pro Gly Ile Leu Ser Val Ser His Ser Ala Gln Pro Pro Ala His
 500 505 510

Gln Pro Pro Met Ile Ser Thr Lys Tyr Pro Glu Leu Phe Pro Ala His
 515 520 525

Gln Ser Pro Met Phe Pro Asp Thr Arg Val Ala Gly Thr Gln Thr Thr

530

535

540

Thr His Leu Pro Gly Ile Pro Pro Asn His Ala Pro Leu Val Thr Thr
 545 550 555 560

Leu Gly Ala Gln Leu Pro Pro Gln Ala Pro Asp Ala Leu Val Leu Arg
 565 570 575

Thr Gln Ala Thr Gln Leu Pro Ile Ile Pro Thr Ala Gln Pro Ser Leu
 580 585 590

Thr Thr Thr Ser Arg Ser Pro Val Ser Pro Ala His Gln Ile Ser Val
 595 600 605

Pro Ala Ala Thr Gln Pro Ala Ala Leu Pro Thr Leu Leu Pro Ser Gln
 610 615 620

Ser Pro Thr Asn Gln Thr Ser Pro Ile Ser Pro Thr His Pro His Ser
 625 630 635 640

Lys Ala Pro Gln Ile Pro Arg Glu Asp Gly Pro Ser Pro Lys Leu Ala
 645 650 655

Leu Trp Leu Pro Ser Pro Ala Pro Thr Ala Ala Pro Thr Ala Leu Gly
 660 665 670

Glu Ala Gly Leu Ala Glu His Ser Gln Arg Asp Asp Arg Val Asn Asp
 675 680 685

Asp Asp Asp Lys Glu Pro Ser Gly Pro Ile Ser Thr Ile Asn Pro Ser
 690 695 700

Pro Pro Ser Lys Glu Ser His Lys Ser Pro Ala Pro Asn Leu Glu Gly
 705 710 715 720

Gly Pro Ser Val Phe Ile Phe Pro Pro Asn Ile Lys Asp Val Leu Met
 725 730 735

Ile Ser Leu Thr Pro Lys Val Thr Cys Val Val Val Asp Val Ser Glu
 740 745 750

Asp Asp Pro Asp Val Gln Ile Ser Trp Phe Val Asn Asn Val Glu Val
 755 760 765

His Thr Ala Gln Thr Gln Thr His Arg Glu Asp Tyr Asn Ser Thr Ile
 770 775 780

Arg Val Val Ser Thr Leu Pro Ile Gln His Gln Asp Trp Met Ser Gly

785	790	795	800
Lys Glu Phe Lys Cys Lys Val Asn Asn Lys Asp Leu Pro Ser Pro Ile	805	810	815
Glu Arg Thr Ile Ser Lys Ile Lys Gly Leu Val Arg Ala Pro Gln Val	820	825	830
Tyr Ile Leu Pro Pro Pro Ala Glu Gln Leu Ser Arg Lys Asp Val Ser	835	840	845
Leu Thr Cys Leu Val Val Gly Phe Asn Pro Gly Asp Ile Ser Val Glu	850	855	860
Trp Thr Ser Asn Gly His Thr Glu Glu Asn Tyr Lys Asp Thr Ala Pro	865	870	875
Val Leu Asp Ser Asp Gly Ser Tyr Phe Ile Tyr Ser Lys Leu Asn Met	885	890	895
Lys Thr Ser Lys Trp Glu Lys Thr Asp Ser Phe Ser Cys Asn Val Arg	900	905	910
His Glu Gly Leu Lys Asn Tyr Tyr Leu Lys Lys Thr Ile Ser Arg Ser	915	920	925
Pro Gly Lys	930		

<210> 45
 <211> 1380
 <212> DNA
 <213> Artificial Sequence

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

<400> 45	
atggcaccac tgtgcccgaag cccatggctg ccactgctga tcccagcacc agcaccagga	60
ctgaccgtgc agctgctgct gagcctgctg ctgctggtgc ccgtgcaccc ccagcggctg	120
ccccggatgc aggaggacag ccccttgggc ggcggcagca gcggcgagga cgacccctg	180
ggcgaggagg acctgcccag cgaggaggac agccccggg aggaggacc ccccgagaa	240
gaggacctgc ccggcgagga ggacctgcca ggagaggagg acctgccaga ggtgaagcca	300
aagagcgagg aggagggaag cctgaagctg gaggacctgc caaccgtgga ggcaccaggc	360
gaccacagg agccccagaa caacgcccac cgggacaagg agggcgacga ccagagccac	420

```

tggagatacg gaggcgaccc accatggcca cgggtgagcc cagcatgcgc aggacggttc      480
cagagccccg tggacatccg gccccagctg gccgccttct gccccgccct gcggccccctg      540
gagctgctgg gcttccagct gccccccctg cccgagctgc ggctgcggaa caacggccac      600
agcgtgcagc tgaccctgcc ccccggcctg gagatggccc tgggccccgg ccgggagtac      660
cggggccctgc agctgcacct gcactggggc gccgccggcc ggcccggcag cgagcacacc      720
gtggagggac acaggttccc agcagagatc cacgtggtgc acctgagcac cgcattcgca      780
agggtggacg aggactggg aaggccagga ggactggcag tgctggcagc cttcctggag      840
gagggaccag aggagaacag cgcatacag cagctgctga gccggctgga ggagatcgca      900
gaggagggaa gcgagaccca ggtgccaggc ctggacatca gcgcactgct gccaagcgac      960
ttcagccggt acttccagta cgagggcagc ctgaccaccc cccctgcgc ccagggcgctg     1020
atctggaccg tgttcaacca gaccgtgatg ctgagcgcaa agcagctgca caccctgagc     1080
gacaccctgt ggggaccagg cgacagccgg ctgcagctga acttcagggc aaccagccc     1140
ctgaacggaa gagtgatcga ggcaagcttc ccagcaggag tggacagcag cccaagggca     1200
gcagagccag tgcagctgaa cagctgcctg gcagcaggcg acatcctggc actggtgttc     1260
ggactgctgt tcgcagtgac cagcgtggcc ttcctggtgc agatgcggcg gcagcaccgg     1320
cggggcacca agggcggcgt gagctaccgg cccgccgagg tggccgagac cggcgcctga     1380

```

<210> 46

<211> 459

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 46

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Met Ala Pro Leu Cys Pro Ser Pro Trp Leu Pro Leu Leu Ile Pro Ala
1           5           10          15

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Pro Ala Pro Gly Leu Thr Val Gln Leu Leu Leu Ser Leu Leu Leu Leu
          20          25          30

```

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Val Pro Val His Pro Gln Arg Leu Pro Arg Met Gln Glu Asp Ser Pro
          35          40          45

```

```

Leu Gly Gly Gly Ser Ser Gly Glu Asp Asp Pro Leu Gly Glu Glu Asp
          50          55          60

```

```

Leu Pro Ser Glu Glu Asp Ser Pro Arg Glu Glu Asp Pro Pro Gly Glu
65          70          75          80

```

Glu	Asp	Leu	Pro	Gly	Glu	Glu	Asp	Leu	Pro	Gly	Glu	Glu	Asp	Leu	Pro	85	90	95
Glu	Val	Lys	Pro	Lys	Ser	Glu	Glu	Glu	Gly	Ser	Leu	Lys	Leu	Glu	Asp	100	105	110
Leu	Pro	Thr	Val	Glu	Ala	Pro	Gly	Asp	Pro	Gln	Glu	Pro	Gln	Asn	Asn	115	120	125
Ala	His	Arg	Asp	Lys	Glu	Gly	Asp	Asp	Gln	Ser	His	Trp	Arg	Tyr	Gly	130	135	140
Gly	Asp	Pro	Pro	Trp	Pro	Arg	Val	Ser	Pro	Ala	Cys	Ala	Gly	Arg	Phe	145	150	155
Gln	Ser	Pro	Val	Asp	Ile	Arg	Pro	Gln	Leu	Ala	Ala	Phe	Cys	Pro	Ala	165	170	175
Leu	Arg	Pro	Leu	Glu	Leu	Leu	Gly	Phe	Gln	Leu	Pro	Pro	Leu	Pro	Glu	180	185	190
Leu	Arg	Leu	Arg	Asn	Asn	Gly	His	Ser	Val	Gln	Leu	Thr	Leu	Pro	Pro	195	200	205
Gly	Leu	Glu	Met	Ala	Leu	Gly	Pro	Gly	Arg	Glu	Tyr	Arg	Ala	Leu	Gln	210	215	220
Leu	His	Leu	His	Trp	Gly	Ala	Ala	Gly	Arg	Pro	Gly	Ser	Glu	His	Thr	225	230	235
Val	Glu	Gly	His	Arg	Phe	Pro	Ala	Glu	Ile	His	Val	Val	His	Leu	Ser	245	250	255
Thr	Ala	Phe	Ala	Arg	Val	Asp	Glu	Ala	Leu	Gly	Arg	Pro	Gly	Gly	Leu	260	265	270
Ala	Val	Leu	Ala	Ala	Phe	Leu	Glu	Glu	Gly	Pro	Glu	Glu	Asn	Ser	Ala	275	280	285
Tyr	Glu	Gln	Leu	Leu	Ser	Arg	Leu	Glu	Glu	Ile	Ala	Glu	Glu	Gly	Ser	290	295	300
Glu	Thr	Gln	Val	Pro	Gly	Leu	Asp	Ile	Ser	Ala	Leu	Leu	Pro	Ser	Asp	305	310	315
Phe	Ser	Arg	Tyr	Phe	Gln	Tyr	Glu	Gly	Ser	Leu	Thr	Thr	Pro	Pro	Cys	325	330	335

Ala Gln Gly Val Ile Trp Thr Val Phe Asn Gln Thr Val Met Leu Ser
340 345 350

Ala Lys Gln Leu His Thr Leu Ser Asp Thr Leu Trp Gly Pro Gly Asp
355 360 365

Ser Arg Leu Gln Leu Asn Phe Arg Ala Thr Gln Pro Leu Asn Gly Arg
370 375 380

Val Ile Glu Ala Ser Phe Pro Ala Gly Val Asp Ser Ser Pro Arg Ala
385 390 395 400

Ala Glu Pro Val Gln Leu Asn Ser Cys Leu Ala Ala Gly Asp Ile Leu
405 410 415

Ala Leu Val Phe Gly Leu Leu Phe Ala Val Thr Ser Val Ala Phe Leu
420 425 430

Val Gln Met Arg Arg Gln His Arg Arg Gly Thr Lys Gly Gly Val Ser
435 440 445

Tyr Arg Pro Ala Glu Val Ala Glu Thr Gly Ala
450 455

<210> 47

<211> 1203

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 47

atgggctgga gctgcatcat cctgttcctg gtggcaaccg caaccggagt gcacagccag	60
aggctgccac ggatgcagga ggacagcccc ctgggcgggc gcagcagcgg cgaggacgac	120
cccctgggcg aggaggacct gcccagcgag gaggacagcc caaggaggga ggaccaccca	180
ggagaggagg acctgcctgg cgaggaggac ctgcctgggg aggaggacct gccagaggtg	240
aagccaaaga gcgaagagga gggaagcctg aagctggagg acctgccaac cgtggaggca	300
ccaggcgacc cacaggagcc ccagaacaac gccaccggg acaaggagg cgacgaccag	360
agccactgga gatacgagg cgaccacca tggccacggg tgagcccagc atgcgcagga	420
cggttccaga gcccgtgga catccggccc cagctggccg ctttctgccc cgccctgcgg	480
cccctggagc tgctgggctt ccagctgccc cccctgccc agctgcggct gcggaacaac	540
ggccacagcg tgcagctgac cctgcccccc ggccctggaga tggccctggg ccccgccgg	600
gagtaccggg ccctgcagct gcacctgcac tggggcgccg ccggccggcc cggcagcgag	660

cacaccgtgg agggacacag gttcccagca gagatccacg tgggtgcacct gagcaccgca	720
ttcgcaaggg tggacgaggg actgggaagg ccaggaggac tggcagtgtt ggcagccttc	780
ctggaggagg gaccagagga gaacagcgca tacgagcagc tgctgagccg gctggaggag	840
atcgacagagg aggggaagcga gacccagggtg ccaggcctgg acatcagcgc actgctgcca	900
agcgacttca gccggtactt ccagtacgag ggcagcctga ccaccccccc ctgcgcccag	960
ggcgtgatct ggaccgtgtt caaccagacc gtgatgtctga gcgcaaagca gctgcacacc	1020
ctgagcgaca ccctgtgggg accaggcgac agccggctgc agctgaactt cagggcaacc	1080
cagccccctga acggaagagt gatcgaggca agcttcccag caggagtgga cagcagccca	1140
agggcagcag agccagtgca gctgaacagc tgccctggccg gccaccacca ccaccaccac	1200
tga	1203

<210> 48
 <211> 400
 <212> PRT
 <213> Artificial Sequence

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

<400> 48
 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15

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

 Gly Gly Ser Ser Gly Glu Asp Asp Pro Leu Gly Glu Glu Asp Leu Pro
 35 40 45

 Ser Glu Glu Asp Ser Pro Arg Glu Glu Asp Pro Pro Gly Glu Glu Asp
 50 55 60

 Leu Pro Gly Glu Glu Asp Leu Pro Gly Glu Glu Asp Leu Pro Glu Val
 65 70 75 80

 Lys Pro Lys Ser Glu Glu Gly Ser Leu Lys Leu Glu Asp Leu Pro
 85 90 95

 Thr Val Glu Ala Pro Gly Asp Pro Gln Glu Pro Gln Asn Asn Ala His
 100 105 110

 Arg Asp Lys Glu Gly Asp Asp Gln Ser His Trp Arg Tyr Gly Gly Asp
 115 120 125

Pro	Pro	Trp	Pro	Arg	Val	Ser	Pro	Ala	Cys	Ala	Gly	Arg	Phe	Gln	Ser	130	135	140	
Pro	Val	Asp	Ile	Arg	Pro	Gln	Leu	Ala	Ala	Phe	Cys	Pro	Ala	Leu	Arg	145	150	155	160
Pro	Leu	Glu	Leu	Leu	Gly	Phe	Gln	Leu	Pro	Pro	Leu	Pro	Glu	Leu	Arg	165	170	175	
Leu	Arg	Asn	Asn	Gly	His	Ser	Val	Gln	Leu	Thr	Leu	Pro	Pro	Gly	Leu	180	185	190	
Glu	Met	Ala	Leu	Gly	Pro	Gly	Arg	Glu	Tyr	Arg	Ala	Leu	Gln	Leu	His	195	200	205	
Leu	His	Trp	Gly	Ala	Ala	Gly	Arg	Pro	Gly	Ser	Glu	His	Thr	Val	Glu	210	215	220	
Gly	His	Arg	Phe	Pro	Ala	Glu	Ile	His	Val	Val	His	Leu	Ser	Thr	Ala	225	230	235	240
Phe	Ala	Arg	Val	Asp	Glu	Ala	Leu	Gly	Arg	Pro	Gly	Gly	Leu	Ala	Val	245	250	255	
Leu	Ala	Ala	Phe	Leu	Glu	Glu	Gly	Pro	Glu	Glu	Asn	Ser	Ala	Tyr	Glu	260	265	270	
Gln	Leu	Leu	Ser	Arg	Leu	Glu	Glu	Ile	Ala	Glu	Glu	Gly	Ser	Glu	Thr	275	280	285	
Gln	Val	Pro	Gly	Leu	Asp	Ile	Ser	Ala	Leu	Leu	Pro	Ser	Asp	Phe	Ser	290	295	300	
Arg	Tyr	Phe	Gln	Tyr	Glu	Gly	Ser	Leu	Thr	Thr	Pro	Pro	Cys	Ala	Gln	305	310	315	320
Gly	Val	Ile	Trp	Thr	Val	Phe	Asn	Gln	Thr	Val	Met	Leu	Ser	Ala	Lys	325	330	335	
Gln	Leu	His	Thr	Leu	Ser	Asp	Thr	Leu	Trp	Gly	Pro	Gly	Asp	Ser	Arg	340	345	350	
Leu	Gln	Leu	Asn	Phe	Arg	Ala	Thr	Gln	Pro	Leu	Asn	Gly	Arg	Val	Ile	355	360	365	
Glu	Ala	Ser	Phe	Pro	Ala	Gly	Val	Asp	Ser	Ser	Pro	Arg	Ala	Ala	Glu	370	375	380	

Pro	Val	Gln	Leu	Asn	Ser	Cys	Leu	Ala	Gly	His	His	His	His	His	His
385					390					395					400

<210> 49
 <211> 1041
 <212> DNA
 <213> Artificial Sequence

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

<400> 49
 atgggatgga gctgtatcat cctcttcttg gtagcaacag ctacaggtgt acacagcgaa 60
 gtggagaaga cagcctgtcc ttcaggcaag aaggcccgcg agatagacga gagcctcatc 120
 ttctacaaga agtgggagct ggaagcctgc gtggatgcgg ccctgctggc caccagatg 180
 gaccgcgtga acgccatccc cttcacctac gagcagctgg acgtcctaaa gcataaactg 240
 gatgagctct acccacaagg ttaccccgag tctgtgatcc agcacctggg ctacctcttc 300
 ctcaagatga gccctgagga cattcgcaag tggaatgtga cgtccctgga gaccctgaag 360
 gctttgcttg aagtcaacaa agggcacgaa atgagtcctc aggtggccac cctgatcgac 420
 cgctttgtga agggaagggg ccagctagac aaagacaccc tagacaccct gaccgccttc 480
 taccctgggt acctgtgctc cctcagcccc gaggagctga gctccgtgcc cccagcagc 540
 atctggggcg tcaggcccca ggacctggac acgtgtgacc caaggcagct ggacgtcctc 600
 tatcccaagg cccgccttgc tttccagaac atgaacgggt ccgaataactt cgtgaagatc 660
 cagtccttcc tgggtggggc cccacaggag gatttgaagg cgctcagtca gcagaatgtg 720
 agcatggact tggccacgtt catgaagctg cggacggatg cggtgctgcc gttgactgtg 780
 gctgaggtgc agaaacttct gggacccac gtggagggcc tgaaggcgga ggagcggcac 840
 cgcccgggtgc gggactggat cctacggcag cggcaggacg acctggacac gctggggctg 900
 gggctacagg gcggcatccc caacggctac ctggtcctag acctcagcat gcaagaggcc 960
 ctctcgggga cgccctgcct cctaggacct ggacctgttc tcaccgtcct ggcactgctc 1020
 ctagcctcca ccctggcctg a 1041

<210> 50
 <211> 346
 <212> PRT
 <213> Artificial Sequence

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

<400> 50

Met	Gly	Trp	Ser	Cys	Ile	Ile	Leu	Phe	Leu	Val	Ala	Thr	Ala	Thr	Gly	1	5	10	15
Val	His	Ser	Glu	Val	Glu	Lys	Thr	Ala	Cys	Pro	Ser	Gly	Lys	Lys	Ala	20	25	30	
Arg	Glu	Ile	Asp	Glu	Ser	Leu	Ile	Phe	Tyr	Lys	Lys	Trp	Glu	Leu	Glu	35	40	45	
Ala	Cys	Val	Asp	Ala	Ala	Leu	Leu	Ala	Thr	Gln	Met	Asp	Arg	Val	Asn	50	55	60	
Ala	Ile	Pro	Phe	Thr	Tyr	Glu	Gln	Leu	Asp	Val	Leu	Lys	His	Lys	Leu	65	70	75	80
Asp	Glu	Leu	Tyr	Pro	Gln	Gly	Tyr	Pro	Glu	Ser	Val	Ile	Gln	His	Leu	85	90	95	
Gly	Tyr	Leu	Phe	Leu	Lys	Met	Ser	Pro	Glu	Asp	Ile	Arg	Lys	Trp	Asn	100	105	110	
Val	Thr	Ser	Leu	Glu	Thr	Leu	Lys	Ala	Leu	Leu	Glu	Val	Asn	Lys	Gly	115	120	125	
His	Glu	Met	Ser	Pro	Gln	Val	Ala	Thr	Leu	Ile	Asp	Arg	Phe	Val	Lys	130	135	140	
Gly	Arg	Gly	Gln	Leu	Asp	Lys	Asp	Thr	Leu	Asp	Thr	Leu	Thr	Ala	Phe	145	150	155	160
Tyr	Pro	Gly	Tyr	Leu	Cys	Ser	Leu	Ser	Pro	Glu	Glu	Leu	Ser	Ser	Val	165	170	175	
Pro	Pro	Ser	Ser	Ile	Trp	Ala	Val	Arg	Pro	Gln	Asp	Leu	Asp	Thr	Cys	180	185	190	
Asp	Pro	Arg	Gln	Leu	Asp	Val	Leu	Tyr	Pro	Lys	Ala	Arg	Leu	Ala	Phe	195	200	205	
Gln	Asn	Met	Asn	Gly	Ser	Glu	Tyr	Phe	Val	Lys	Ile	Gln	Ser	Phe	Leu	210	215	220	
Gly	Gly	Ala	Pro	Thr	Glu	Asp	Leu	Lys	Ala	Leu	Ser	Gln	Gln	Asn	Val	225	230	235	240
Ser	Met	Asp	Leu	Ala	Thr	Phe	Met	Lys	Leu	Arg	Thr	Asp	Ala	Val	Leu	245	250	255	

Pro Leu Thr Val Ala Glu Val Gln Lys Leu Leu Gly Pro His Val Glu
260 265 270

Gly Leu Lys Ala Glu Glu Arg His Arg Pro Val Arg Asp Trp Ile Leu
275 280 285

Arg Gln Arg Gln Asp Asp Leu Asp Thr Leu Gly Leu Gly Leu Gln Gly
290 295 300

Gly Ile Pro Asn Gly Tyr Leu Val Leu Asp Leu Ser Met Gln Glu Ala
305 310 315 320

Leu Ser Gly Thr Pro Cys Leu Leu Gly Pro Gly Pro Val Leu Thr Val
325 330 335

Leu Ala Leu Leu Leu Ala Ser Thr Leu Ala
340 345

<210> 51
<211> 1416
<212> DNA
<213> Artificial Sequence

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

<400> 51
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagccag 60
tcgggtgaagg agtccggggg tcgcctggtc acgcctggga caccctgac actcacctgc 120
acagtctctg gatttctcct caatagctat gcgatgatct ggggccgcca ggctccaggg 180
gaggggctgg aatacatcgg attcattact actggtggta ccacatacta cgcgagctgg 240
gcaaaaggcc gattcaccat ctccagaacc tcgaccacgg tggatctgaa gctcaccctg 300
ccgacaaccg aggacacggc cacctatttc tgtgccagag atcgggttaa aagctacgat 360
gactatgggtg atttagatgc tttcgagccc tggggcccag gcaccctggt caccatctcc 420
tcagcatcca ccaagggccc atcgggtcttc ccctggcac cctcctccaa gagcacctct 480
gggggacacg cggccctggg ctgcctggtc aaggactact tccccgaacc ggtgacgggtg 540
tcgtggaact caggcgccct gaccagcggc gtgcacacct tcccggtgt cctacagtcc 600
tcaggactct actccctcag cagcgtgggt accgtgccct ccagcagctt gggcaccag 660
acctacatct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gaaagttgag 720
cccaaattctt gtgacaaaac tcacacatgc ccaccgtgcc cagcacctga actcctgggg 780
ggaccgtcag tcttcctctt cccccaaaa cccaaggaca ccctcatgat ctcccggaac 840
cctgaggtca catgcgtggt ggtggacgtg agccacgaag accctgaggt caagttcaac 900

tggtacgtgg acggcgtgga ggtgcataat gccaaagaaa agccgcggga ggagcagtac	960
aacagcacgt accgtgtggt cagcgtcctc accgtcctgc accaggactg gctgaatggc	1020
aaggagtaca agtgaaggt ctccaacaaa gccctcccag ccccatcga gaaaaccatc	1080
tccaaagcca aagggcagcc ccgagaacca caggtgtaca ccctgcccc atcccgggat	1140
gagctgacca agaaccaggt cagcctgacc tgcctgggtca aaggcttcta tcccagcgac	1200
atcgccgtgg agtgggagag caatgggcag ccggagaaca actacaagac cagcctccc	1260
gtgctggact ccgacggctc cttcttctta tattcaaagc tcaccgtgga caagagcagg	1320
tggcagcagg ggaacgtctt ctcatgctcc gtgatgcatg aggctctgca caaccactac	1380
acgcagaaga gcctctccct gtctcccggg aaatga	1416

<210> 52

<211> 471

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 52

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

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

Gly	Thr	Pro	Leu	Thr	Leu	Thr	Cys	Thr	Val	Ser	Gly	Phe	Ser	Leu	Asn
		35					40					45			

Ser	Tyr	Ala	Met	Ile	Trp	Val	Arg	Gln	Ala	Pro	Gly	Glu	Gly	Leu	Glu
	50					55					60				

Tyr	Ile	Gly	Phe	Ile	Thr	Thr	Gly	Gly	Thr	Thr	Tyr	Tyr	Ala	Ser	Trp
65					70				75						80

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

Lys	Leu	Thr	Arg	Pro	Thr	Thr	Glu	Asp	Thr	Ala	Thr	Tyr	Phe	Cys	Ala
			100					105					110		

Arg	Asp	Arg	Val	Lys	Ser	Tyr	Asp	Asp	Tyr	Gly	Asp	Leu	Asp	Ala	Phe
			115				120					125			

Glu	Pro	Trp	Gly	Pro	Gly	Thr	Leu	Val	Thr	Ile	Ser	Ser	Ala	Ser	Thr
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

130

135

140

Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser
 145 150 155 160

Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu
 165 170 175

Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His
 180 185 190

Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser
 195 200 205

Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys
 210 215 220

Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu
 225 230 235 240

Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro
 245 250 255

Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys
 260 265 270

Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val
 275 280 285

Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp
 290 295 300

Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr
 305 310 315 320

Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp
 325 330 335

Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu
 340 345 350

Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg
 355 360 365

Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys
 370 375 380

Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp

385 390 395 400

Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys
405 410 415

Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser
420 425 430

Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser
435 440 445

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser
450 455 460

Leu Ser Leu Ser Pro Gly Lys
465 470

<210> 53
<211> 1425
<212> DNA
<213> Artificial Sequence

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

<400> 53
atgggttgga gttgcatcat tctgttcctg gtggccacag ctactggcgt gcactcacag 60
gtgcagctgg tggagtcagg aggaggactg gtgcagccag gtggctctct gcgactgtct 120
tgtagtgctt caggcttttc cctgaacagc tacgctatga tctgggtcag gcaggcacct 180
ggcaagggcc tggaatatat cggattcatt accacaggag ggactaccta ctatgccgac 240
tccgtgaagg ggagattcac tatctctcgc gataacagta agaataccct gtacctgcag 300
atgaatagcc tgagagcaga ggacacagcc gtgtactatt gcgccaggga tcgggtgaaa 360
tcttacgacg attatggaga cctggatgct ttcgaaccat ggggacaggg gaccctgggtg 420
acagtgtcca gcgcatccac caagggccca tcggtcttcc ccctggcacc ctctccaag 480
agcacctctg ggggcacagc ggccctgggc tgcctgggtca aggactactt ccccgaaccg 540
gtgacgggtg cgtggaactc aggcgccctg accagcggcg tgcacacctt cccggctgtc 600
ctacagtcct caggactcta ctccctcagc agcgtggtga ccgtgccctc cagcagcttg 660
ggcaccacaga cctacatctg caacgtgaat cacaagccca gcaacaccaa ggtggacaag 720
aaagttgagc ccaaattctg tgacaaaact cacacatgcc caccgtgcc agcacctgaa 780
ctcctggggg gaccgtcagt cttcctcttc ccccaaaaac ccaaggacac cctcatgatc 840
tcccggaacc ctgaggtcac atgcgtggtg gtggacgtga gccacgaaga ccctgaggtc 900

```

aagttcaact ggtacgtgga cggcgtggag gtgcataatg ccaagacaaa gccgcgggag      960
gagcagtaca acagcacgta ccggtgtggtc agcgtcctca ccgtcctgca ccaggactgg      1020
ctgaatggca aggagtacaa gtgcaaggtc tccaacaaag ccctcccagc ccccatcgag      1080
aaaaccatct ccaaagccaa agggcagccc cgagaaccac aggtgtacac cctgccccca      1140
tcccgggatg agctgaccaa gaaccaggtc agcctgacct gcctgggtcaa aggcttctat      1200
cccagcgaca tcgccgtgga gtgggagagc aatgggcagc cggagaacaa ctacaagacc      1260
acgcctcccg tgctggactc cgacggctcc ttcttcttat attcaaagct caccgtggac      1320
aagagcaggt ggcagcaggg gaacgtcttc tcatgctccg tgatgcatga ggctctgcac      1380
aaccactaca cgcagaagag cctctccctg tctcccgga aatga                        1425

```

<210> 54

<211> 474

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 54

```

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

```

```

Val His Ser Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
          20          25          30

```

```

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ser Ala Ser Gly Phe Ser Leu
          35          40          45

```

```

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

```

```

Glu Tyr Ile Gly Phe Ile Thr Thr Gly Gly Thr Thr Tyr Tyr Ala Asp
65          70          75          80

```

```

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr
          85          90          95

```

```

Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr
          100          105          110

```

```

Tyr Cys Ala Arg Asp Arg Val Lys Ser Tyr Asp Asp Tyr Gly Asp Leu
          115          120          125

```

```

Asp Ala Phe Glu Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
          130          135          140

```

Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	145	150	155	160
Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	165	170	175	
Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	180	185	190	
Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	195	200	205	
Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	210	215	220	
Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	225	230	235	240
Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	245	250	255	
Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	260	265	270	
Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	275	280	285	
Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	290	295	300	
Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	305	310	315	320
Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	325	330	335	
His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	340	345	350	
Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	355	360	365	
Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	370	375	380	
Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	385	390	395	400

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
405 410 415

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
420 425 430

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
435 440 445

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
450 455 460

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
465 470

<210> 55

<211> 1410

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 55

atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactcccag	60
tcggtggagg agtccggggg agacctggtc aagcctgagg gatccctgac actcacctgc	120
acagcctctg gattctcctt cagtagcagc tactggggat gctgggtccg ccaggctcca	180
gggaaggggc ctgagtggat cgcatgcatt tatggtggta gtagtggtac cacttattac	240
ccgaactggg cgaaaggccg attctccatc tccaaaacct cgtcgaccac ggtgactctg	300
caaatggcca gtctgacagc cgcggaacg gccacctatt tctgtgagag agtgactaat	360
ggtggtgatt gggatttttaa attgtggggc ccaggcaccc tggtcaccat ctctcagca	420
tccaccaagg gcccatcggt cttccccctg gcaccctcct ccaagagcac ctctgggggc	480
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg	540
aactcaggcg ccctgaccag cggcgtgcac accttcccgg ctgtcctaca gtcctcagga	600
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca gcttgggcac ccagacctac	660
atctgcaacg tgaatcaciaa gcccagcaac accaaggtgg acaagaaagt tgagcccaaa	720
tcttgtgaca aaactcacac atgcccaccg tgcccagcac ctgaactcct ggggggaccg	780
tcagtcttcc tcttcccccc aaaacccaag gacaccctca tgatctcccg gaccctgag	840
gtcacatgcg tgggtggtgga cgtgagccac gaagaccctg aggtcaagtt caactggtac	900
gtggacggcg tggaggtgca taatgccaaag acaaagccgc gggaggagca gtacaacagc	960

```

acgtaccgtg tggtcagcgt cctcaccgtc ctgcaccagg actggctgaa tggcaaggag      1020
tacaagtgca aggtctccaa caaagccctc ccagccccc tcgagaaaac catctccaaa      1080
gccaaagggc agccccgaga accacaggtg tacaccctgc ccccatcccg ggatgagctg      1140
accaagaacc aggtcagcct gacctgcctg gtcaaaggct tctatcccag cgacatcgcc      1200
gtggagtggg agagcaatgg gcagccggag aacaactaca agaccacgcc tcccgtagctg      1260
gactccgacg gctccttctt cttatatcca aagctcaccg tggacaagag caggtggcag      1320
caggggaacg tcttctcatg ctccgtgatg catgaggctc tgcacaacca ctacacgcag      1380
aagagcctct ccctgtctcc cgggaaatga                                     1410

```

<210> 56

<211> 469

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 56

```

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

```

```

Val His Ser Gln Ser Val Glu Glu Ser Gly Gly Asp Leu Val Lys Pro
          20           25           30

```

```

Glu Gly Ser Leu Thr Leu Thr Cys Thr Ala Ser Gly Phe Ser Phe Ser
35           40           45

```

```

Ser Ser Tyr Trp Gly Cys Trp Val Arg Gln Ala Pro Gly Lys Gly Pro
50           55           60

```

```

Glu Trp Ile Ala Cys Ile Tyr Gly Gly Ser Ser Gly Thr Thr Tyr Tyr
65           70           75           80

```

```

Pro Asn Trp Ala Lys Gly Arg Phe Ser Ile Ser Lys Thr Ser Ser Thr
          85           90           95

```

```

Thr Val Thr Leu Gln Met Ala Ser Leu Thr Ala Ala Asp Thr Ala Thr
          100          105          110

```

```

Tyr Phe Cys Ala Arg Val Thr Asn Gly Gly Asp Trp Asp Phe Lys Leu
115           120          125

```

```

Trp Gly Pro Gly Thr Leu Val Thr Ile Ser Ser Ala Ser Thr Lys Gly
130           135          140

```

Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	145	150	155	160
Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	165	170	175	
Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	180	185	190	
Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	195	200	205	
Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	210	215	220	
Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	225	230	235	240
Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	245	250	255	
Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	260	265	270	
Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	275	280	285	
Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	290	295	300	
Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	305	310	315	320
Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	325	330	335	
Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	340	345	350	
Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	355	360	365	
Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	370	375	380	
Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	385	390	395	400

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
405 410 415

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
420 425 430

Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
435 440 445

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
450 455 460

Leu Ser Pro Gly Lys
465

<210> 57
<211> 1407
<212> DNA
<213> Artificial Sequence

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

<400> 57
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagccag 60
tcggtggagg agtccagggg tcgcctggtc acgcctggga caccctgac actcacctgc 120
acagtctctg gaatcgacct cagtaattat gcaatgacct gggtcgcga ggctccaggg 180
aaggggctgg aatggatcgg aatcattagt agtaatgata agacatggta cgcgagctgg 240
gtgaaaggcc ggttcaccat ctcaaaaacc tcgtcgacca cggtgatct gaaaatgacc 300
agtctgacaa ccgaggacac ggccacctat ttctgtgcca gagctgctat gcctgggtgt 360
ttaaagaatg ctttcgatcc ctggggccca ggcaccctgg tcaccgtctc ttcagcatcc 420
accaagggcc catcgggtctt cccctgga ccctcctcca agagcacctc tgggggcaca 480
gcggccctgg gctgcctggt caaggactac ttccccgaac cggtgacggt gtcgtggaac 540
tcaggcgccc tgaccagcgg cgtgcacacc ttcccggtg tcctacagtc ctcaggactc 600
tactccctca gcagcgtggt gaccgtgccc tccagcagct tgggcacca gacctacatc 660
tgcaacgtga atcacaagcc cagcaacacc aaggtggaca agaaagttga gcccaaattc 720
tgtgacaaaa ctcacacatg cccaccgtgc ccagcacctg aactcctggg gggaccgtca 780
gtcttcctct tcccccaaa acccaaggac accctcatga tctcccgga ccctgaggtc 840
acatgcgtgg tgggtggacgt gagccacgaa gaccctgagg tcaagttcaa ctggtacgtg 900
gacggcgtgg aggtgcataa tgccaagaca aagccgcggg aggagcagta caacagcacg 960

Ser	Val	Phe	Pro	Leu	Ala	Pro	Ser	Ser	Lys	Ser	Thr	Ser	Gly	Gly	Thr	145	150	155	160
Ala	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	165	170	175	
Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	180	185	190	
Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	195	200	205	
Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	210	215	220	
His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	225	230	235	240
Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	245	250	255	
Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	260	265	270	
Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	275	280	285	
His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	290	295	300	
Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	305	310	315	320
Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	325	330	335	
Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	340	345	350	
Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	355	360	365	
Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	370	375	380	
Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	385	390	395	400

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
405 410 415

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
420 425 430

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
435 440 445

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
450 455 460

Ser Pro Gly Lys
465

<210> 59
<211> 1413
<212> DNA
<213> Artificial Sequence

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

<400> 59
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgag 60
gtccagctgc tggaatcagg gggaggactg gtgcagcccg gagggtcact gcgactgtct 120
tgtgccgctt caggcattga tctgtctaac tacgctatga cttgggtgag gcaggcaccc 180
ggcaagggac tggagtgggt cggaatcatt agctccaatg acaagacctg gtacgccgat 240
tcagtgaaag gccggttcac catctctaga gacaacagta agaatacact gtatctgcag 300
atgaacagcc tgcgggcaga agatacagcc gtctactatt gcgctaaagc cgctatgcct 360
ggcggactga agaacgcatt tgatccttgg ggacagggaa ctctggtcac cgtctcatct 420
gcatccacca agggcccacg ggtcttcccc ctggcaccct cctccaagag cacctctggg 480
ggcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacggtgtcg 540
tggaactcag gcgccctgac cagcggcgtg cacaccttcc cggctgtcct acagtctca 600
ggactctact ccctcagcag cgtgggtgacc gtgccctcca gcagcttggg caccagacc 660
tacatctgca acgtgaatca caagcccagc aacaccaagg tggacaagaa agttgagccc 720
aaatcttgtg aaaaaactca cacatgcccc ccgtgcccag cacctgaact cctgggggga 780
ccgtcagtct tcctcttccc cccaaaaccc aaggacaccc tcatgatctc ccggaccct 840
gaggtcacat gcgtgggtgt ggacgtgagc cacgaagacc ctgaggtcaa gttcaactgg 900
tacgtggacg gcgtggaggt gcataatgcc aagacaaagc cgcgggagga gcagtacaac 960
agcacgtacc gtgtgggtcag cgtcctcacc gtcctgcacc aggactggct gaatggcaag 1020

gagtacaagt gcaaggtctc caacaaagcc ctcccagccc ccatcgagaa aaccatctcc 1080
aaagccaaaag ggcagccccg agaaccacag gtgtacaccc tgcccccatc ccgggatgag 1140
ctgaccaaga accaggtcag cctgacctgc ctggtcaaag gcttctatcc cagcgacatc 1200
gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac gcctcccgtg 1260
ctggactccg acggctcctt cttcttatat tcaaagctca ccgtggacaa gagcaggtgg 1320
cagcagggga acgtcttctc atgctccgtg atgcatgagg ctctgcacaa ccactacag 1380
cagaagagcc tctccctgtc tcccgggaaa tga 1413

<210> 60

<211> 470

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 60

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

Val His Ser Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Asp Leu
35 40 45

Ser Asn Tyr Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50 55 60

Glu Trp Val Gly Ile Ile Ser Ser Asn Asp Lys Thr Trp Tyr Ala Asp
65 70 75 80

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr
85 90 95

Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr
100 105 110

Tyr Cys Ala Lys Ala Ala Met Pro Gly Gly Leu Lys Asn Ala Phe Asp
115 120 125

Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys
130 135 140

Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly

145		150		155		160
Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro	165			170		175
Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr	180			185		190
Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val	195			200		205
Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn	210			215		220
Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro	225			230		235
Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu	245			250		255
Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp	260			265		270
Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp	275			280		285
Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly	290			295		300
Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn	305			310		315
Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp	325			330		335
Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro	340			345		350
Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu	355			360		365
Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn	370			375		380
Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile	385			390		395
Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr						400

Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
 420 425 430

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
 435 440 445

Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
 450 455 460

Ser Leu Ser Pro Gly Lys
 465 470

<210> 61

<211> 1419

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 61

atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactcccag	60
tcgggtggagg agtccggggg tcgcctggtc acgcctggga caccctgac actcacctgc	120
accgtctctg gaatctccct cagtagcgat gcaataagct gggtcggcca ggctccaggg	180
aaggggctcg aatacatcgg aatcattaat ggtggtggta acacatacta cgcgagctgg	240
gcgaaaggcc gattcaccat ctccaaaacc tcgaccacgg tggatctgaa aatcaccagt	300
ccgacaaccg aggacacggc cacctatttc tgtgccagag gcattcaaca tgggtggtggt	360
aatagtgatt attattatta cggcatggac ctctggggcc caggcaccct ggtcactgtc	420
tcttcagcat ccaccaaggg cccatcggtc ttccccctgg caccctcctc caagagcacc	480
tctgggggca cagcggccct gggctgcctg gtcaaggact acttccccga accggtgacg	540
gtgtcgtgga actcaggcgc cctgaccagc ggcgtgcaca ccttcccggc tgtcctacag	600
tcctcaggac tctactccct cagcagcgtg gtgaccgtgc cctccagcag cttgggcacc	660
cagacctaca tctgcaacgt gaatcacaag cccagcaaca ccaaggtgga caagaaagtt	720
gagcccaaat cttgtgacaa aactcacaca tgcccaccgt gcccagcacc tgaactcctg	780
gggggaccgt cagtcttcct cttcccccca aaaccgaagg acaccctcat gatctcccgg	840
acccctgagg tcacatgcgt ggtggtggac gtgagccacg aagaccctga ggtcaagttc	900
aactggtacg tggacggcgt ggaggtgcat aatgccaaaga caaagccgcg ggaggagcag	960
tacaacagca cgtaccgtgt ggtcagcgtc ctcaccgtcc tgcaccagga ctgggtgaat	1020

```

ggcaaggagt acaagtgcaa ggtctccaac aaagccctcc cagcccccat cgagaaaacc      1080
atctccaaag ccaaagggca gccccgagaa ccacaggtgt acaccctgcc cccatcccgg      1140
gatgagctga ccaagaacca ggtcagcctg acctgcctgg tcaaaggctt ctatcccagc      1200
gacatcgccg tggagtggga gagcaatggg cagccggaga acaactacaa gaccacgcct      1260
cccgtgctgg actccgacgg ctcccttcttc ttatatattcaa agctcaccgt ggacaagagc      1320
aggtggcagc aggggaacgt cttctcatgc tccgtgatgc atgaggctct gcacaaccac      1380
tacacgcaga agagcctctc cctgtctccc gggaaatga                               1419

```

<210> 62

<211> 472

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 62

```

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

```

```

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

```

```

Gly Thr Pro Leu Thr Leu Thr Cys Thr Val Ser Gly Ile Ser Leu Ser
          35           40           45

```

```

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

```

```

Tyr Ile Gly Ile Ile Asn Gly Gly Gly Asn Thr Tyr Tyr Ala Ser Trp
65           70           75           80

```

```

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

```

```

Lys Ile Thr Ser Pro Thr Thr Glu Asp Thr Ala Thr Tyr Phe Cys Ala
          100          105          110

```

```

Arg Gly Ile Gln His Gly Gly Gly Asn Ser Asp Tyr Tyr Tyr Tyr Gly
          115          120          125

```

```

Met Asp Leu Trp Gly Pro Gly Thr Leu Val Thr Val Ser Ser Ala Ser
          130          135          140

```

```

Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr
          145          150          155          160

```

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

Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
 180 185 190

His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
 195 200 205

Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile
 210 215 220

Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val
 225 230 235 240

Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
 245 250 255

Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
 260 265 270

Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
 275 280 285

Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val
 290 295 300

Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
 305 310 315 320

Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
 325 330 335

Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala
 340 345 350

Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
 355 360 365

Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr
 370 375 380

Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
 385 390 395 400

Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
 405 410 415

Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
420 425 430

Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe
435 440 445

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
450 455 460

Ser Leu Ser Leu Ser Pro Gly Lys
465 470

<210> 63

<211> 1428

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 63

atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgaa	60
gtccaactgg tggaaagcgg gggaggactg gtgcagccgg gcggatccct ccggctgtca	120
tgtgctgcat cgggaatttc cctctcctcc gacgcgatta gctgggtcag acaggccccc	180
ggaaaggggc tggagtacat cggtatcatc aacggcgggc gaaacaccta ctacgcctcc	240
tggggccaagg gccgcttcac catctcgcgg cataattcca agaacactct gtacttgcaa	300
atgaactccc tgagggccga ggacaccgcc gtgtactact gcgcgcgcgg catccagcac	360
ggtggtggaa acagcgacta ctactactat gggatggatc tgtggggcca gggaactctt	420
gtgaccgtgt cgtcagcatc caccaagggc ccatcgggtct tccccctggc accctcctcc	480
aagagcacct ctggggggcac agcggccctg ggctgcctgg tcaaggacta cttccccgaa	540
ccggtgacgg tgtcgtggaa ctcaggcgcc ctgaccagcg gcgtgcacac cttcccggct	600
gtcctacagt cctcaggact ctactccctc agcagcgtgg tgaccgtgcc ctccagcagc	660
ttggggcacc agacctacat ctgcaacgtg aatcacaagc ccagcaacac caaggtggac	720
aagaaagtgt agcccaaata ttgtgacaaa actcacacat gcccaccgtg cccagcacct	780
gaactcctgg ggggaccgtc agtcttcctc ttccccccaa aaccaagga caccctcatg	840
atctcccgga cccctgaggt cacatgcgtg gtggtggacg tgagccacga agaccctgag	900
gtcaagttca actggtacgt ggacggcgtg gaggtgcata atgccaagac aaagccgcgg	960
gaggagcagt acaacagcac gtaccgtgtg gtcagcgtcc tcaccgtcct gcaccaggac	1020
tggctgaatg gcaaggagta caagtgcaag gtctccaaca aagccctccc agccccatc	1080

gagaaaacca tctccaaagc caaagggcag ccccgagaac cacaggtgta caccctgccc 1140
 ccatcccggg atgagctgac caagaaccag gtcagcctga cctgcctggt caaaggcttc 1200
 tatcccagcg acatcgccgt ggagtgggag agcaatgggc agccggagaa caactacaag 1260
 accacgcctc ccgtgctgga ctccgacggc tccttcttct tatattcaaa gctcaccgtg 1320
 gacaagagca ggtggcagca ggggaacgtc ttctcatgct ccgtgatgca tgaggctctg 1380
 cacaaccact acacgcagaa gagcctctcc ctgtctcccg ggaaatga 1428

<210> 64

<211> 475

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 64

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

Val His Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Ser Leu
 35 40 45

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

Glu Tyr Ile Gly Ile Ile Asn Gly Gly Gly Asn Thr Tyr Tyr Ala Ser
 65 70 75 80

Trp Ala Lys Gly Arg Phe Thr Ile Ser Arg His Asn Ser Lys Asn Thr
 85 90 95

Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr
 100 105 110

Tyr Cys Ala Arg Gly Ile Gln His Gly Gly Gly Asn Ser Asp Tyr Tyr
 115 120 125

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

Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser
 145 150 155 160

Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
 165 170 175

Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr
 180 185 190

Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr
 195 200 205

Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln
 210 215 220

Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp
 225 230 235 240

Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro
 245 250 255

Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
 260 265 270

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
 275 280 285

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
 290 295 300

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
 305 310 315 320

Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
 325 330 335

Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
 340 345 350

Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
 355 360 365

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
 370 375 380

Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
 385 390 395 400

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
 405 410 415

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
 420 425 430

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
 435 440 445

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
 450 455 460

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 465 470 475

<210> 65

<211> 1404

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 65

atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactcccag	60
tcgctggagg agtccggggg tcgcctggtc acgcctggga caccctgac actcacctgc	120
acagcctctg gattctccct cagtaactat gcaatgacct gggtcgcca ggctccaggg	180
aaggggctag aatacatcgg aatcattagt actggcggta tcacatacta tatggactcg	240
gcaaaaggcc gattcaccat ctccagaacc tcgaccacgg tggatctgaa aatgaccagt	300
ctgacaaccg aggacacggc cacctatttc tgtggcagaa atgctgggtg tagttatatt	360
ttctattatt ttgacttgtg gggccaaggc accctgggtc ctgtctcttc agcatccacc	420
aagggcccat cggctcttccc cctggcaccc tcctccaaga gcacctctgg gggcacagcg	480
gccctgggct gcctgggtcaa ggactacttc cccgaaccgg tgacgggtgc gtggaactca	540
ggcgccctga ccagcggcgt gcacaccttc ccggctgtcc tacagtcctc aggactctac	600
tcctcagca gcgtgggtgac cgtgccctcc agcagcttg gacccagac ctacatctgc	660
aacgtgaatc acaagcccag caacaccaag gtggacaaga aagttgagcc caaatcttgt	720
gacaaaactc acacatgccc accgtgccc gcacctgaac tcctgggggg accgtcagtc	780
ttcctcttcc ccccaaaacc caaggacacc ctcatgatct cccggacccc tgaggtcaca	840
tgcggtgggtg tggacgtgag ccacgaagac cctgaggtca agttcaactg gtacgtggac	900
ggcgtggagg tgcataatgc caagacaaag ccgcgggagg agcagtacaa cagcacgtac	960
cgtgtgggtc gcgtcctcac cgtcctgcac caggactggc tgaatggcaa ggagtacaag	1020
tgcaagggtct ccaacaaagc cctcccagcc cccatcgaga aaaccatctc caaagccaaa	1080

```

gggcagcccc gagaaccaca ggtgtacacc ctgcccccat cccgggatga gctgaccaag      1140
aaccagggtca gcctgacctg cctgggtcaaa ggcttctatc ccagcgacat cgccgtggag      1200
tgggagagca atgggcagcc ggagaacaac tacaagacca cgcctcccgt gctggactcc      1260
gacggctcct tcttcttata ttcaaagctc accgtggaca agagcagggtg gcagcagggg      1320
aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc      1380
ctctccctgt ctcccgggaa atga                                              1404

```

<210> 66

<211> 467

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 66

```

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

```

```

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

```

```

Gly Thr Pro Leu Thr Leu Thr Cys Thr Ala Ser Gly Phe Ser Leu Ser
    35           40           45

```

```

Asn Tyr Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu
    50           55           60

```

```

Tyr Ile Gly Ile Ile Ser Thr Gly Gly Ile Thr Tyr Tyr Met Asp Ser
65           70           75           80

```

```

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

```

```

Lys Met Thr Ser Leu Thr Thr Glu Asp Thr Ala Thr Tyr Phe Cys Gly
    100           105           110

```

```

Arg Asn Ala Gly Gly Ser Tyr Ile Phe Tyr Tyr Phe Asp Leu Trp Gly
    115           120           125

```

```

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

```

```

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
145           150           155           160

```

Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr	Phe	Pro	Glu	Pro	Val	Thr	Val		
				165					170						175		
Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala		
			180					185					190				
Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val		
		195					200					205					
Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His		
	210					215					220						
Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys		
225					230					235					240		
Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly		
				245					250						255		
Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met		
			260					265					270				
Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His		
		275					280					285					
Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val		
	290					295					300						
His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr		
305					310					315					320		
Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly		
				325					330					335			
Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile		
			340					345					350				
Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val		
		355					360					365					
Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser		
	370					375					380						
Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu		
385					390					395					400		
Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro		
				405					410					415			

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
420 425 430

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
435 440 445

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
450 455 460

Pro Gly Lys
465

<210> 67
<211> 1404
<212> DNA
<213> Artificial Sequence

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

<400> 67
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactcccag 60
tcgttggagg agtccggggg tcgcctggtc acgcctggga caccctgac actcacctgc 120
acagcctctg gattctccct cagtaactat gcaatgacct gggtcgcga ggctccaggg 180
aaggggctag aatacatcgg aatcattagt actggcggtg tcacatacta tatggactcg 240
gcaaaaggcc gattcaccat ctccagaacc tcgaccacgg tggatctgaa aatgaccagt 300
ctgacaaccg aggacacggc cacctatttc tgtggcagaa atgctggtgg tagttatatt 360
ttctattatt tcgacttggt gggccaaggg accctcgta ctgtctcttc agcatccacc 420
aagggcccat cggctcttcc cctggcaccc tcctccaaga gcacctctgg gggcacagcg 480
gccctgggct gcctggtcaa ggactacttc cccgaaccgg tgacggtgtc gtggaactca 540
ggcgccctga ccagcggcgt gcacaccttc ccggctgtcc tacagtcctc aggactctac 600
tcctcagca gcgtggtgac cgtgccctcc agcagcttgg gcaccagac ctacatctgc 660
aacgtgaatc acaagcccag caacaccaag gtggacaaga aagttgagcc caaatcttgt 720
gacaaaactc acacatgccc accgtgccca gcacctgaac tcctgggggg accgtcagtc 780
ttcctcttcc ccccaaaacc caaggacacc ctcatgatct cccggacccc tgaggtcaca 840
tgcggtggtg tggacgtgag ccacgaagac cctgaggtca agttcaactg gtacgtggac 900
ggcgtggagg tgcataatgc caagacaaag ccgcgggagg agcagtacaa cagcacgtac 960
cgtgtggtca gcgtcctcac cgtcctgcac caggactggc tgaatggcaa ggagtacaag 1020
tgcaaggtct ccaacaaagc cctcccagcc cccatcgaga aaaccatctc caaagccaaa 1080
gggcagcccc gagaaccaca ggtgtacacc ctgcccccat cccgggatga gctgaccaag 1140

aaccagggtca gcctgacctg cctgggtcaaa ggctttctatc ccagcgacat cgccgtggag 1200
 tgggagagca atgggcagcc ggagaacaac tacaagacca cgcctcccgt gctggactcc 1260
 gacggctcct tcttcttata ttcaaagctc accgtggaca agagcagggtg gcagcagggg 1320
 aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc 1380
 ctctccctgt ctcccgggaa atga 1404

<210> 68

<211> 467

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 68

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

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

Gly Thr Pro Leu Thr Leu Thr Cys Thr Ala Ser Gly Phe Ser Leu Ser
 35 40 45

Asn Tyr Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu
 50 55 60

Tyr Ile Gly Ile Ile Ser Thr Gly Gly Ile Thr Tyr Tyr Met Asp Ser
 65 70 75 80

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

Lys Met Thr Ser Leu Thr Thr Glu Asp Thr Ala Thr Tyr Phe Cys Gly
 100 105 110

Arg Asn Ala Gly Gly Ser Tyr Ile Phe Tyr Tyr Phe Asp Leu Trp Gly
 115 120 125

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

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 145 150 155 160

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val

165

170

175

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
180 185 190

Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
195 200 205

Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
210 215 220

Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
225 230 235 240

Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
245 250 255

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
260 265 270

Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
275 280 285

Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
290 295 300

His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
305 310 315 320

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
325 330 335

Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
340 345 350

Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
355 360 365

Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser
370 375 380

Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
385 390 395 400

Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
405 410 415

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val

Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
 435 440 445

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
 450 455 460

Pro Gly Lys
 465

<210> 69

<211> 1389

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 69

atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactcccag	60
tcgctggagg agtccggggg tcgcctggtc gcgcctggga cacccttgac actcacctgc	120
acagtctctg gattctccct cagtagttac cacatgagct gggtcgcgca ggctccaggg	180
gaggggctgg aatggatcgg aggcattact gctatgagtc gcacatacta cgcgagctgg	240
gcgaaaggcc gattcaccat ctccaaaacc tcgaccacgg tccatctgaa aatcaccagt	300
ccgacaaccg aggacacggc cacctatttc tgtgccaggg aacctggttt tgtagtaac	360
atctggggcc caggcaccct ggtcaccgtc tccttagcat ccaccaaggg cccatcggtc	420
ttccccctgg caccctcctc caagagcacc tctgggggca cagcgccctt gggctgcctg	480
gtcaaggact acttccccga accggtgacg gtgtcgtgga actcaggcgc cctgaccagc	540
ggcgtgcaca ccttcccggc tgtcctacag tcctcaggac tctactccct cagcagcgtg	600
gtgaccgtgc cctccagcag cttgggcacc cagacctaca tctgcaacgt gaatcacaag	660
cccagcaaca ccaagggtgga caagaaagt gagcccaa cttgtgacaa aactcacaca	720
tgcccaccgt gcccagcacc tgaactcctg gggggaccgt cagtcttcct cttcccccca	780
aaacccaagg acaccctcat gatctcccgg acccctgagg tcacatgcgt ggtggtggac	840
gtgagccacg aagaccctga ggtcaagttc aactggtacg tggacggcgt ggaggtgcat	900
aatgccaaga caaagccgcg ggaggagcag tacaacagca cgtaccgtgt ggtcagcgtc	960
ctcaccgtcc tgcaccagga ctggctgaat ggcaaggagt acaagtgcaa ggtctccaac	1020
aaagccctcc cagcccccat cgagaaaacc atctccaaag ccaaagggca gccccgagaa	1080
ccacaggtgt acaccctgcc cccatcccgg gatgagctga ccaagaacca ggtcagcctg	1140

acctgcctgg tcaaaggctt ctatcccagc gacatcgccg tggagtggga gagcaatggg 1200
cagccgggaga acaactacaa gaccacgcct cccgtgctgg actccgacgg ctccttcttc 1260
ttatattcaa agctcaccgt ggacaagagc aggtggcagc aggggaacgt cttctcatgc 1320
tccgtgatgc atgaggctct gcacaaccac tacacgcaga agagcctctc cctgtctccc 1380
gggaaatga 1389

<210> 70

<211> 462

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 70

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

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

Gly Thr Pro Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser
35 40 45

Ser Tyr His Met Ser Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu
50 55 60

Trp Ile Gly Gly Ile Thr Ala Met Ser Arg Thr Tyr Tyr Ala Ser Trp
65 70 75 80

Ala Lys Gly Arg Phe Thr Ile Ser Lys Thr Ser Thr Thr Val His Leu
85 90 95

Lys Ile Thr Ser Pro Thr Thr Glu Asp Thr Ala Thr Tyr Phe Cys Ala
100 105 110

Arg Glu Pro Gly Phe Val Ser Asn Ile Trp Gly Pro Gly Thr Leu Val
115 120 125

Thr Val Ser Leu Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala
130 135 140

Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu
145 150 155 160

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

Ala	Leu	Thr	Ser	Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	
			180					185					190			
Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	
		195					200					205				
Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	
	210					215					220					
Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	
225					230					235					240	
Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	
				245					250					255		
Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	
			260					265					270			
Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	
		275					280					285				
Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	
	290					295					300					
Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	
305					310					315					320	
Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	
				325					330					335		
Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	
			340					345					350			
Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	
	355						360					365				
Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	
	370					375					380					
Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	
385					390					395					400	
Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	
			405						410					415		
Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	
			420					425					430			

Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
435 440 445

Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
450 455 460

<210> 71
<211> 1404
<212> DNA
<213> Artificial Sequence

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

<400> 71
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactcccag 60
tcggtggagg agtccggggg tcgcctggtc acgcctggga caccctgac actcacctgc 120
acagtctctg gattctccct cagtagctat gcaatgggct gggtcgcca ggctccaggg 180
gaggggctgg aatggatcgg aaccattagt actggtggta ttacatacta cgcgagctgg 240
gcgaaaggcc gattcaccat ctccaaaacc tcgaccacgg tggatctgaa aatcaccagt 300
ccgacaaccg aggacacggc cacctatttc tgtgccagag tgggtagtag tggttatctt 360
ttctacttct ttaacttgtg gggccaaggc accctcgtca ctgtctcctc agcatccacc 420
aagggcccat cggtcttccc cctggcaccc tcctccaaga gcacctctgg gggcacagcg 480
gccctgggct gcctgggtcaa ggactacttc cccgaaccgg tgacggtgtc gtggaactca 540
ggcgccctga ccagcggcgt gcacaccttc ccggctgtcc tacagtcctc aggactctac 600
tcctcagca gcgtggtgac cgtgccctcc agcagcttgg gcaccagac ctacatctgc 660
aacgtgaatc acaagcccag caacaccaag gtggacaaga aagttgagcc caaatcttgt 720
gacaaaactc acacatgccc accgtgcccga gcacctgaac tcctgggggg accgtcagtc 780
ttcctcttcc ccccaaaacc caaggacacc ctcatgatct cccggacccc tgaggtcaca 840
tgcgtggtgg tggacgtgag ccacgaagac cctgaggtca agttcaactg gtacgtggac 900
ggcgtggagg tgcataatgc caagacaaag ccgcgggagg agcagtacaa cagcacgtac 960
cgtgtggtca gcgtcctcac cgtcctgcac caggactggc tgaatggcaa ggagtacaag 1020
tgcaaggctc ccaacaaagc cctcccagcc cccatcgaga aaaccatctc caaagccaaa 1080
gggcagcccc gagaaccaca ggtgtacacc ctgcccccat cccgggatga gctgaccaag 1140
aaccagggtc gcctgacctg cctgggtcaaa ggcttctatc ccagcgacat cgccgtggag 1200
tgggagagca atgggcagcc ggagaacaac tacaagacca cgcctcccgt gctggactcc 1260
gacggctcct tcttcttata ttcaaagctc accgtggaca agagcaggtg gcagcagggg 1320

aacgtcttct catgctccgt gatgcatgag gctctgcaca accactacac gcagaagagc 1380

ctctccctgt ctcccgga atga 1404

<210> 72

<211> 467

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 72

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

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

Gly Thr Pro Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser
35 40 45

Ser Tyr Ala Met Gly Trp Val Arg Gln Ala Pro Gly Glu Gly Leu Glu
50 55 60

Trp Ile Gly Thr Ile Ser Thr Gly Gly Ile Thr Tyr Tyr Ala Ser Trp
65 70 75 80

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

Lys Ile Thr Ser Pro Thr Thr Glu Asp Thr Ala Thr Tyr Phe Cys Ala
100 105 110

Arg Val Gly Ser Ser Gly Tyr Leu Phe Tyr Phe Phe Asn Leu Trp Gly
115 120 125

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

Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
145 150 155 160

Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
165 170 175

Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
180 185 190

Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	Ser	Val	Val	Thr	Val				
		195					200					205							
Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	Cys	Asn	Val	Asn	His				
		210				215					220								
Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	Glu	Pro	Lys	Ser	Cys				
		225				230				235					240				
Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly				
				245					250						255				
Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	Met				
			260					265						270					
Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His				
		275						280					285						
Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val				
		290				295					300								
His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr				
		305				310				315					320				
Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	Gly				
				325					330						335				
Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile				
			340					345					350						
Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	Val				
		355					360					365							
Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	Ser				
		370				375					380								
Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	Glu				
		385				390				395					400				
Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	Pro				
				405					410					415					
Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	Val				
			420					425						430					
Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	Met				
		435					440					445							

His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	Ser
450						455					460				

Pro Gly Lys
465

<210> 73
 <211> 1419
 <212> DNA
 <213> Artificial Sequence

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

<400> 73	
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagccag	60
tcgggtgaagg agtccagggg tcgcctggtc acgcctggga caccctgac actcacctgc	120
acagtctctg gattctccct cagtaggtat acattgatct gggtcgcga ggctccaggg	180
aaggggctgg aatggatcgg aatcatagat agtagtagta gtgcatacta cgcgaggtgg	240
gcgaaaggcc gattcaccat ctccaaaacc tcgaccacgg tggatctgaa aatcaccagt	300
ccgacaaccg aggacacggc cacctatttc tgtgccagag acagagtcct aagctacgat	360
gactatggtg atttgccga tggtttcgat ccctggggcc caggcaccct ggtcaccgtc	420
tcctcagcat ccaccaaggg cccatcggtc ttccccctgg caccctcctc caagagcacc	480
tctgggggca cagcggccct gggctgcctg gtcaaggact acttccccga accggtgacg	540
gtgtcgtgga actcaggcgc cctgaccagc ggcgtgcaca ccttcccggc tgtcctacag	600
tcctcaggac tctactccct cagcagcgtg gtgaccgtgc cctccagcag cttgggcacc	660
cagacctaca tctgcaacgt gaatcacaag cccagcaaca ccaagggtga caagaaagtt	720
gagcccaaatt cttgtgacaa aactcacaca tgcccaccgt gccacgacc tgaactcctg	780
gggggaccgt cagtcttcct cttcccccca aaacccaagg acaccctcat gatctcccg	840
accctgagg tcacatgcgt ggtgggtggac gtgagccacg aagaccctga ggtcaagttc	900
aactggtacg tggacggcgt ggaggtgcat aatgccaga caaagccgcg ggaggagcag	960
tacaacagca cgtaccgtgt ggtcagcgtc ctcaccgtcc tgcaccagga ctggctgaat	1020
ggcaaggagt acaagtgcaa ggtctccaac aaagccctcc cagcccccat cgagaaaacc	1080
atctccaaag ccaaagggca gccccgagaa ccacaggtgt acaccctgcc cccatcccg	1140
gatgagctga ccaagaacca ggtcagcctg acctgcctgg tcaaaggctt ctatcccagc	1200
gacatcgccg tggagtggga gagcaatggg cagccggaga acaactacaa gaccacgcct	1260
cccgctgctg actccgacgg ctcttcttc ttatatcaa agctcaccgt ggacaagagc	1320

agggtggcagc aggggaacgt cttctcatgc tccgtgatgc atgaggctct gcacaaccac 1380

tacacgcaga agagcctctc cctgtctccc gggaaatga 1419

<210> 74

<211> 472

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 74

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

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

Gly Thr Pro Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser
35 40 45

Arg Tyr Thr Leu Ile Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu
50 55 60

Trp Ile Gly Ile Ile Asp Ser Ser Ser Ser Ala Tyr Tyr Ala Arg Trp
65 70 75 80

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

Lys Ile Thr Ser Pro Thr Thr Glu Asp Thr Ala Thr Tyr Phe Cys Ala
100 105 110

Arg Asp Arg Val Leu Ser Tyr Asp Asp Tyr Gly Asp Leu Pro Asp Gly
115 120 125

Phe Asp Pro Trp Gly Pro Gly Thr Leu Val Thr Val Ser Ser Ala Ser
130 135 140

Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr
145 150 155 160

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

Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
180 185 190

His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser	Leu	Ser	195	200	205
Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr	Tyr	Ile	210	215	220
Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys	Lys	Val	225	230	235
Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	Ala	245	250	255
Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	260	265	270
Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	275	280	285
Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	290	295	300
Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	305	310	315
Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	325	330	335
Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	340	345	350
Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	355	360	365
Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	370	375	380
Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	385	390	395
Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	405	410	415
Lys	Thr	Thr	Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	420	425	430
Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	435	440	445

Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
 450 455 460

Ser Leu Ser Leu Ser Pro Gly Lys
 465 470

<210> 75
 <211> 1428
 <212> DNA
 <213> Artificial Sequence

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

<400> 75
 atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgaa 60
 gtgcagctgg tcgaatctgg aggaggactg gtgcagcctg gagggagcct gagactgagt 120
 tgcgcagcaa gcgggttttag cctgtcccga tacaccctga tctgggtgag acaggccccc 180
 ggcaagggac tggagtgggt ctctatcatt gacagctcct ctagtgccta ctatgctgat 240
 agtgtgaagg gcaggttcac catttcacgc gacaacgcta aaaatagcct gtatctgcag 300
 atgaactccc tgcgggcaga agacacagcc gtgtactatt gcgcacggga tagagtccctg 360
 agctacgacg attatgggga cctgcctgac ggctttgatc cttggggaca gggaactctg 420
 gtgacagtga gcagcgcata caccaagggc ccacgggtct tccccctggc accctcctcc 480
 aagagcacct ctggggggcac agcggccctg ggctgcctgg tcaaggacta cttccccgaa 540
 ccggtgacgg tgctcgtggaa ctcaggcgcc ctgaccagcg gcgtgcacac cttcccggct 600
 gtccctacagt cctcaggact ctactccctc agcagcgtgg tgaccgtgcc ctccagcagc 660
 ttgggcaccc agacctacat ctgcaacgtg aatcacaagc ccagcaacac caaggtggac 720
 aagaaagtgt agcccaaata ttgtgacaaa actcacacat gcccaccgtg cccagcacct 780
 gaactcctgg ggggaccgtc agtcttcctc ttccccccaa aaccacaagga caccctcatg 840
 atctcccgga cccctgaggt cacatgcgtg gtggtggacg tgagccacga agaccctgag 900
 gtcaagttca actggtacgt ggacggcgtg gaggtgcata atgccaagac aaagccgcgg 960
 gaggagcagt acaacagcac gtaccgtgtg gtcagcgtcc tcaccgtcct gcaccaggac 1020
 tggctgaatg gcaaggagta caagtgcaag gtctccaaca aagccctccc agccccatc 1080
 gagaaaacca tctccaaagc caaagggcag ccccgagaac cacaggtgta caccctgccc 1140
 ccatcccggg atgagctgac caagaaccag gtcagcctga cctgcctggc caaaggcttc 1200
 tatcccagcg acatcgccgt ggagtgggag agcaatgggc agccggagaa caactacaag 1260
 accacgcctc ccgtgctgga ctccgacggc tccttcttct tatattcaaa gctcaccgtg 1320
 gacaagagca ggtggcagca ggggaacgtc ttctcatgct ccgtgatgca tgaggctctg 1380

<210> 76

<211> 475

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 76

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

Val His Ser Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Leu
35 40 45

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

Glu Trp Val Ser Ile Ile Asp Ser Ser Ser Ser Ala Tyr Tyr Ala Asp
65 70 75 80

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser
85 90 95

Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr
100 105 110

Tyr Cys Ala Arg Asp Arg Val Leu Ser Tyr Asp Asp Tyr Gly Asp Leu
115 120 125

Pro Asp Gly Phe Asp Pro Trp Gly Gln Gly Thr Leu Val Thr Val Ser
130 135 140

Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser
145 150 155 160

Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
165 170 175

Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr
180 185 190

Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr

195

200

205

Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln
 210 215 220

Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp
 225 230 235 240

Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro
 245 250 255

Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
 260 265 270

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
 275 280 285

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
 290 295 300

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
 305 310 315 320

Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
 325 330 335

Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
 340 345 350

Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
 355 360 365

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
 370 375 380

Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
 385 390 395 400

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
 405 410 415

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
 420 425 430

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
 435 440 445

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 465 470 475

<210> 77

<211> 714

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 77

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atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgag      60
ctcgtgatga cccagactcc atcctccgtg tctgcagctg tgggaggcac agtcaccatc      120
aattgccagg ccagtcagag cattagtagc tacttagcct ggtatcagca gaaaccaggg      180
cagcctccca agctcctgat ctattatgca tccactctgg cgtctggggg cccatcgcgg      240
ttcaaaggca gtggctctgg gacagagttc actctcacca tcaccggcgt gcagtgtgac      300
gatgctgcca cttactactg tctaggtggt tatggttata gttttgatga tggatttgct      360
ttcggcgagg ggaccgagct ggagatcaaa cgaactgtgg ctgcaccatc tgtcttcac      420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttggtgtg cctgctgaat      480
aacttctatc ccagagaggg caaagtacag tggaaggtgg ataacgccct ccaatcgggg      540
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc      600
accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc      660
catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga          714

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<210> 78

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 78

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

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

Ala Val Gly Gly Thr Val Thr Ile Asn Cys Gln Ala Ser Gln Ser Ile
 35 40 45

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

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

Phe Lys Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Thr Gly
85 90 95

Val Gln Cys Asp Asp Ala Ala Thr Tyr Tyr Cys Leu Gly Val Tyr Gly
100 105 110

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Gly Gly Thr Glu Leu Glu
115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 79

<211> 714

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 79

atgggggtggt cttgcatcat tctgttcctg gtggcaaccg ccacaggtgt gcactccgac 60

atccagatga ctcaagatcc atcaaccctg tccgctagcg tgggagatag agtgactatc 120

acctgtcagg cctctcagag tatttccagc tacctggctt ggtatcagca gaagccaggc 180
 aaagcaccca agctgctgat ctactatgct agtacactgg catcaggagt gccttcccgc 240
 ttctcagggt ccggcagcgg aactgagttt aactgacta tttctagtct gcagtgcgac 300
 gatttcgcta cctactattg cctgggggtg tacggttatt ctttcgacga tggcatcgca 360
 tttggcggag ggacaaaagt ggagattaag aggactgtgg ccgctcccag tgtgttcatt 420
 tttcccccta gcgacgaaca gctgaaaagc gggacagcct ctgtggtgtg tctgctgaac 480
 aatttttacc ctcgggaggc caaagtgcag tggaaggtgg ataacgctct gcagtctggc 540
 aatagtcagg agtcagtgac cgaacaggac tccaaagata gcacatattc tctgtcatcc 600
 accctgacac tgtccaaggc agactacgag aagcacaaag tgtatgcctg cgaagtgact 660
 catcagggcc tgagctctcc cgtgaccaag agctttaaca ggggagaatg ttga 714

<210> 80

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 80

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

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

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

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

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

Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser
 85 90 95

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

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Gly Gly Thr Lys Val Glu
 115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
 130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
 165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
 180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
 195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
 210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 81
 <211> 714
 <212> DNA
 <213> Artificial Sequence

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

<400> 81
 atggggtggt cttgcatcat tctgttcctg gtggcaaccg ccacaggtgt gcactccgac 60
 atccagatga ctcagagtcc atcaaccctg tccgctagcg tgggagatag agtgactatc 120
 acctgtcagg cctctcagag tatttccagc tacctggctt ggtatcagca gaagccaggc 180
 aaagcaccca agctgctgat ctactatgct agtacactgg catcaggagt gccttcccgc 240
 ttctcagggt ccggcagcgg aactgagttt aactgacta ttactggtgt gcagtgcgac 300
 gatttcgcta cctactattg cctgggggtg tacggttatt ctttcgacga tggcatcgca 360
 tttggcggag ggacaaaagt ggagattaag aggactgtgg ccgctcccag tgtgttcatt 420
 tttcccccta gcgacgaaca gctgaaaagc gggacagcct ctgtggtgtg tctgctgaac 480
 aatttttacc ctcgggaggc caaagtgcag tggaaggtgg ataacgctct gcagtctggc 540
 aatagtcagg agtcagtgac cgaacaggac tccaaagata gcacatattc tctgtcatcc 600
 accctgacac tgtccaaggc agactacgag aagcacaaaag tgtatgcctg cgaagtgact 660
 catcagggcc tgagctctcc cgtgaccaag agctttaaca ggggagaatg ttga 714

<210> 82
<211> 237
<212> PRT
<213> Artificial Sequence

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

<400> 82
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

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

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

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

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

Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Thr Gly
85 90 95

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

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Gly Gly Thr Lys Val Glu
115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
 210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 83
 <211> 714
 <212> DNA
 <213> Artificial Sequence

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

<400> 83
 atgggggtggt cttgcatcat tctgttcctg gtggcaaccg ccacaggtgt gcactccgac 60
 atccagatga ctgagagtcc atcaaccctg tccgctagcg tgggagatag agtgactatc 120
 acctgtcagg cctctcagag tatttccagc tacctggctt ggtatcagca gaagccaggc 180
 aaagcaccca agctgctgat ctactatgct agtacactgg catcaggagt gccttcccgc 240
 ttctcagggt cgggcagcgg aactgagttt aactgacta tttctagtct gcagtgcgac 300
 gatgccgcta cctactattg cctgggggtg tacgggttatt ctttcgacga tggcatcgca 360
 tttggcggag ggacaaaagt ggagattaag aggactgtgg ccgctcccag tgtgttcatt 420
 tttcccccta gcgacgaaca gctgaaaagc gggacagcct ctgtggtgtg tctgctgaac 480
 aatttttacc ctgaggaggc caaagtgcag tggaaggtgg ataacgctct gcagtctggc 540
 aatagtcagg agtcagtgac cgaacaggac tccaaagata gcacatattc tctgtcatcc 600
 accctgacac tgtccaaggc agactacgag aagcacaaag tgtatgcctg cgaagtgact 660
 catcagggcc tgagctctcc cgtgaccaag agctttaaca ggggagaatg ttga 714

<210> 84
 <211> 237
 <212> PRT
 <213> Artificial Sequence

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

<400> 84
 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15

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

Ser Val Gly Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Ser Ile

35

40

45

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

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

Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser
 85 90 95

Leu Gln Cys Asp Asp Ala Ala Thr Tyr Tyr Cys Leu Gly Val Tyr Gly
 100 105 110

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Gly Gly Thr Lys Val Glu
 115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
 130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
 165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
 180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
 195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
 210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 85

<211> 714

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 85

atgggggtggt cttgcatcat tctgttcctg gtggcaaccg ccacaggtgt gcactccgac

60

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atccagatga ctcagagtcc atcaaccctg tccgctagcg tgggagatag agtgactatc      120
acctgtcagg cctctcagag tatttccagc tacctggcctt ggtatcagca gaagccaggc      180
aaagcaccca agctgctgat ctactatgct agtacactgg catcaggagt gccttcccgc      240
ttctcagggt ccggcagcgg aactgagttt acactgacta ttactgggtg gcagtgcgac      300
gatgccgcta cctactattg cctgggggtg tacgggttatt ctttcgacga tggcatcgca      360
tttggcggag ggacaaaagt ggagattaag aggactgtgg ccgctcccag tgtgttcatt      420
tttcccccta gcgacgaaca gctgaaaagc gggacagcct ctgtggtgtg tctgctgaac      480
aatttttacc ctcgggaggc caaagtgcag tggaagggtg ataacgctct gcagtctggc      540
aatagtcagg agtcagtgac cgaacaggac tccaaagata gcacatattc tctgtcatcc      600
accctgacac tgtccaaggc agactacgag aagcacaaag tgtatgcctg cgaagtgact      660
catcagggcc tgagctctcc cgtgaccaag agctttaaca ggggagaatg ttga          714

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<210> 86

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 86

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

```

```

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

```

```

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

```

```

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

```

```

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

```

```

Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Thr Gly
          85          90          95

```

```

Val Gln Cys Asp Asp Ala Ala Thr Tyr Tyr Cys Leu Gly Val Tyr Gly
          100          105          110

```

```

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Gly Gly Thr Lys Val Glu
          115          120          125

```

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 87
<211> 714
<212> DNA
<213> Artificial Sequence

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

<400> 87
atgggggtggt cttgcatcat tctgttcctg gtggcaaccg ccacaggtgt gcactccgac 60
atccagatga ctcagagtcc atcaaccctg tccgctagcg tgggagatag agtgactatc 120
acctgtcagg cctctcagag tatttccagc tacctggctt ggtatcagca gaagccaggc 180
aaagcaccca agctgctgat ctactatgct agtacactgg catcaggagt gccttcccgc 240
ttcaaagggt ccggcagcgg aactgagttt aactgacta ttactggtgt gcagtgcgac 300
gatgccgcta cctactattg cctgggggtg tacggttatt ctttcgacga tggcatcgca 360
tttggcggag ggacaaaagt ggagattaag aggactgtgg ccgctcccag tgtgttcatt 420
tttcccccta gcgacgaaca gctgaaaagc gggacagcct ctgtggtgtg tctgctgaac 480
aatttttacc ctcgggaggc caaagtgcag tggaagggtg ataacgctct gcagtctggc 540
aatagtcagg agtcagtgac cgaacaggac tccaaagata gcacatattc tctgtcatcc 600
accctgacac tgtccaaggc agactacgag aagcacaaag tgtatgcctg cgaagtgact 660
catcagggcc tgagctctcc cgtgaccaag agctttaaca ggggagaatg ttga 714

<210> 88
<211> 237
<212> PRT
<213> Artificial Sequence

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

<400> 88
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

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

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

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

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

Phe Lys Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Thr Gly
85 90 95

Val Gln Cys Asp Asp Ala Ala Thr Tyr Tyr Cys Leu Gly Val Tyr Gly
100 105 110

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Gly Gly Thr Lys Val Glu
115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 89
<211> 714
<212> DNA
<213> Artificial Sequence

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

<400> 89
atgggggtggt cttgcatcat tctgttcctg gtggcaaccg ccacaggtgt gcactccgac 60
atccagatga ctgagagtcc atcaaccgtg tccgctgcag tgggaggtac agtgactatc 120
acctgtcagg cctctcagag tatttccagc tacctggctt ggtatcagca gaagccaggc 180
aaagcaccca agctgctgat ctactatgct agtacactgg catcaggagt gccttcccgc 240
ttctcagggt cgggcagcgg aactgagttt aactgacta ttactgggtgt gcagtgcgac 300
gatgccgcta cctactattg cctgggggtg tacgggttatt ctttcgacga tggcatcgca 360
tttggcggag ggacaaaagt ggagattaag aggactgtgg ccgctcccag tgtgttcatt 420
tttcccccta gcgacgaaca gctgaaaagc gggacagcct ctgtggtgtg tctgctgaac 480
aatttttacc ctcgggaggc caaagtgcag tggaaggtgg ataacgctct gcagtctggc 540
aatagtcagg agtcagtgac cgaacaggac tccaaagata gcacatattc tctgtcatcc 600
accctgacac tgtccaaggc agactacgag aagcacaaag tgtatgcctg cgaagtgact 660
catcagggcc tgagctctcc cgtgaccaag agctttaaca ggggagaatg ttga 714

<210> 90
<211> 237
<212> PRT
<213> Artificial Sequence

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

<400> 90
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

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

Ala Val Gly Gly Thr Val Thr Ile Thr Cys Gln Ala Ser Gln Ser Ile
35 40 45

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

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

Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Thr Gly
85 90 95

Val Gln Cys Asp Asp Ala Ala Thr Tyr Tyr Cys Leu Gly Val Tyr Gly
100 105 110

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Gly Gly Thr Lys Val Glu
115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 91
<211> 714
<212> DNA
<213> Artificial Sequence

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

<400> 91
atgggggtggt cttgcatcat tctgttcctg gtggcaaccg ccacaggtgt gactccgac

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atccagatga ctcagagtcc atcaaccctg tccgctagcg tgggagatag agtgactatc      120
acctgtcagg cctctcagag tatttccagc tacctggcctt ggtatcagca gaagccaggc      180
aaagcaccca agctgctgat ctactatgct agtacactgg catcaggagt gccttcccgc      240
ttctcagggtt ccggcagcgg aactgagttt aactgacta ttactgggtg gcagtgcgac      300
gatgccgcta cctactattg cctgggggtg tacggttatt ctttcgacga tggcatcgca      360
tttggcggag ggacagagct ggagattaag aggactgtgg ccgctcccag tgtgttcatt      420
tttcccccta gcgacgaaca gctgaaaagc gggacagcct ctgtggtgtg tctgctgaac      480
aatttttacc ctcgggaggc caaagtgcag tggaagggtg ataacgctct gcagtctggc      540
aatagtcagg agtcagtgac cgaacaggac tccaaagata gcacatattc tctgtcatcc      600
accctgacac tgtccaaggc agactacgag aagcacaaaag tgtatgcctg cgaagtgact      660
catcagggcc tgagctctcc cgtgaccaag agctttaaca ggggagaatg ttga          714

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<210> 92

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 92

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

```

```

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

```

```

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

```

```

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

```

```

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

```

```

Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Thr Gly
          85           90           95

```

```

Val Gln Cys Asp Asp Ala Ala Thr Tyr Tyr Cys Leu Gly Val Tyr Gly
          100          105          110

```

```

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Gly Gly Thr Glu Leu Glu

```

115

120

125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
 130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
 165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
 180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
 195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
 210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 93

<211> 714

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 93

atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgac 60
 attcagatga ctcagtcccc ctccctccctt tcggcctccg tcggcgaccg cgtgaccatt 120
 acctgtcaag ccagccagtc catctcctcc tacttggcct ggtaccaaca gaagccagga 180
 aaagctccta agctgctcat ctactacgcc tccactctgg cgtctggtgt cccgtcacgg 240
 ttcagcgggt ccggatcagg aactgacttc accctgacga tcagcagcct ccagtgcgag 300
 gatthttgcga cctactactg cctgggggtg tatggttact cgttcgacga tggaatcgca 360
 ttcggtctcg gcaccaaggt ggaaatcaaa cgaactgtgg ctgcaccatc tgtcttcac 420
 ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttggtgt cctgctgaat 480
 aacttctatc ccagagagggc caaagtacag tggaagggtg ataacgccct ccaatcgggt 540
 aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc 600
 accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc 660

<210> 94

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 94

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

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

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

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

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

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

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

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Ser Gly Thr Lys Val Glu
115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
 210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 95
 <211> 714
 <212> DNA
 <213> Artificial Sequence

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

<400> 95
 atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgac 60
 attgtgatga cccagactcc tctctccctg cccgtgactc ctggagaacc cgcctcgatc 120
 tcatgtcaag cgtcgcagag catctcctca tacttggtt ggtacctcca aaagccgggc 180
 cagagcccac agcttctgat ctattacgcc tccaccctgg cctcgggcgt gccggatcgg 240
 ttttccgggt ctggaagcgg aaccgacttc accctgaaaa tctcccgcgt ggagtgcgag 300
 gacgtgggcg tgtactactg cctgggagtc tacgggtact ccttcgatga cggcattgca 360
 ttcggtgccg gtaccaaggt cgaaatcaaa cgaactgttg ctgcaccatc tgtcttcac 420
 ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttgtgtg cctgctgaat 480
 aacttctatc ccagagagggc caaagtacag tggaagggtg ataacgccct ccaatcgggt 540
 aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc 600
 accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc 660
 catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga 714

<210> 96
 <211> 237
 <212> PRT
 <213> Artificial Sequence

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

<400> 96
 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15

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

Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Gln Ala Ser Gln Ser Ile
 35 40 45
 Ser Ser Tyr Leu Ala Trp Tyr Leu Gln Lys Pro Gly Gln Ser Pro Gln
 50 55 60
 Leu Leu Ile Tyr Tyr Ala Ser Thr Leu Ala Ser Gly Val Pro Asp Arg
 65 70 75 80
 Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg
 85 90 95
 Val Glu Cys Glu Asp Val Gly Val Tyr Tyr Cys Leu Gly Val Tyr Gly
 100 105 110
 Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Ser Gly Thr Lys Val Glu
 115 120 125
 Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
 130 135 140
 Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn
 145 150 155 160
 Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
 165 170 175
 Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
 180 185 190
 Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
 195 200 205
 Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
 210 215 220
 Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 97

<211> 714

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 97

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atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgaa      60
attgtgctca ctcaatcccc tgccaccctt tccttgtccc ccggcgaaag agccactctg      120
tcattgtcaag ccagccagtc gatctcctct tacctggctt ggtaccagca gaagccagga      180
caggcaccgc gcctgctgat ctactacgcg tcgaccctcg cctcgggaat cccggcccgg      240
ttcagcggat caggctccgg taccgacttc actctgacca ttagctccct ggagtgcgag      300
gacttcgcgg tgtattactg cctgggggtg tacggctact ccttcgatga cggaatcgcc      360
tttgggagcg gtaccaaggt cgagatcaaa cgaactgtgg ctgcaccatc tgtcttcac      420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttgtgtg cctgctgaat      480
aactttctatc ccagagaggc caaagtacag tggaagggtg ataacgccct ccaatcgggt      540
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc      600
accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc      660
catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga          714

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<210> 98

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 98

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

```

```

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

```

```

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

```

```

Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg
          50           55           60

```

```

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

```

```

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

```

```

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

```

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Ser Gly Thr Lys Val Glu
115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 99
<211> 714
<212> DNA
<213> Artificial Sequence

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

<400> 99
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgat 60
atcgtgatga cccaaagccc tgactccctt gccgtgtcac tcggagaacg cgccaccatc 120
aactgtcaag cgtcgcagtc catctcctca tacctggcct ggtatcagca gaaaccgggg 180
cagccgcaa agctgctgat ctactacgct tccactctgg cctccggcgt gcccgatcgg 240
ttctccggat cgggctccgg caccgacttt actctgacca ttagcagcct ccagtgcgag 300
gacgtggcgg tgtactactg cttgggtgtc tacggatact ctttcgacga cgggatcgca 360
ttcggttcgg gaaccaaggt cgagattaa cgaactgtgg ctgcaccatc tgtcttcac 420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttgtgtg cctgctgaat 480
aacttctatc ccagagaggc caaagtacag tggaagggtg ataacgccct ccaatcgggt 540
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc 600
accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc 660

catcaggggcc tgagctcgcc cgtcacaaaag agcttcaaca ggggagagtg ttga

714

<210> 100

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 100

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

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

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

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

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

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

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

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Ser Gly Thr Lys Val Glu
115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
 210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 101

<211> 714

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 101

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atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgaa      60
atcgtcttga cccaaagccc tgacttccaa tccgtgaccc ccaaggaaaa ggtcaccatc      120
acgtgtcagg cctcccagtc aatttcctcg taccttgcggt ggtaccagca gaagccagac      180
cagtccccga agctcctgat taagtacgca tccaccctgg ctagcggagt gccgagccgg      240
ttctcgggat ccggctctgg aactgacttc actctgacca tcaactcgct cgagtgcgaa      300
gatgccgcca cttactattg cctgggggtg tacgggtact catttgacga tggcatcgcc      360
ttcggctccg gtaccaaagt ggagatcaaa cgaactgtgg ctgcaccatc tgtcttcatc      420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttgtgtg cctgctgaat      480
aacttctatc ccagagagggc caaagtacag tggaagggtg ataacgccct ccaatcgggt      540
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc      600
accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc      660
catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga          714

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<210> 102

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 102

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

Val His Ser Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val
 20 25 30

Thr	Pro	Lys	Glu	Lys	Val	Thr	Ile	Thr	Cys	Gln	Ala	Ser	Gln	Ser	Ile
		35					40					45			
Ser	Ser	Tyr	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Asp	Gln	Ser	Pro	Lys
	50					55					60				
Leu	Leu	Ile	Lys	Tyr	Ala	Ser	Thr	Leu	Ala	Ser	Gly	Val	Pro	Ser	Arg
65					70					75					80
Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Asn	Ser
				85					90					95	
Leu	Glu	Cys	Glu	Asp	Ala	Ala	Thr	Tyr	Tyr	Cys	Leu	Gly	Val	Tyr	Gly
			100					105					110		
Tyr	Ser	Phe	Asp	Asp	Gly	Ile	Ala	Phe	Gly	Ser	Gly	Thr	Lys	Val	Glu
		115					120					125			
Ile	Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser
	130					135					140				
Asp	Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn
145					150					155					160
Asn	Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala
				165					170					175	
Leu	Gln	Ser	Gly	Asn	Ser	Gln	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys
			180					185					190		
Asp	Ser	Thr	Tyr	Ser	Leu	Ser	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp
		195					200					205			
Tyr	Glu	Lys	His	Lys	Val	Tyr	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu
	210					215					220				
Ser	Ser	Pro	Val	Thr	Lys	Ser	Phe	Asn	Arg	Gly	Glu	Cys			
225					230					235					

<210> 103

<211> 714

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

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<400> 103
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgac      60
gtcgtgatga ctcaaagccc cgcattcctt tccgtgactc ctggagaaaa ggtcaccatc      120
acctgtcaag ccagccagtc catttcgtcc tacttggcct ggtatcagca gaagccagac      180
caggccccga agctgctgat taagtacgcc tccaccctgg ccagcggagt gccgtcacgg      240
ttctccgggt ccggctcagg aaccgacttc acgttcacca tctcgtccct cgagtgcgaa      300
gatgctgcga cttactactg cctgggctg tacggttact cgtttgatga cggcatcgcg      360
ttcgggtctg gaaccaaagt ggagatcaaa cgaactgtgg ctgcaccatc tgtcttcac      420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttggtgtg cctgctgaat      480
aacttctatc ccagagaggg caaagtacag tggaagggtg ataacgccct ccaatcgggt      540
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc      600
accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc      660
catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga          714

```

<210> 104

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 104

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

```

```

Val His Ser Asp Val Val Met Thr Gln Ser Pro Ala Phe Leu Ser Val
          20           25           30

```

```

Thr Pro Gly Glu Lys Val Thr Ile Thr Cys Gln Ala Ser Gln Ser Ile
          35           40           45

```

```

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

```

```

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

```

```

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser
          85           90           95

```

```

Leu Glu Cys Glu Asp Ala Ala Thr Tyr Tyr Cys Leu Gly Val Tyr Gly
          100           105           110

```

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Ser Gly Thr Lys Val Glu
115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 105
<211> 714
<212> DNA
<213> Artificial Sequence

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

<400> 105
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgat 60
atcgctctca ctcaatcccc cgcttcactc gccgtgtccc ctggtcaacg cgccaccatt 120
acgtgtcagg cgtcccagtc catttcgagc taccttgcac ggtaccagca gaagcctgga 180
cagcccccca aactgctgat ctattacgcc tccaccttgg cctcgggagt gccagcgcgg 240
tttagcgggt cgggctccgg cactgacttc actctgacca tcaacccggt ggagtgcgaa 300
gataccgcca actactactg cctgggggtg tacggatact cattcgacga cgggatcgcc 360
ttcgggaagcg gcaccaaggt cgaaatcaaa cgaactgtgg ctgcaccatc tgtcttcatc 420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttgtgtg cctgctgaat 480
aacttctatc ccagagaggc caaagtacag tggaagggtg ataacgccct ccaatcgggt 540
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc 600

accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc 660

catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga 714

<210> 106

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 106

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

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

Ser Pro Gly Gln Arg Ala Thr Ile Thr Cys Gln Ala Ser Gln Ser Ile
35 40 45

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

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

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Pro
85 90 95

Val Glu Cys Glu Asp Thr Ala Asn Tyr Tyr Cys Leu Gly Val Tyr Gly
100 105 110

Tyr Ser Phe Asp Asp Gly Ile Ala Phe Gly Ser Gly Thr Lys Val Glu
115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 107
<211> 711
<212> DNA
<213> Artificial Sequence

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

<400> 107
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactccgag 60
ctcgtgatga cccagactcc agcctctgtg gaggtagctg tgggaggcac agtcaccatc 120
aagtgccagg ccagtcagag cattaatacc tacttagcct ggtatcagca gaaaccaggg 180
cagcctccca agctcctgat ctacagggca tccactctgg catctgggggt cccatcgcg 240
ttcaaaggca gtggatctgg gacagagttc actctcacca ttagcgacct ggagtgtgcc 300
gatgctgcca cttactactg tcaacagagt gttcgtgtta ttgatgttga taatactttc 360
ggcggaggga ccgaggtggt ggtcaaacga actgtggctg caccatctgt cttcatcttc 420
ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480
ttctatccca gagaggccaa agtacagtgg aaggtaggata acgccctcca atcgggtaac 540
tcccaggaga gtgtcacaga gcaggacagc aaggacagca cctacagcct cagcagcacc 600
ctgacgctga gcaaagcaga ctacgagaaa cacaaagtct acgcctgcga agtcacccat 660
cagggcctga gctcgcccgt cacaaagagc ttcaacaggg gagagtgttg a 711

<210> 108
<211> 236
<212> PRT
<213> Artificial Sequence

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

<400> 108
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

Val His Ser Glu Leu Val Met Thr Gln Thr Pro Ala Ser Val Glu Val

20

25

30

Ala Val Gly Gly Thr Val Thr Ile Lys Cys Gln Ala Ser Gln Ser Ile
 35 40 45

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

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

Phe Lys Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp
 85 90 95

Leu Glu Cys Ala Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Ser Val Arg
 100 105 110

Val Ile Asp Val Asp Asn Thr Phe Gly Gly Gly Thr Glu Val Val Val
 115 120 125

Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 130 135 140

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 145 150 155 160

Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 165 170 175

Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
 180 185 190

Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
 195 200 205

Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
 210 215 220

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 109

<211> 714

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

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<400> 109
atgggctggg cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgag      60
ctcgtgatga cccagactcc atcctacacg tctgcagctg tgggagacac agtcaccatc      120
aagtgccagg ccagtcagac cattggtggg agcgacttat cctggatatca gcagaaacca      180
gggcagcctc ccaaactcct gatctggtat gcaaccaatc tgccatctgg ggtcccatcg      240
cggttcagtg gcagtagatc tgggacagag tacactctca ccatcagcgg cgtgcagtg      300
gaggatgctg ccacctacta ctgtctaggt ggttatgctg ctgcttctta cagaactgct      360
ttcggcggag ggaccgaggt ggtcgtcaaa cgaactgtgg ctgcaccatc tgtcttcac      420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttgctg cctgctgaat      480
aacttctatc ccagagaggc caaagtacag tggaagggtg ataacgccct ccaatcgggt      540
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc      600
accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc      660
catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga          714

```

<210> 110

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 110

```

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

```

```

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

```

```

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

```

```

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

```

```

Lys Leu Leu Ile Trp Tyr Ala Thr Asn Leu Pro Ser Gly Val Pro Ser
65          70          75          80

```

```

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

```

```

Gly Val Gln Cys Glu Asp Ala Ala Thr Tyr Tyr Cys Leu Gly Gly Tyr
          100          105          110

```

Ala Ala Ala Ser Tyr Arg Thr Ala Phe Gly Gly Gly Thr Glu Val Val
115 120 125

Val Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 111

<211> 714

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 111

atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgat 60

attcagatga cccagagccc ttctttcctg tcagccagcg tcggggatag agtcacaatc 120

acttgccagg ccagccagac cattggcggg agcgacctgt cctggtacca gcagaagccc 180

ggaaaagccc ctaagctgct gatctactat gctacaaacc tgccatctgg cgtgcccagc 240

cggtttctctg gaagtggctc agggactgac tttaccctga caattagctc cctgcagtgc 300

gaggatttcg ccacctacta ttgtctgggg ggctatgccg ccgcaagcta ccgcaccgcc 360

ttcggaggag gaactaaagt ggaaatcaaa cgaactgtgg ctgcaccatc tgtcttcac 420

ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttggtgtg cctgctgaat 480

aacttctatc ccagagagggc caaagtacag tggaagggtg ataacgccct ccaatcgggt 540

aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc 600

accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc 660

catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga 714

<210> 112

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 112

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

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

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

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

Lys Leu Leu Ile Tyr Tyr Ala Thr Asn Leu Pro Ser Gly Val Pro Ser
65 70 75 80

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

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

Ala Ala Ala Ser Tyr Arg Thr Ala Phe Gly Gly Gly Thr Lys Val Glu
115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 113
<211> 714
<212> DNA
<213> Artificial Sequence

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

<400> 113
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgat 60
attcagatga ctcagagccc ttcccttcctg tccgcttcctg tcggggatcg ggtcacaatc 120
acttgccagg cctcacagac tattggcggg agcgacctgt cctggtacca gcagaagccc 180
ggaaaagcac ctaagctgct gatctactat gccacaaacc tgccatctgg cgtgcccagc 240
cggttctctg gaagtggctc agggactgac tttaccctga caattagctc cctgcagtgc 300
gaggatgccg ctacctacta ttgtctgggg ggctacgccg ccgcttcata caggaccgcc 360
ttcggaggag gaactaaagt ggaaatcaaa cgaactgtgg ctgcaccatc tgtcttcac 420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttgtgtg cctgctgaat 480
aacttctatc ccagagagggc caaagtacag tggaagggtg ataacgccct ccaatcgggt 540
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc 600
accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc 660
catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga 714

<210> 114
<211> 237
<212> PRT
<213> Artificial Sequence

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

<400> 114
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

polynucleotide"

```
<400> 115
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactccgaa      60
gtgttgatga cccagactcc atcctccgtg tctgcagctg tgggagacac agtcaccatc      120
aagtgccagg ccagtcagag cattagtagt gtcttgtcct ggtatcagca gaaaccaggg      180
cagcctccca agctcctgat ctatctggca tccactctgg catctggggg cccatcgcgg      240
ttcagcggca gtagatctgg gacagagttc actctcacca tcagcgacct ggagtgtgac      300
gatgctgcca cttactactg tcaaaccaat tatggtacta gtagtagtaa ttatggtttt      360
gctttcggcg gagggaccga ggtggctgctc aaacgaactg tggctgcacc atctgtcttc      420
atcttcccg ccatctgatga gcagttgaaa tctggaactg cctctgttgt gtgcctgctg      480
aataacttct atcccagaga ggccaaagta cagtggaagg tggataacgc cctccaatcg      540
ggtaactccc aggagagtgt cacagagcag gacagcaagg acagcaccta cagcctcagc      600
agcaccctga cgctgagcaa agcagactac gagaaacaca aagtctacgc ctgcgaagtc      660
acccatcagg gcctgagctc gcccgtcaca aagagcttca acaggggaga gtgttga      717
```

<210> 116

<211> 238

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 116

```
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1           5           10           15
```

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

```
Ala Val Gly Asp Thr Val Thr Ile Lys Cys Gln Ala Ser Gln Ser Ile
          35           40           45
```

```
Ser Ser Val Leu Ser Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys
          50           55           60
```

```
Leu Leu Ile Tyr Leu Ala Ser Thr Leu Ala Ser Gly Val Pro Ser Arg
65           70           75           80
```

```
Phe Ser Gly Ser Arg Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp
          85           90           95
```

```
Leu Glu Cys Asp Asp Ala Ala Thr Tyr Tyr Cys Gln Thr Asn Tyr Gly
```

100

105

110

Thr Ser Ser Ser Asn Tyr Gly Phe Ala Phe Gly Gly Gly Thr Glu Val
 115 120 125

Val Val Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro
 130 135 140

Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu
 145 150 155 160

Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
 165 170 175

Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser
 180 185 190

Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala
 195 200 205

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

Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230 235

<210> 117

<211> 717

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 117

atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgac 60

attcagatga cccagtcccc aagctcgctg tccgcctccg tgggcgaccg cgtgaccatc 120

acgtgccagg cgtcccagtc aattagcagc gtgctctcct ggtaccaaca gaagccgggg 180

aaagcaccca agctgctgat ctacttgGCC tccactctgg cctcgggagt gccttcacgg 240

ttctccggat cgggatctgg tactgatttc accctcacca tctcgagcct tcagtgcgag 300

gacttcgcta cttactattg tcaaaccaac tacggaacct ccagctccaa ctacggcttt 360

gccttcggtg gcgggaccaa ggtcgaaatc aaacgaactg tggctgcacc atctgtcttc 420

atcttcccgC catctgatga gcagttgaaa tctggaactg cctctgttgt gtgcctgctg 480

aataacttct atcccagaga ggccaaagta cagtggaagg tggataacgc cctccaatcg 540

ggtaactccc aggagagtgt cacagagcag gacagcaagg acagcaccta cagcctcagc	600
agcaccctga cgctgagcaa agcagactac gagaaacaca aagtctacgc ctgcgaagtc	660
acccatcagg gcctgagctc gcccgtcaca aagagcttca acaggggaga gtgttga	717

<210> 118
 <211> 238
 <212> PRT
 <213> Artificial Sequence

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

<400> 118
 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15

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

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

Ser Ser Val Leu Ser Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
 50 55 60

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

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

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

Thr Ser Ser Ser Asn Tyr Gly Phe Ala Phe Gly Gly Gly Thr Lys Val
 115 120 125

Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro
 130 135 140

Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu
 145 150 155 160

Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
 165 170 175

Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser
 180 185 190

Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala
195 200 205

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

Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 119
<211> 717
<212> DNA
<213> Artificial Sequence

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

<400> 119
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgac 60
attcagatga cccagtcctc aagctcgctg tccgcctccg tgggcgaccg cgtgaccatc 120
acgtgccagg cgtcccagtc aattagcagc gtgctctcct ggtaccaaca gaagccgggg 180
aaagcaccca agctgctgat ctacttggcc tccactctgg cctcgggagt gccttcacgg 240
ttctccggat cgggatctgg tactgatttc accctcacca tctcgagcct tcagtgcgag 300
gacgccgcta cttactattg tcaaaccaac tacggaacct ccagctccaa ctacggcttt 360
gccttcggtg gcgggaccaa ggctcgaatc aaacgaactg tggctgcacc atctgtcttc 420
atcttcccg ccatctgatga gcagttgaaa tctggaactg cctctgttgt gtgcctgctg 480
aataacttct atcccagaga ggccaaagta cagtggaagg tggataacgc cctccaatcg 540
ggtaactccc aggagagtgt cacagagcag gacagcaagg acagcaccta cagcctcagc 600
agcaccctga cgctgagcaa agcagactac gagaaacaca aagtctacgc ctgcgaagtc 660
acccatcagg gcctgagctc gcccgtcaca aagagcttca acaggggaga gtgttga 717

<210> 120
<211> 238
<212> PRT
<213> Artificial Sequence

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

<400> 120
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

Val	His	Ser	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala			
			20					25					30					
Ser	Val	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys	Gln	Ala	Ser	Gln	Ser	Ile			
		35					40					45						
Ser	Ser	Val	Leu	Ser	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys			
		50				55					60							
Leu	Leu	Ile	Tyr	Leu	Ala	Ser	Thr	Leu	Ala	Ser	Gly	Val	Pro	Ser	Arg			
65					70					75					80			
Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser			
				85					90					95				
Leu	Gln	Cys	Glu	Asp	Ala	Ala	Thr	Tyr	Tyr	Cys	Gln	Thr	Asn	Tyr	Gly			
			100					105					110					
Thr	Ser	Ser	Ser	Asn	Tyr	Gly	Phe	Ala	Phe	Gly	Gly	Gly	Thr	Lys	Val			
			115				120						125					
Glu	Ile	Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro			
	130					135					140							
Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu			
145					150					155					160			
Asn	Asn	Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn			
				165					170					175				
Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser			
				180				185					190					
Lys	Asp	Ser	Thr	Tyr	Ser	Leu	Ser	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala			
		195					200					205						
Asp	Tyr	Glu	Lys	His	Lys	Val	Tyr	Ala	Cys	Glu	Val	Thr	His	Gln	Gly			
	210					215					220							
Leu	Ser	Ser	Pro	Val	Thr	Lys	Ser	Phe	Asn	Arg	Gly	Glu	Cys					
225					230					235								

<210> 121

<211> 717

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 121

```
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgac      60
attcagatga cccagtcctc aagctcgctg tccgcctccg tgggcgaccg cgtgaccatc      120
acgtgccagg cgtcccagtc aattagcagc gtgctctcct ggtaccaaca gaagccgggg      180
aaagcaccca agctgctgat ctacttggtc tccactctgg cctcgggagt gccttcacgg      240
ttctccggat cgggatctgg tactgatttc accctcacca tctcgagcct tcagtgcgag      300
gacatcgcta cttactattg tcaaaccaac tacggaacct ccagctccaa ctacggcttt      360
gccttcggtg gcgggaccaa ggtcgaaatc aaacgaactg tggctgcacc atctgtcttc      420
atcttcccgc catctgatga gcagttgaaa tctggaactg cctctgttgt gtgcctgctg      480
aataacttct atcccagaga ggccaaagta cagtggaagg tggataacgc cctccaatcg      540
ggtaactccc aggagagtgt cacagagcag gacagcaagg acagcaccta cagcctcagc      600
agcaccctga cgctgagcaa agcagactac gagaaacaca aagtctacgc ctgcgaagtc      660
acccatcagg gcctgagctc gcccgtcaca aagagcttca acaggggaga gtgttga      717
```

<210> 122

<211> 238

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 122

```
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1              5              10              15

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

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

Ser Ser Val Leu Ser Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
      50              55              60

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

Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser
      85              90              95
```

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

Thr Ser Ser Ser Asn Tyr Gly Phe Ala Phe Gly Gly Gly Thr Lys Val
115 120 125

Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro
130 135 140

Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu
145 150 155 160

Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn
165 170 175

Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser
180 185 190

Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala
195 200 205

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

Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 123
<211> 705
<212> DNA
<213> Artificial Sequence

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

<400> 123
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactccgca 60
ttcgaattga cccagactcc atcctccgtg gaggcagctg tgggaggcac agtcaccatc 120
aagtgccagg ccagtcagag catttacagt tatttagcct ggtatcagca gaaaccaggg 180
cagcctccca agctcctgat ctattctgca tccactctgg catctgggggt ctcatcgcg 240
ttcagaggca gtggatctgg gacagaatac actctcacca tcagcgacct ggagtgtgcc 300
gatgctgcca cttactactg tcaaacctat tatgatattg ttactagtag tttcggcgga 360
gggaccgagg tggtcgtcaa acgaactgtg gctgcaccat ctgtcttcat cttcccgcca 420
totgatgagc agttgaaatc tggaactgcc tctgttgtgt gcctgctgaa taacttctat 480
cccagagagg ccaaagtaca gtggaagggt gataacgccc tccaatcggg taactcccag 540

gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg	600
ctgagcaaaag cagactacga gaaacacaaa gtctacgcct gcgaagtcac ccatacagggc	660
ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gttga	705

<210> 124
 <211> 234
 <212> PRT
 <213> Artificial Sequence

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

<400> 124
 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15

Val His Ser Ala Phe Glu Leu Thr Gln Thr Pro Ser Ser Val Glu Ala
 20 25 30

Ala Val Gly Gly Thr Val Thr Ile Lys Cys Gln Ala Ser Gln Ser Ile
 35 40 45

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

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

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

Leu Glu Cys Ala Asp Ala Ala Thr Tyr Tyr Cys Gln Thr Tyr Tyr Asp
 100 105 110

Ile Val Thr Ser Thr Phe Gly Gly Gly Thr Glu Val Val Val Lys Arg
 115 120 125

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
 130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
 145 150 155 160

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
 165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr

180

185

190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
 195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
 210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230

<210> 125

<211> 705

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 125

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atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactccgca      60
ttcgaattga cccagactcc atcctccgtg gaggcagctg tgggaggcac agtcaccatc      120
aagtgccagg ccagtcagag catttacagt tatttagcct ggtatcagca gaaaccaggg      180
cagcctccca agctcctgat ctattctgca tccactctgg catctgggggt ctcatcgcg      240
ttcagaggga gtggatctgg gacagaatac attctcacca tcagcgacct ggagtgtgcc      300
gatgctgcca cttactactg tcaaacctat tatgatattg ttactagtag tttcggcgga      360
gggaccgagg tgggtggtcaa acgaactgtg gctgcaccat ctgtcttcat cttcccgcca      420
tctgatgagc agttgaaatc tggaactgcc tctgttgtgt gcctgctgaa taacttctat      480
cccagagagg ccaaagtaca gtggaagggt gataacgccc tccaatcggg taactcccag      540
gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg      600
ctgagcaaag cagactacga gaaacacaaa gtctacgcct gcgaagtcac ccatcagggc      660
ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gttga                        705
  
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<210> 126

<211> 234

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 126

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

Val	His	Ser	Ala	Phe	Glu	Leu	Thr	Gln	Thr	Pro	Ser	Ser	Val	Glu	Ala
			20					25					30		
Ala	Val	Gly	Gly	Thr	Val	Thr	Ile	Lys	Cys	Gln	Ala	Ser	Gln	Ser	Ile
		35					40					45			
Tyr	Ser	Tyr	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro	Pro	Lys
	50					55					60				
Leu	Leu	Ile	Tyr	Ser	Ala	Ser	Thr	Leu	Ala	Ser	Gly	Val	Ser	Ser	Arg
65					70					75					80
Phe	Arg	Gly	Ser	Gly	Ser	Gly	Thr	Glu	Tyr	Ile	Leu	Thr	Ile	Ser	Asp
				85					90					95	
Leu	Glu	Cys	Ala	Asp	Ala	Ala	Thr	Tyr	Tyr	Cys	Gln	Thr	Tyr	Tyr	Asp
			100					105					110		
Ile	Val	Thr	Ser	Thr	Phe	Gly	Gly	Gly	Thr	Glu	Val	Val	Val	Lys	Arg
		115					120					125			
Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser	Asp	Glu	Gln
	130					135					140				
Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr
145					150					155					160
Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser
				165					170					175	
Gly	Asn	Ser	Gln	Glu	Ser	Val	Thr	Glu	Gln	Asp	Ser	Lys	Asp	Ser	Thr
			180					185					190		
Tyr	Ser	Leu	Ser	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys
		195					200					205			
His	Lys	Val	Tyr	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro
	210					215					220				
Val	Thr	Lys	Ser	Phe	Asn	Arg	Gly	Glu	Cys						
225					230										

<210> 127

<211> 705

<212> DNA

<213> Artificial Sequence

<220>

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

<400> 127
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactccgcc 60
gtcgtgctga cccagactgc atccccctg tctggagttg tgggaggcac agtcaccatc 120
aagtgccagg ccagtcagaa catttacagc aatttagcct ggtatcagca gaaaccaggg 180
cagcgtccca agctcctgat gtatgatgca tccactctgg catctggggg cccatcgcg 240
ttcaaaggca gtggatctgg gacacagttc actctcacca tcagcgacct ggagtgtgcc 300
gatgctgcca cttactactg tcaaagtatt agtagtgttg acaataatgt tttcggcgga 360
gggaccgagg tgggtggtaa acgaactgtg gctgcaccat ctgtcttcat cttcccggca 420
tctgatgagc agttgaaatc tggaactgcc tctgttgtgt gcctgctgaa taacttctat 480
cccagagagg ccaaagtaca gtggaagggt gataacgccc tccaatcggg taactcccag 540
gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg 600
ctgagcaaag cagactacga gaaacacaaa gtctacgcct gcgaagtcac ccatcagggc 660
ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gttga 705

<210> 128
<211> 234
<212> PRT
<213> Artificial Sequence

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

<400> 128
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1 5 10 15

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

Val Val Gly Gly Thr Val Thr Ile Lys Cys Gln Ala Ser Gln Asn Ile
35 40 45

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

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

Phe Lys Gly Ser Gly Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Asp
85 90 95

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

Val Asp Asn Asn Val Phe Gly Gly Gly Thr Glu Val Val Val Lys Arg
 115 120 125

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
 130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
 145 150 155 160

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
 165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
 180 185 190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
 195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
 210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 225 230

<210> 129
 <211> 705
 <212> DNA
 <213> Artificial Sequence

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

<400> 129
 atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcactccgta 60
 ttcgaattga cccagactcc atccccctg tctgcagctg tgggaggcac agtcaccatc 120
 aggtgccagg ccagtcagaa cattaagagc tacttagcct ggtatcagca gaaaccaggg 180
 cagcctccca aactcctgat ctatgaagca tccattctgg catctgggggt ctcatcgcg 240
 ttcaaaggca gtggatctgg gacagagttc actctcacca tcagcgacct ggagtgtgcc 300
 gatgctgcca ctactactg tcaaagctat tatgctgcta gtagtaatgc tttcggcgga 360
 gggaccgagg tgggtggtaa acgaactgtg gctgcaccat ctgtcttcat cttcccgcca 420
 tctgatgagc agttgaaatc tggaactgcc tctgttgtgt gcctgctgaa taacttctat 480

cccagagagg ccaaagtaca gtggaaggtg gataacgccc tccaatcggg taactcccag	540
gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg	600
ctgagcaaaag cagactacga gaaacacaaa gtctacgcct gcgaagtcac ccatacagggc	660
ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gttga	705

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

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

<400> 130
 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
 1 5 10 15

Val His Ser Val Phe Glu Leu Thr Gln Thr Pro Ser Pro Val Ser Ala
 20 25 30

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

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

Leu Leu Ile Tyr Glu Ala Ser Ile Leu Ala Ser Gly Val Ser Ser Arg
 65 70 75 80

Phe Lys Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp
 85 90 95

Leu Glu Cys Ala Asp Ala Ala Thr Tyr Tyr Cys Gln Ser Tyr Tyr Ala
 100 105 110

Ala Ser Ser Asn Ala Phe Gly Gly Gly Thr Glu Val Val Val Lys Arg
 115 120 125

Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln
 130 135 140

Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr
 145 150 155 160

Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser
 165 170 175

Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
180 185 190

Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys
195 200 205

His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro
210 215 220

Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230

<210> 131
<211> 714
<212> DNA
<213> Artificial Sequence

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

<400> 131
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgag 60
ctcgtgatga cccagactcc atcctccgtg tctgcagctg tgggaggcac agtcaccatc 120
aattgccagg ccagtcagag cattagtaac tacttatacct ggtatcagca gaaaccagga 180
cagcctccca agctcctgat ctttgctgca tccaaactgg catcttgggt cccaaagcgg 240
ttcagtggca gcagatctgg gatagaatac actctcacca ttagcggcgt gcagtgtgac 300
gatgctgcca cttacttctg tctaggagtt tatagtatta gtactgatga tggagctgct 360
ttcggcggag ggaccgaggt ggtcgtcaaa cgaactgtgg ctgcaccatc tgtcttcac 420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttggtgtg cctgctgaat 480
aacttctatc ccagagagggc caaagtacag tggaagggtg ataacgccct ccaatcgggt 540
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc 600
accctgacgc tgagcaaagc agactacgag aacacaaaag tctacgcctg cgaagtcacc 660
catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga 714

<210> 132
<211> 237
<212> PRT
<213> Artificial Sequence

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

<400> 132
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly

1	5	10	15
Val His Ser	Glu Leu Val Met Thr	Gln Thr Pro Ser Ser	Val Ser Ala
	20	25	30
Ala Val Gly	Gly Thr Val Thr Ile	Asn Cys Gln Ala Ser	Gln Ser Ile
	35	40	45
Ser Asn Tyr	Leu Ser Trp Tyr	Gln Gln Lys Pro Gly	Gln Pro Pro Lys
	50	55	60
Leu Leu Ile	Phe Ala Ala Ser Lys	Leu Ala Ser Trp	Val Pro Lys Arg
65	70	75	80
Phe Ser Gly	Ser Arg Ser Gly Ile	Glu Tyr Thr Leu Thr	Ile Ser Gly
	85	90	95
Val Gln Cys	Asp Asp Ala Ala Thr	Tyr Phe Cys Leu Gly	Val Tyr Ser
	100	105	110
Ile Ser Thr	Asp Asp Gly Ala Ala	Phe Gly Gly Gly Thr	Glu Val Val
	115	120	125
Val Lys Arg	Thr Val Ala Ala Pro	Ser Val Phe Ile Phe	Pro Pro Ser
	130	135	140
Asp Glu Gln	Leu Lys Ser Gly Thr	Ala Ser Val Val Cys	Leu Leu Asn
145	150	155	160
Asn Phe Tyr	Pro Arg Glu Ala Lys	Val Gln Trp Lys Val	Asp Asn Ala
	165	170	175
Leu Gln Ser	Gly Asn Ser Gln Glu	Ser Val Thr Glu Gln	Asp Ser Lys
	180	185	190
Asp Ser Thr	Tyr Ser Leu Ser Ser	Thr Leu Thr Leu Ser	Lys Ala Asp
	195	200	205
Tyr Glu Lys	His Lys Val Tyr	Ala Cys Glu Val Thr	His Gln Gly Leu
	210	215	220
Ser Ser Pro	Val Thr Lys Ser Phe	Asn Arg Gly Glu Cys	
225	230	235	

<210> 133

<211> 714

<212> DNA

<213> Artificial Sequence

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

<400> 133
atgggctggc cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgat      60
attcagatga cccagctctcc ttccctccctg tccgcttccg tcggcgatag agtcacaatc      120
acttgccagg cttcccagag catcagcaac tacctgtcct ggtatcagca gaagcccggc      180
aaagcaccta agctgctgat ctacgccgct tctaaactgg caagcggagt gccaagccgg      240
ttctctggaa gtgggtcagg aactgacttt accctgacaa ttagctccct gcagtgcgag      300
gatttcgcta cctactattg tctgggctgc tattcaatct caactgacga cggagccgca      360
ttcggagggg gcaccaaagt ggaaatcaaa cgaactgtgg ctgcaccatc tgtcttcac      420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttgtgtg cctgctgaat      480
aacttctatc ccagagagggc caaagtacag tggaagggtg ataacgccct ccaatcgggt      540
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc      600
accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg cgaagtcacc      660
catcagggcc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga              714

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<210> 134
<211> 237
<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> 134
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
1           5           10          15

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

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

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

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

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

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

Ile Ser Thr Asp Asp Gly Ala Ala Phe Gly Gly Gly Thr Lys Val Glu
115 120 125

Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
130 135 140

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

Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
165 170 175

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 135
<211> 714
<212> DNA
<213> Artificial Sequence

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

<400> 135
atgggctggt cctgcatcat cctgtttctg gtggccaccg ccaccggcgt gcacagcgat 60
attcagatga cccagagccc ttcctccctg tccgctagtg tcggggatag agtgaccatt 120
acttgccagg ccagccagag cattagcaac tacctgtcct ggtatcagca gaagcccggc 180
aaagctccta agctgctgat ctacgccgct tctaaactgg caagcggagt gccaagccgg 240
ttctctggaa gtgggtcagg aactgacttt accctgacaa ttagctccct gcagtgcgag 300
gatgcagcca cctactattg tctgggctgc tactcaatct caaccgacga cggagctgct 360
tttgaggagg gcactaagggt ggaaatcaaa cgaactgtgg ctgcaccatc tgtcttcac 420
ttcccgccat ctgatgagca gttgaaatct ggaactgcct ctgttgtgtg cctgctgaat 480

aacttctatc ccagagaggc caaagtacag tggaaggtgg ataacgccct ccaatcgggt	540
aactcccagg agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc	600
accctgacgc tgagcaaagc agactacgag aacacaaaag tctacgcctg cgaagtcacc	660
catcaggggc tgagctcgcc cgtcacaaag agcttcaaca ggggagagtg ttga	714

<210> 136

<211> 237

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 136

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

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

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

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

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

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

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

Ile	Ser	Thr	Asp	Asp	Gly	Ala	Ala	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu
		115					120					125			

Ile	Lys	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	Pro	Ser
	130					135					140				

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

Asn	Phe	Tyr	Pro	Arg	Glu	Ala	Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala
				165					170					175	

Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
180 185 190

Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
195 200 205

Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu
210 215 220

Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225 230 235

<210> 137
<211> 993
<212> DNA
<213> Artificial Sequence

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

<400> 137
gcattccacca agggcccatc ggtcttcccc ctggcaccct cctccaagag cacctctggg 60
ggcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacgggtgtcg 120
tggaactcag gcgccctgac cagcggcgtg cacaccttcc cggtgttcct acagtctctca 180
ggactctact ccctcagcag cgtgggtgacc gtgccctcca gcagcttggg caccagacc 240
tacatctgca acgtgaatca caagcccagc aacaccaagg tggacaagaa agttgagccc 300
aaatcttgtg aaaaaactca cacatgcccc ccgtgcccag cacctgaact cctgggggga 360
ccgtcagtct tcctcttccc cccaaaaccc aaggacaccc tcatgatctc ccggaccctt 420
gaggtcacat gcgtgggtgt ggacgtgagc cacgaagacc ctgaggtcaa gttcaactgg 480
tacgtggacg gcgtggaggt gcataatgcc aagacaaagc cgcgggagga gcagtacaac 540
agcacgtacc gtgtgggtcag cgtcctcacc gtcctgcacc aggactgggt gaatggcaag 600
gagtacaagt gcaaggtctc caacaaagcc ctcccagccc ccattcgagaa aaccatctcc 660
aaagccaaag ggcagccccg agaaccacag gtgtacaccc tgcccccatc ccgggatgag 720
ctgaccaaga accagggtcag cctgacctgc ctgggtcaaag gcttctatcc cagcgacatc 780
gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac gcctcccgtg 840
ctggactccg acggctcctt cttcttatat tcaaagctca ccgtggacaa gagcaggtgg 900
cagcagggga acgtcttctc atgctccgtg atgcatgagg ctctgcacaa ccactacacg 960
cagaagagcc tctccctgtc tcccgggaaa tga 993

<210> 138

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

<220>

<221> source

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

<400> 138

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

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
35 40 45

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

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

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
85 90 95

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
100 105 110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
115 120 125

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
130 135 140

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
165 170 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
180 185 190

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
195 200 205

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
210 215 220

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
225 230 235 240

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

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
260 265 270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
275 280 285

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
290 295 300

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
305 310 315 320

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
325 330

<210> 139
<211> 324
<212> DNA
<213> Artificial Sequence

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

<400> 139
cgaactgtgg ctgcaccatc tgtcttcac ttcccgccat ctgatgagca gttgaaatct 60
ggaactgcct ctgttggtgtg cctgctgaat aacttctatc ccagagaggc caaagtacag 120
tggaagggtg ataacgccct ccaatcgggt aactcccagg agagtgtcac agagcaggac 180
agcaaggaca gcacctacag cctcagcagc accctgacgc tgagcaaagc agactacgag 240
aaacacaaag tctacgcctg cgaagtcacc catcagggcc tgagctcgcc cgtcacaaag 300
agcttcaaca ggggagagtg ttga 324

<210> 140
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 140

Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
1 5 10 15

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

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

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
50 55 60

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
65 70 75 80

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
85 90 95

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
100 105

<210> 141

<211> 972

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 141

gggcaaccta aggtccatc agtcttccca ctggccccct gctgcgggga cacaccacgc	60
tccacggtga ccctgggctg cctggtcaaa ggctacctcc cggagccagt gaccgtgacc	120
tggaactcgg gcaccctcac caatggggta cgcaccttcc cgtccgtccg gcagtcctca	180
ggcctctact cgctgagcag cgtggtgagc gtgacctcaa gcagccagcc cgtcacctgc	240
aacgtggccc acccagccac caacaccaa gtggacaaga ccgttgacc ctcgacatgc	300
agcaagccca cgtgcccacc ccctgaactc ctggggggac cgtctgtctt catcttcccc	360
ccaaaaccca aggacaccct catgatctca cgcacccccg aggtcacatg cgtggtggtg	420
gacgtgagcc aggatgacct cgaggtgcag ttcacatggt acataaaca cgagcaggtg	480
cgcaccgccc ggccgcccgt acgggagcag cagttcaaca gcacgatccg cgtggtcagc	540
accctcccca tcacgcacca ggactggctg aggggcaagg agttcaagtg caaagtccac	600
aacaaggcac tcccggcccc catcgagaaa accatctcca aagccagagg gcagcccctg	660
gagccgaagg tctacacat gggccctccc cgggaggagc tgagcagcag gtcggtcagc	720

ctgacctgca tgatcaacgg cttctaccct tccgacatct cggtggagtg ggagaagaac	780
gggaaggcag aggacaacta caagaccacg cgggccgtgc tggacagcga cggctcctac	840
ttcctctaca acaagctctc agtgcccacg agtgagtggc agcggggcga cgtcttcacc	900
tgctccgtga tgcacgaggc cttgcacaac cactacacgc agaagtccat ctcccgtctt	960
ccgggtaaat ga	972

<210> 142

<211> 323

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 142

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

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

Leu	Pro	Glu	Pro	Val	Thr	Val	Thr	Trp	Asn	Ser	Gly	Thr	Leu	Thr	Asn
		35					40					45			

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

Leu	Ser	Ser	Val	Val	Ser	Val	Thr	Ser	Ser	Ser	Gln	Pro	Val	Thr	Cys
65					70					75					80

Asn	Val	Ala	His	Pro	Ala	Thr	Asn	Thr	Lys	Val	Asp	Lys	Thr	Val	Ala
			85						90					95	

Pro	Ser	Thr	Cys	Ser	Lys	Pro	Thr	Cys	Pro	Pro	Pro	Glu	Leu	Leu	Gly
			100					105					110		

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

Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	Gln
	130					135					140				

Asp	Asp	Pro	Glu	Val	Gln	Phe	Thr	Trp	Tyr	Ile	Asn	Asn	Glu	Gln	Val
145					150					155					160

Arg	Thr	Ala	Arg	Pro	Pro	Leu	Arg	Glu	Gln	Gln	Phe	Asn	Ser	Thr	Ile
				165					170					175	

Arg	Val	Val	Ser	Thr	Leu	Pro	Ile	Thr	His	Gln	Asp	Trp	Leu	Arg	Gly			
			180					185					190					
Lys	Glu	Phe	Lys	Cys	Lys	Val	His	Asn	Lys	Ala	Leu	Pro	Ala	Pro	Ile			
		195					200					205						
Glu	Lys	Thr	Ile	Ser	Lys	Ala	Arg	Gly	Gln	Pro	Leu	Glu	Pro	Lys	Val			
	210					215					220							
Tyr	Thr	Met	Gly	Pro	Pro	Arg	Glu	Glu	Leu	Ser	Ser	Arg	Ser	Val	Ser			
225					230					235					240			
Leu	Thr	Cys	Met	Ile	Asn	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ser	Val	Glu			
				245					250					255				
Trp	Glu	Lys	Asn	Gly	Lys	Ala	Glu	Asp	Asn	Tyr	Lys	Thr	Thr	Pro	Ala			
			260					265						270				
Val	Leu	Asp	Ser	Asp	Gly	Ser	Tyr	Phe	Leu	Tyr	Asn	Lys	Leu	Ser	Val			
		275					280					285						
Pro	Thr	Ser	Glu	Trp	Gln	Arg	Gly	Asp	Val	Phe	Thr	Cys	Ser	Val	Met			
	290					295					300							
His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Ile	Ser	Arg	Ser			
305					310					315					320			

Pro Gly Lys

<210> 143

<211> 315

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 143

ggatgatccag ttgcacctac tgtcctcatc ttcccacccat ctgctgatct tgtggcaact 60

ggaacagtca ccatcgtgtg tgtggcgaat aaatactttc ccgatgtcac cgtcacctgg 120

gaggtggatg gcaccacca aacaactggc atcgagaaca gtaaaacacc gcagaattct 180

gcagattgta cctacaacct cagcagcact ctgacactga ccagcacaca gtacaacagc 240

cacaaagagt acacctgcaa ggtgacccag ggcacgacct cagtcgtcca gagcttcaat 300

aggggtgact gttag 315

<210> 144
<211> 104
<212> PRT
<213> Artificial Sequence

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

<400> 144
Gly Asp Pro Val Ala Pro Thr Val Leu Ile Phe Pro Pro Ser Ala Asp
1 5 10 15

Leu Val Ala Thr Gly Thr Val Thr Ile Val Cys Val Ala Asn Lys Tyr
20 25 30

Phe Pro Asp Val Thr Val Thr Trp Glu Val Asp Gly Thr Thr Gln Thr
35 40 45

Thr Gly Ile Glu Asn Ser Lys Thr Pro Gln Asn Ser Ala Asp Cys Thr
50 55 60

Tyr Asn Leu Ser Ser Thr Leu Thr Leu Thr Ser Thr Gln Tyr Asn Ser
65 70 75 80

His Lys Glu Tyr Thr Cys Lys Val Thr Gln Gly Thr Thr Ser Val Val
85 90 95

Gln Ser Phe Asn Arg Gly Asp Cys
100

<210> 145
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 145
ggattctccc tcaatagcta tgcg

24

<210> 146
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 146
Gly Phe Ser Leu Asn Ser Tyr Ala
1 5

<210> 147
<211> 21
<212> DNA
<213> Artificial Sequence

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

<400> 147
attactactg gtggtaccac a

21

<210> 148
<211> 7
<212> PRT
<213> Artificial Sequence

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

<400> 148
Ile Thr Thr Gly Gly Thr Thr
1 5

<210> 149
<211> 51
<212> DNA
<213> Artificial Sequence

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

<400> 149
gatcgggtta aaagctacga tgactatggt gatttagatg ctttcgagcc c

51

<210> 150
<211> 20
<212> PRT
<213> Artificial Sequence

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

<400> 150
Asp Arg Val Lys Ser Tyr Asp Asp Tyr Gly Asp Leu Asp Ala Phe Glu
1 5 10 15

Pro Trp Gly Pro
20

<210> 151
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 151
ggcttttccc tgaacagcta cgct

24

<210> 152
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 152
Gly Phe Ser Leu Asn Ser Tyr Ala
1 5

<210> 153
<211> 21
<212> DNA
<213> Artificial Sequence

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

<400> 153
attaccacag gagggactac c

21

<210> 154
<211> 7
<212> PRT
<213> Artificial Sequence

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

<400> 154
Ile Thr Thr Gly Gly Thr Thr
1 5

<210> 155
<211> 51

<212> DNA
<213> Artificial Sequence

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

<400> 155
gatcgggtga aatcttacga cgattatgga gacctggatg ctttcgaacc a 51

<210> 156
<211> 20
<212> PRT
<213> Artificial Sequence

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

<400> 156
Asp Arg Val Lys Ser Tyr Asp Asp Tyr Gly Asp Leu Asp Ala Phe Glu
1 5 10 15

Pro Trp Gly Pro
20

<210> 157
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 157
ggattctcct tcagtagcag ctac 24

<210> 158
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 158
Gly Phe Ser Phe Ser Ser Ser Tyr
1 5

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

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

<400> 159
atttatggtg gtagtagtgg taccact

27

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

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

<400> 160
Ile Tyr Gly Gly Ser Ser Gly Thr Thr
1 5

<210> 161
<211> 33
<212> DNA
<213> Artificial Sequence

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

<400> 161
gtgactaatg gtggtgattg ggattttaaa ttg

33

<210> 162
<211> 11
<212> PRT
<213> Artificial Sequence

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

<400> 162
Val Thr Asn Gly Gly Asp Trp Asp Phe Lys Leu
1 5 10

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

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

<400> 163
ggaatcgacc tcagtaatta tgca 24

<210> 164
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 164
Gly Ile Asp Leu Ser Asn Tyr Ala
1 5

<210> 165
<211> 21
<212> DNA
<213> Artificial Sequence

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

<400> 165
attagtagta atgataagac a 21

<210> 166
<211> 7
<212> PRT
<213> Artificial Sequence

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

<400> 166
Ile Ser Ser Asn Asp Lys Thr
1 5

<210> 167
<211> 39
<212> DNA
<213> Artificial Sequence

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

<400> 167
gctgctatgc ctggtgggtt aaagaatgct ttcgatccc 39

<210> 168
<211> 13

<212> PRT
<213> Artificial Sequence

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

<400> 168
Ala Ala Met Pro Gly Gly Leu Lys Asn Ala Phe Asp Pro
1 5 10

<210> 169
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 169
ggcattgatc tgtctaacta cgct

24

<210> 170
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 170
Gly Ile Asp Leu Ser Asn Tyr Ala
1 5

<210> 171
<211> 21
<212> DNA
<213> Artificial Sequence

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

<400> 171
attagctcca atgacaagac c

21

<210> 172
<211> 7
<212> PRT
<213> Artificial Sequence

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

peptide"

<400> 172

Ile Ser Ser Asn Asp Lys Thr
1 5

<210> 173

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 173

gccgctatgc ctggcggact gaagaacgca tttgatacct

39

<210> 174

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 174

Ala Ala Met Pro Gly Gly Leu Lys Asn Ala Phe Asp Pro
1 5 10

<210> 175

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 175

ggaatctccc tcagtagcga tgca

24

<210> 176

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 176

Gly Ile Ser Leu Ser Ser Asp Ala
1 5

<210> 177
<211> 21
<212> DNA
<213> Artificial Sequence

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

<400> 177
attaatggtg gtggtaacac a

21

<210> 178
<211> 7
<212> PRT
<213> Artificial Sequence

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

<400> 178
Ile Asn Gly Gly Gly Asn Thr
1 5

<210> 179
<211> 54
<212> DNA
<213> Artificial Sequence

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

<400> 179
ggcattcaac atggtggtgg taatagtgat tattattatt acggcatgga cctc

54

<210> 180
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 180
Gly Ile Gln His Gly Gly Gly Asn Ser Asp Tyr Tyr Tyr Tyr Gly Met
1 5 10 15

Asp Leu

<210> 181

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

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

<400> 181
ggaatttccc tctcctccga cgcg

24

<210> 182
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 182
Gly Ile Ser Leu Ser Ser Asp Ala
1 5

<210> 183
<211> 21
<212> DNA
<213> Artificial Sequence

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

<400> 183
atcaacggcg gcggaaacac c

21

<210> 184
<211> 7
<212> PRT
<213> Artificial Sequence

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

<400> 184
Ile Asn Gly Gly Gly Asn Thr
1 5

<210> 185
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<221> source

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

<400> 185
ggcatccagc acggtggtgg aaacagcgac tactactact atgggatgga tctg

54

<210> 186
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 186
Gly Ile Gln His Gly Gly Gly Asn Ser Asp Tyr Tyr Tyr Tyr Gly Met
1 5 10 15

Asp Leu

<210> 187
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 187
ggattctccc tcagtaacta tgca

24

<210> 188
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 188
Gly Phe Ser Leu Ser Asn Tyr Ala
1 5

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

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

<400> 189
attagtactg gcggtatcac a 21

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

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

<400> 190
Ile Ser Thr Gly Gly Ile Thr
1 5

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

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

<400> 191
aatgctggtg gtagttatat tttctattat tttgacttg 39

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

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

<400> 192
Asn Ala Gly Gly Ser Tyr Ile Phe Tyr Tyr Phe Asp Leu
1 5 10

<210> 193
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 193
ggattctccc tcagtaacta tgca 24

<210> 194

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

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

<400> 194
Gly Phe Ser Leu Ser Asn Tyr Ala
1 5

<210> 195
<211> 21
<212> DNA
<213> Artificial Sequence

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

<400> 195
attagtactg gcggtatcac a

21

<210> 196
<211> 7
<212> PRT
<213> Artificial Sequence

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

<400> 196
Ile Ser Thr Gly Gly Ile Thr
1 5

<210> 197
<211> 39
<212> DNA
<213> Artificial Sequence

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

<400> 197
aatgctggtg gtagttatat tttctattat ttcgacttg

39

<210> 198
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 198

Asn Ala Gly Gly Ser Tyr Ile Phe Tyr Tyr Phe Asp Leu
1 5 10

<210> 199

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 199

ggattctccc tcagtagtta ccac

24

<210> 200

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 200

Gly Phe Ser Leu Ser Ser Tyr His
1 5

<210> 201

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<221> source

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

<400> 201

attactgcta tgagtcgcac a

21

<210> 202

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 202

Ile Thr Ala Met Ser Arg Thr
1 5

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

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

<400> 203
gaacctgggtt ttgttagtaa catc

24

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

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

<400> 204
Glu Pro Gly Phe Val Ser Asn Ile
1 5

<210> 205
<211> 24
<212> DNA
<213> Artificial Sequence

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

<400> 205
ggattctccc tcagtagcta tgca

24

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39

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1 5 10

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Gln Ser Ile Ser Ser Val

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Gln Asn Ile Tyr Ser Asn
1 5

<210> 375

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Gln Ser Ile Ser Ser Val Asp Asn Asn Val
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1 5

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Ala Ala Ser

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peptide"

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1 5 10

<210> 403
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<212> PRT
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Gly Thr Val Thr Ile Asn Cys Gln Ala Ser Gln Ser Val Tyr Asp Asn
20 25 30

Asn Trp Leu Ser Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu
35 40 45

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

Ser Gly Ser Gly Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val
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Gln Cys Asp Asp Ala Ala Thr Tyr Tyr Cys Gln Gly Ser Tyr Tyr Ser
85 90 95

Ser Gly Trp Tyr
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<213> Homo sapiens

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1 5 10 15

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala 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 Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

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

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

Pro Asp Val Thr Val Thr Trp Glu Val Asp Gly Thr Thr Gln Thr Thr
35 40 45

Gly Ile Glu Asn Ser Lys Thr Pro Gln Asn Ser Ala Asp Cys Thr Tyr
50 55 60

Asn Leu Ser Ser Thr Leu Thr Leu Thr Ser Thr Gln Tyr Asn Ser His
65 70 75 80

Lys Glu Tyr Thr Cys Lys Val Thr Gln Gly Thr Thr Ser Val Val Gln
85 90 95

Ser Phe Asn Arg Gly Asp Cys
100

<210> 406
<211> 107
<212> PRT
<213> Homo sapiens

<400> 406
Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
1 5 10 15

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

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

Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
50 55 60

Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
65 70 75 80

Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
85 90 95

Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
100 105

<210> 407
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 407
Ala Leu Val Met Thr Gln Thr Pro Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Glu Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 408
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 408
Ala Gln Val Leu Thr Gln Thr Glu Ser Pro Val Ser Ala Pro Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 409
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 409
Ala Gln Val Leu Thr Gln Thr Glu Ser Pro Val Ser Ala Pro Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 410

<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 410
Ala Gln Val Leu Thr Gln Thr Pro Ala Ser Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Leu Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 411
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 411
Ala Gln Val Met Thr Gln Thr Pro Ala Ser Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Ile Cys Trp Tyr Gln Gln Lys Leu Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 412
<211> 70
<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 412

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

Gly Thr Ile Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 413

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 413

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

Gly Thr Val Thr Ile Asn Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45

Ser Gly Lys Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 414

<211> 70

<212> PRT

<213> Artificial Sequence

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

<400> 414
Asp Gly Val Met Thr Gln Thr Pro Ala Pro Val Ser Ala Ala Val Gly
1      5      10      15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
      20      25      30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Asn Gly Ser Gly
      35      40      45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50      55      60

Ala Ala Thr Tyr Tyr Cys
65      70

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<210> 415
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 415
Asp Val Val Met Thr Gln Thr Pro Ser Pro Val Ser Ala Ala Val Gly
1      5      10      15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
      20      25      30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
      35      40      45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50      55      60

Ala Ala Thr Tyr Tyr Cys
65      70

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<210> 416
<211> 70
<212> PRT
<213> Artificial Sequence

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<220>
<221> source

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

<400> 416

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

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 417

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 417

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

Gly Thr Val Thr Ile Asn Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 418

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 418

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

Asp Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 419

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 419

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

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 420

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 420

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

Gly Thr Val Thr Ile Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 421
<211> 26
<212> PRT
<213> Artificial Sequence

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

<400> 421
Ala Leu Val Met Thr Gln Thr Pro Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln
20 25

<210> 422
<211> 43
<212> PRT
<213> Artificial Sequence

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

<400> 422
Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg
1 5 10 15

Phe Lys Gly Ser Gly Phe Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly
20 25 30

Ala Gln Cys Asp Asp Ala Ala Thr Tyr Tyr Cys
35 40

<210> 423
<211> 70

<212> PRT
<213> Artificial Sequence

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

<400> 423
Asp Pro Met Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Ser Thr Val Thr Ile Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 424
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 424
Ala Gln Gly Pro Thr Gln Thr Pro Ser Ser Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Asp Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 425
<211> 70
<212> PRT
<213> Artificial Sequence

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

 <400> 425
 Asp Pro Met Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly
 1 5 10 15

 Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
 20 25 30

 Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
 35 40 45

 Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
 50 55 60

 Ala Ala Thr Tyr Tyr Cys
 65 70

<210> 426
 <211> 70
 <212> PRT
 <213> Artificial Sequence

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

 <400> 426
 Ala Leu Val Met Thr Gln Thr Pro Ala Ser Val Glu Ala Ala Val Gly
 1 5 10 15

 Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 20 25 30

 Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
 35 40 45

 Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Gly Val Gln Cys Ala Asp
 50 55 60

 Ala Ala Thr Tyr Tyr Cys
 65 70

<210> 427
 <211> 70
 <212> PRT
 <213> Artificial Sequence

<220>

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

 <400> 427
 Ala Ala Val Met Thr Gln Thr Pro Ser Pro Val Ser Val Ala Val Gly
 1 5 10 15

 Gly Thr Val Thr Ile Asn Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
 20 25 30

 Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
 35 40 45

 Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
 50 55 60

 Ala Ala Thr Tyr Tyr Cys
 65 70

<210> 428
 <211> 70
 <212> PRT
 <213> Artificial Sequence

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

 <400> 428
 Ala Ala Val Leu Thr Gln Thr Pro Ser Pro Val Ser Ala Ala Val Gly
 1 5 10 15

 Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 20 25 30

 Pro Lys Leu Leu Ile Tyr Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
 35 40 45

 Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
 50 55 60

 Ala Ala Thr Tyr Tyr Cys
 65 70

<210> 429
 <211> 70
 <212> PRT
 <213> Artificial Sequence

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

polypeptide"

<400> 429

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

Ser Thr Val Thr Ile Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 430

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 430

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

Gly Thr Val Thr Ile Tyr Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Arg Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Met Lys Ala Glu Asp
50 55 60

Val Ala Thr Tyr Tyr Cys
65 70

<210> 431

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 431

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

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 432

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 432

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

Gly Thr Val Thr Ile Asn Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 433

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 433

Asp Pro Met Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly

1 5 10 15

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 434
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 434
Asp Pro Met Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 435
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 435
Asp Pro Met Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 436
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 436
Tyr Val Met Met Thr Gln Thr Pro Ser Ser Val Ser Glu Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Tyr Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 437
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 437
Asp Pro Met Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro

20

25

30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
 35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
 50 55 60

Ala Ala Thr Tyr Tyr Cys
 65 70

<210> 438

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 438

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

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
 35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
 50 55 60

Ala Ala Thr Tyr Tyr Cys
 65 70

<210> 439

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 439

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

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
 20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 440

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 440

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

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 441

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 441

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

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Arg
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly

35

40

45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 442

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 442

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

Ser Thr Val Thr Ile Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 443

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 443

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

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45

Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 444
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 444
Asp Val Val Met Thr Gln Thr Pro Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Arg Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Met Lys Ala Glu Asp
50 55 60

Val Ala Thr Tyr Tyr Cys
65 70

<210> 445
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 445
Asp Val Val Met Thr Gln Thr Pro Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Arg
35 40 45

Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 446
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 446
Asp Val Val Met Thr Gln Thr Pro Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 447
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 447
Asp Val Val Met Thr Gln Thr Pro Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 448
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 448
Asp Pro Val Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 449
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 449
Ala Ala Val Leu Thr Gln Thr Pro Ser Pro Val Ser Val Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys

<210> 450
 <211> 70
 <212> PRT
 <213> Artificial Sequence

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

<400> 450
 Asp Pro Met Leu Thr Gln Thr Pro Ser Pro Val Ser Ala Ala Val Gly
 1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Pro Arg Phe Lys Gly Ser Gly
 35 40 45

Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp
 50 55 60

Ala Ala Thr Tyr Tyr Cys
 65 70

<210> 451
 <211> 70
 <212> PRT
 <213> Artificial Sequence

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

<400> 451
 Ala Ala Val Leu Thr Gln Thr Pro Ser Pro Val Ser Val Ala Val Gly
 1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
 20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
 35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Pro Gly Asp
 50 55 60

Ala Ala Thr Tyr Tyr Cys
 65 70

<210> 452
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 452
Asp Pro Met Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Ser Thr Val Thr Ile Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45

Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 453
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 453
Asp Pro Val Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 454

<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 454
Ala Ile Lys Met Thr Gln Thr Pro Ser Ser Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 455
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 455
Asp Pro Met Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 456
<211> 70
<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 456

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

Gly Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Ser
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Glu Tyr Thr Leu Thr Ile Ser Asp Leu Glu Cys Ala Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 457

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 457

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

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 458

<211> 70

<212> PRT

<213> Artificial Sequence

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

 <400> 458
 Tyr Val Met Met Thr Gln Thr Pro Ser Ser Val Ser Glu Ala Val Gly
 1 5 10 15

 Gly Thr Val Thr Ile Tyr Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 20 25 30

 Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
 35 40 45

 Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
 50 55 60

 Ala Ala Thr Tyr Tyr Cys
 65 70

<210> 459
 <211> 70
 <212> PRT
 <213> Artificial Sequence

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

 <400> 459
 Asp Pro Met Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly
 1 5 10 15

 Gly Thr Val Thr Ile Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
 20 25 30

 Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
 35 40 45

 Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
 50 55 60

 Ala Ala Thr Tyr Tyr Cys
 65 70

<210> 460
 <211> 70
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> source

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

<400> 460

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

Gly Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 461

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 461

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

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 462

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 462

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

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 463

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 463

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

Gly Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 464

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 464

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

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Trp Val Ser Ser Ser Gly
35 40 45

Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Gly Val Gln Pro Gly Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 465
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 465
Asp Val Val Met Thr Gln Thr Pro Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 466
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 466
Ala Ala Val Leu Thr Gln Thr Pro Ser Pro Val Ser Val Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Ser Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 467
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 467
Asp Pro Val Leu Thr Gln Thr Pro Ser Pro Val Ser Val Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 468
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 468
Ala Leu Val Met Thr Gln Thr Pro Ser Ser Thr Ser Glu Pro Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 469

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 469

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

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 470

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 470

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

Gly Thr Val Thr Ile Asn Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 471
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 471
Asp Pro Val Leu Thr Gln Thr Ala Ser Pro Val Ser Ala Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 472
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 472
Tyr Val Met Met Thr Gln Thr Pro Ser Ser Val Ser Glu Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Tyr Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Arg Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 473

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 473

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

Ser Thr Val Thr Ile Ser Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Arg Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 474

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 474

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

Asp Thr Val Thr Ile Lys Cys Trp Tyr Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Pro Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 475
<211> 70
<212> PRT
<213> Artificial Sequence

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

<400> 475
Ala Ala Val Leu Thr Gln Thr Pro Ser Pro Val Ser Val Ala Val Gly
1 5 10 15

Gly Thr Val Thr Ile Asn Cys Trp Phe Gln Gln Lys Pro Gly Gln Pro
20 25 30

Pro Lys Leu Leu Ile Tyr Gly Val Ser Ser Arg Phe Lys Gly Ser Gly
35 40 45

Ser Gly Thr Gln Phe Thr Leu Thr Ile Asn Gly Val Gln Cys Asp Asp
50 55 60

Ala Ala Thr Tyr Tyr Cys
65 70

<210> 476
<211> 94
<212> PRT
<213> Artificial Sequence

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

<400> 476
Gln Ser Val Lys Glu Ser Gly Gly Arg Leu Val Thr Pro Gly Thr Pro
1 5 10 15

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

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

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

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

Arg Pro Thr Thr Glu Asp Thr Ala Thr Tyr Phe Cys Ala Arg
85 90

<210> 477

<211> 98

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 477

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 Ser 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 Tyr Val
35 40 45

Ser Ala Ile Ser Ser Asn 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 Arg

<210> 478

<211> 95

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 478

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

Cys Thr Ala Ser Gly Phe Thr Phe Gly Asp Tyr Ala Met Ser Trp Val
20 25 30

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

Lys Ala Tyr Gly Gly Thr Thr Glu Tyr Ala Ala Ser Val Lys Gly Arg
50 55 60

Phe Thr Ile Ser Arg Asp Asp Ser Lys Ser Ile Ala Tyr Leu Gln Met
65 70 75 80

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

<210> 479

<211> 93

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 479

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

Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Ala Met His Trp Val
20 25 30

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

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

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

Leu Arg Ala Glu Asp Met Ala Val Tyr Tyr Cys Ala Arg
85 90

<210> 480

<211> 95

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 480

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

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

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

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

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

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

<210> 481

<211> 95

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 481

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

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

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

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

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

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

<210> 482

<211> 95
<212> PRT
<213> Artificial Sequence

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

<400> 482
Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly
1 5 10 15

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

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala 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 Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

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

<210> 483
<211> 91
<212> PRT
<213> Artificial Sequence

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

<400> 483
Met Thr Gln Ser Pro Ser Ser Phe Ser Ala Ser Thr Gly Asp Arg Val
1 5 10 15

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

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

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

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

Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Ser Tyr
85 90

<210> 484

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 484

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

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

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

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

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

Asp Asp Ala Ala Thr Tyr Tyr Cys Leu Gly Val Tyr Gly Tyr Ser Phe
85 90 95

Asp Asp Gly Ile Ala Phe Gly Gly Gly Thr Glu Leu Glu Ile Lys
100 105 110

<210> 485

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 485

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

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

Asp Asp Phe Ala Thr Tyr Tyr Cys Leu Gly Val Tyr Gly Tyr Ser Phe
 85 90 95

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

<210> 486

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 486

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

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

Asp Leu Ser Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu
 35 40 45

Ile Trp Tyr Ala Thr Asn Leu Pro Ser Gly Val Pro Ser Arg Phe Ser
 50 55 60

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

Cys Glu Asp Ala Ala Thr Tyr Tyr Cys Leu Gly Gly Tyr Ala Ala Ala
 85 90 95

Ser Tyr Arg Thr Ala Phe Gly Gly Gly Thr Glu Val Val Val Lys
 100 105 110

<210> 487

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

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

<400> 487
Asp Ile Gln Met Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1      5      10      15

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

Asp Leu Ser Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu
      35      40      45

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

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

Cys Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gly Gly Tyr Ala Ala Ala
      85      90      95

Ser Tyr Arg Thr Ala Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
      100      105      110

<210> 488
<211> 111
<212> PRT
<213> Artificial Sequence

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

<400> 488
Glu Leu Val Met Thr Gln Thr Pro Ser Ser Val Ser Ala Ala Val Gly
1      5      10      15

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

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

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

Ser Arg Ser Gly Ile Glu Tyr Thr Leu Thr Ile Ser Gly Val Gln Cys
65      70      75      80

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

Asp Asp Gly Ala Ala Phe Gly Gly Gly Thr Glu Val Val Val Lys
100 105 110

<210> 489

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 489

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 Gln Ser Ile Ser Asn Tyr
20 25 30

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

Tyr Ala Ala Ser Lys Leu Ala 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 Cys
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gly Val Tyr Ser Ile Ser Thr
85 90 95

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

<210> 490

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 490

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

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

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

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

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

Asp Asp Ala Ala Thr Tyr Tyr Cys Gln Thr Asn Tyr Gly Thr Ser Ser
85 90 95

Ser Asn Tyr Gly Phe Ala Phe Gly Gly Gly Thr Glu Val Val Val Lys
100 105 110

<210> 491

<211> 112

<212> PRT

<213> Artificial Sequence

<220>

<221> source

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

<400> 491

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 Gln Ser Ile Ser Ser Val
20 25 30

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

Tyr Leu Ala Ser Thr Leu Ala 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 Thr Asn Tyr Gly Thr Ser Ser
85 90 95

Ser Asn Tyr Gly Phe Ala Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105 110