SEQUENCE LISTING

<110> DENALI THERAPEUTICS INC.

<120> PROGRANULIN VARIANTS

<130> 102342-003920PC-1219188

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<150> 63/091,819
<151> 2020-10-14

<150> 62/953,099
<151> 2019-12-23

<160> 143

<170> PatentIn version 3.5

<210> 1
<211> 593
<212> PRT
<213> Homo sapiens

<400> 1
Met Trp Thr Leu Val Ser Trp Val Ala Leu Thr Ala Gly Leu Val Ala
1 5 10 15

Gly Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu
20 25 30

Asp Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys
35 40 45

Trp Pro Thr Thr Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp
50 55 60

Ala His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr
65 70 75 80

Ser Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His
85 90 95

His Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys
100 105 110

Phe Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp
115 120 125

Ser Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp
130 135 140

Gly Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp
145 150 155 160

Arg Val His Cys Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr
165 170 175

Arg Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro
180 185 190

Ala Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys
195 200 205

Pro Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu
210 215 220

Pro Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys
225 230 235 240

Ser Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile
245 250 255

Gln Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr
260 265 270

Lys Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val
275 280 285

Ser Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp
290 295 300

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

Cys Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu
325 330 335

Gln Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu
340 345 350

Ser Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn
355 360 365

Val Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly
370 375 380

Glu Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His
385 390 395 400

Gln His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys
405 410 415

Gln Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg
420 425 430

Arg Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr
435 440 445

Ser Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp
450 455 460

Ala Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His
465 470 475 480

Cys Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu
485 490 495

Lys Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro
500 505 510

His Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His
515 520 525

Asp Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys
530 535 540

Pro Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro
545 550 555 560

Ala Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu
565 570 575

Ala Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu
580 585 590

Leu

<210> 2
<211> 576
<212> PRT
<213> Homo sapiens

<400> 2
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala

435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Leu
565 570 575

<210> 3
<211> 576
<212> PRT
<213> Artificial Sequence

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

<220>
<221> MOD_RES
<222> (574)..(576)

<223> Any amino acid

<220>
<221> source
<223> /note="See specification as filed for detailed description of substitutions and preferred embodiments"

<400> 3
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala

165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Xaa Xaa Xaa
565 570 575

<210> 4
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 4
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

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

130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro His Leu
565 570 575

<210> 5
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 5
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser

100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Lys Leu
565 570 575

<210> 6
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 6
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His

65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Asp Leu
565 570 575

<210> 7
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 7
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

Pro Thr Thr Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala

35 40 45

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Glu Leu
565 570 575

<210> 8
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 8
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp

1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Ser Leu
565 570 575

<210> 9
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 9
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Thr Leu
565 570 575

<210> 10
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 10
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Asn Leu
565 570 575

<210> 11
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 11
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Gln Leu
565 570 575

<210> 12
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 12
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Gly Leu
565 570 575

<210> 13
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 13
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Pro Leu
565 570 575

<210> 14
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 14
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Ala Leu
565 570 575

<210> 15
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 15
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Tyr Leu

565 570 575

<210> 16
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 16
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala

530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Val Leu
565 570 575

<210> 17
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 17
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp

500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Ile Leu
565 570 575

<210> 18
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 18
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys

465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Phe Leu
565 570 575

<210> 19
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 19
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala

435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Arg Leu
565 570 575

<210> 20
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 20
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg

405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln His Leu
565 570 575

<210> 21
<211> 576
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 21
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln

370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Lys Leu
565 570 575

<210> 22
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 22
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val

340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Asp Leu
565 570 575

<210> 23
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 23
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln

305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Glu Leu
565 570 575

<210> 24
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 24
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly

275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Asn Leu
565 570 575

<210> 25
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 25
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys

245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Pro Leu
565 570 575

<210> 26
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 26
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser

210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Tyr Leu
565 570 575

<210> 27
<211> 576
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 27
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro

180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Gln Leu
565 570 575

<210> 28
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 28
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

Val His Cys Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg

145 150 155 160

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Val Val Leu
565 570 575

<210> 29
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 29
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly

115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Val Thr Leu
565 570 575

<210> 30
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 30
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe

85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Arg Ile Leu
565 570 575

<210> 31
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 31
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser

50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg His Ile Leu
565 570 575

<210> 32
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 32
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp

20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Lys Ile Leu
565 570 575

<210> 33
<211> 576
<212> PRT
<213> Artificial Sequence

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

polypeptide"

<400> 33
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Glu Ile Leu
565 570 575

<210> 34
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 34
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Arg Phe Leu
565 570 575

<210> 35
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 35
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg His Phe Leu
565 570 575

<210> 36
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 36
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Lys Phe Leu
565 570 575

<210> 37
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 37
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Asp Phe Leu
565 570 575

<210> 38
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 38
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Glu Phe Leu
565 570 575

<210> 39
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 39
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Ser Phe Leu
565 570 575

<210> 40

<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 40
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala

545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Thr Phe Leu
565 570 575

<210> 41
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 41
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro

515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Asn Phe Leu
565 570 575

<210> 42
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 42
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His

485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Phe Leu
565 570 575

<210> 43
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 43
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys

450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Leu Phe Leu
565 570 575

<210> 44
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 44
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser

420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Phe Phe Leu
565 570 575

<210> 45
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 45
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln

385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Tyr Phe Leu
565 570 575

<210> 46
<211> 576

<212> PRT
<213> Artificial Sequence

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

<400> 46
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu

355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Arg Gln Leu
565 570 575

<210> 47
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 47
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

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

325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg His Gln Leu
565 570 575

<210> 48
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 48
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys

290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Lys Gln Leu
565 570 575

<210> 49
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 49
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser

260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Asp Gln Leu
565 570 575

<210> 50
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 50
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln

225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Glu Gln Leu
565 570 575

<210> 51
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 51

Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro

195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Asn Gln Leu
565 570 575

<210> 52
<211> 576
<212> PRT

<213> Artificial Sequence

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

<400> 52
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala

165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Leu Gln Leu
565 570 575

<210> 53
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 53
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

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

130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Phe Gln Leu
565 570 575

<210> 54
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 54
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser

100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Tyr Gln Leu
565 570 575

<210> 55
<211> 581
<212> PRT
<213> Artificial Sequence

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

<220>
<221> VARIANT
<222> (577)..(577)
<223> /replace=" "

<220>
<221> VARIANT
<222> (578)..(578)
<223> /replace=" "

<220>
<221> SITE
<222> (1)..(581)
<223> /note="Variant residues given in the sequence have no
preference with respect to those in the annotations
for variant positions"

<400> 55
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln

385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Leu
565 570 575

Leu Arg Gln Leu Leu
580

<210> 56
<211> 579
<212> PRT
<213> Artificial Sequence

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

<400> 56
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val

340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Leu
565 570 575

Gln Leu Leu

<210> 57
<211> 581
<212> PRT
<213> Artificial Sequence

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

<400> 57
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys

290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Leu
565 570 575

Leu Arg Gln Leu Leu
580

<210> 58
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 58
Leu Arg Gln Leu Leu
1 5

<210> 59
<211> 6
<212> PRT
<213> Artificial Sequence

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

peptide"

<400> 59
Gln Leu Leu Gln Leu Leu
1 5

<210> 60
<211> 8
<212> PRT
<213> Artificial Sequence

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

<400> 60
Gln Leu Leu Leu Arg Gln Leu Leu
1 5

<210> 61
<211> 217
<212> PRT
<213> Homo sapiens

<400> 61
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys

85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145 150 155 160

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

Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
180 185 190

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 62
<211> 110
<212> PRT
<213> Homo sapiens

<400> 62
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
100 105 110

<210> 63
<211> 107
<212> PRT
<213> Homo sapiens

<400> 63
Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
1 5 10 15

Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
20 25 30

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
35 40 45

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
50 55 60

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
65 70 75 80

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
85 90 95

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
100 105

<210> 64
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 64
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

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

130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145 150 155 160

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

Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
180 185 190

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 65
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 65
Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145 150 155 160

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

Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
180 185 190

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 66
<211> 217
<212> PRT
<213> Artificial Sequence

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

polypeptide"

<400> 66
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 67
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 67
Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 68
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 68
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Tyr Gly Thr Glu Trp Ala Asn
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 69
<211> 217
<212> PRT

<213> Artificial Sequence

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

<400> 69
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Tyr Gly Thr Glu Trp Ala Asn
145 150 155 160

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

165 170 175

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 70
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 70
Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Tyr Gly Thr Glu Trp Ala Asn
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 71
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 71
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

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

20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Tyr Gly Thr Glu Trp Ala Asn
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 72
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 72
Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Tyr Gly Thr Glu Trp Ala Asn
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 73
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 73
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly Lys
225

<210> 74
<211> 227
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 74
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

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

180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly Lys
225

<210> 75
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 75
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly Lys
225

<210> 76
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 76
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly

1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly Lys
225

<210> 77
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 77
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly Lys
225

<210> 78
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 78
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Leu Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 79
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 79
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Leu Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser

145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 80
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 80
Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Leu Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 81
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 81
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys

1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Leu Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 82
<211> 217
<212> PRT
<213> Artificial Sequence

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

<400> 82
Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Ser Cys Ala Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Leu Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 83
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 83
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser Tyr Lys Thr Thr Pro Pro
165 170 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly Lys
225

<210> 84
<211> 227
<212> PRT

<213> Artificial Sequence

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

<400> 84
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser Tyr Lys Thr Thr Pro Pro

165 170 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly Lys
225

<210> 85
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 85
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser Tyr Lys Thr Thr Pro Pro
165 170 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly Lys
225

<210> 86
<211> 227
<212> PRT
<213> Artificial Sequence

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

polypeptide"

<400> 86
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser Tyr Lys Thr Thr Pro Pro
165 170 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly Lys
225

<210> 87
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 87
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser Tyr Lys Thr Thr Pro Pro
165 170 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly Lys
225

<210> 88
<211> 15
<212> PRT
<213> Homo sapiens

<400> 88
Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro
1 5 10 15

<210> 89
<211> 10
<212> PRT

<213> Homo sapiens

<400> 89
Asp Lys Thr His Thr Cys Pro Pro Cys Pro
1 5 10

<210> 90
<211> 5
<212> PRT
<213> Artificial Sequence

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

<400> 90
Gly Gly Gly Gly Ser
1 5

<210> 91
<211> 10
<212> PRT
<213> Artificial Sequence

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

<400> 91
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10

<210> 92
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 92
Gly Gly Ser Gly

1

<210> 93
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 93
Ser Gly Gly Gly
1

<210> 94
<211> 18
<212> PRT
<213> Artificial Sequence

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

<400> 94
Lys Glu Ser Gly Ser Val Ser Ser Glu Gln Leu Ala Gln Phe Arg Ser
1 5 10 15

Leu Asp

<210> 95
<211> 14
<212> PRT
<213> Artificial Sequence

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

<400> 95
Glu Gly Lys Ser Ser Gly Ser Gly Ser Glu Ser Lys Ser Thr

1 5 10

<210> 96
<211> 12
<212> PRT
<213> Artificial Sequence

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

<400> 96
Gly Ser Ala Gly Ser Ala Ala Gly Ser Gly Glu Phe
1 5 10

<210> 97
<211> 7
<212> PRT
<213> Artificial Sequence

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

<400> 97
Ala Glu Ala Ala Ala Lys Ala
1 5

<210> 98
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 98
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met

20 25 30

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Ile Leu

805 810

<210> 99
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 99
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala

530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Phe Leu
805 810

<210> 100
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 100
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr

260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Gln Leu
805 810

<210> 101
<211> 813
<212> PRT
<213> Artificial Sequence

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

polypeptide"

<400> 101
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg

770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Val Val Leu
805 810

<210> 102
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 102
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp

500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Val Thr Leu
805 810

<210> 103
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 103
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys

225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Ile Leu
805 810

<210> 104
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 104
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr

740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Phe Leu
805 810

<210> 105
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 105
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys

465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Gln Leu
805 810

<210> 106
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 106

Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

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

195 200 205

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Val Val Leu
805 810

<210> 107
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 107
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val

705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Val Thr Leu
805 810

<210> 108
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 108
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys

435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Leu
805 810

<210> 109
<211> 760
<212> PRT

<213> Homo sapiens

<400> 109

Met Met Asp Gln Ala Arg Ser Ala Phe Ser Asn Leu Phe Gly Gly Glu
1 5 10 15

Pro Leu Ser Tyr Thr Arg Phe Ser Leu Ala Arg Gln Val Asp Gly Asp
20 25 30

Asn Ser His Val Glu Met Lys Leu Ala Val Asp Glu Glu Glu Asn Ala
35 40 45

Asp Asn Asn Thr Lys Ala Asn Val Thr Lys Pro Lys Arg Cys Ser Gly
50 55 60

Ser Ile Cys Tyr Gly Thr Ile Ala Val Ile Val Phe Phe Leu Ile Gly
65 70 75 80

Phe Met Ile Gly Tyr Leu Gly Tyr Cys Lys Gly Val Glu Pro Lys Thr
85 90 95

Glu Cys Glu Arg Leu Ala Gly Thr Glu Ser Pro Val Arg Glu Glu Pro
100 105 110

Gly Glu Asp Phe Pro Ala Ala Arg Arg Leu Tyr Trp Asp Asp Leu Lys
115 120 125

Arg Lys Leu Ser Glu Lys Leu Asp Ser Thr Asp Phe Thr Gly Thr Ile
130 135 140

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

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

Lys Leu Ser Lys Val Trp Arg Asp Gln His Phe Val Lys Ile Gln Val
180 185 190

Lys Asp Ser Ala Gln Asn Ser Val Ile Ile Val Asp Lys Asn Gly Arg
195 200 205

Leu Val Tyr Leu Val Glu Asn Pro Gly Gly Tyr Val Ala Tyr Ser Lys
210 215 220

Ala Ala Thr Val Thr Gly Lys Leu Val His Ala Asn Phe Gly Thr Lys
225 230 235 240

Lys Asp Phe Glu Asp Leu Tyr Thr Pro Val Asn Gly Ser Ile Val Ile
245 250 255

Val Arg Ala Gly Lys Ile Thr Phe Ala Glu Lys Val Ala Asn Ala Glu
260 265 270

Ser Leu Asn Ala Ile Gly Val Leu Ile Tyr Met Asp Gln Thr Lys Phe
275 280 285

Pro Ile Val Asn Ala Glu Leu Ser Phe Phe Gly His Ala His Leu Gly
290 295 300

Thr Gly Asp Pro Tyr Thr Pro Gly Phe Pro Ser Phe Asn His Thr Gln
305 310 315 320

Phe Pro Pro Ser Arg Ser Ser Gly Leu Pro Asn Ile Pro Val Gln Thr
325 330 335

Ile Ser Arg Ala Ala Ala Glu Lys Leu Phe Gly Asn Met Glu Gly Asp
340 345 350

Cys Pro Ser Asp Trp Lys Thr Asp Ser Thr Cys Arg Met Val Thr Ser
355 360 365

Glu Ser Lys Asn Val Lys Leu Thr Val Ser Asn Val Leu Lys Glu Ile
370 375 380

Lys Ile Leu Asn Ile Phe Gly Val Ile Lys Gly Phe Val Glu Pro Asp
385 390 395 400

His Tyr Val Val Val Gly Ala Gln Arg Asp Ala Trp Gly Pro Gly Ala
405 410 415

Ala Lys Ser Gly Val Gly Thr Ala Leu Leu Leu Lys Leu Ala Gln Met
420 425 430

Phe Ser Asp Met Val Leu Lys Asp Gly Phe Gln Pro Ser Arg Ser Ile
435 440 445

Ile Phe Ala Ser Trp Ser Ala Gly Asp Phe Gly Ser Val Gly Ala Thr
450 455 460

Glu Trp Leu Glu Gly Tyr Leu Ser Ser Leu His Leu Lys Ala Phe Thr
465 470 475 480

Tyr Ile Asn Leu Asp Lys Ala Val Leu Gly Thr Ser Asn Phe Lys Val
485 490 495

Ser Ala Ser Pro Leu Leu Tyr Thr Leu Ile Glu Lys Thr Met Gln Asn
500 505 510

Val Lys His Pro Val Thr Gly Gln Phe Leu Tyr Gln Asp Ser Asn Trp
515 520 525

Ala Ser Lys Val Glu Lys Leu Thr Leu Asp Asn Ala Ala Phe Pro Phe
530 535 540

Leu Ala Tyr Ser Gly Ile Pro Ala Val Ser Phe Cys Phe Cys Glu Asp
545 550 555 560

Thr Asp Tyr Pro Tyr Leu Gly Thr Thr Met Asp Thr Tyr Lys Glu Leu
565 570 575

Ile Glu Arg Ile Pro Glu Leu Asn Lys Val Ala Arg Ala Ala Ala Glu
580 585 590

Val Ala Gly Gln Phe Val Ile Lys Leu Thr His Asp Val Glu Leu Asn
595 600 605

Leu Asp Tyr Glu Arg Tyr Asn Ser Gln Leu Leu Ser Phe Val Arg Asp
610 615 620

Leu Asn Gln Tyr Arg Ala Asp Ile Lys Glu Met Gly Leu Ser Leu Gln
625 630 635 640

Trp Leu Tyr Ser Ala Arg Gly Asp Phe Phe Arg Ala Thr Ser Arg Leu
645 650 655

Thr Thr Asp Phe Gly Asn Ala Glu Lys Thr Asp Arg Phe Val Met Lys
660 665 670

Lys Leu Asn Asp Arg Val Met Arg Val Glu Tyr His Phe Leu Ser Pro
675 680 685

Tyr Val Ser Pro Lys Glu Ser Pro Phe Arg His Val Phe Trp Gly Ser
690 695 700

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

Gln Asn Asn Gly Ala Phe Asn Glu Thr Leu Phe Arg Asn Gln Leu Ala
725 730 735

Leu Ala Thr Trp Thr Ile Gln Gly Ala Ala Asn Ala Leu Ser Gly Asp
740 745 750

Val Trp Asp Ile Asp Asn Glu Phe
755 760

<210> 110

<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 110
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys
225

<210> 111
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 111
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His

65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Asn Ile Leu
565 570 575

<210> 112
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 112
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

Pro Thr Thr Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala

35 40 45

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Leu Leu Leu
565 570 575

<210> 113
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 113
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp

1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Leu Leu
565 570 575

<210> 114
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 114
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Arg Leu
565 570 575

<210> 115
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 115
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Tyr Ile Leu
565 570 575

<210> 116
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 116
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Val Leu Leu
565 570 575

<210> 117
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 117
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Val Ile Val
565 570 575

<210> 118
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 118
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Phe Ile Leu
565 570 575

<210> 119
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 119
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Met Leu Leu
565 570 575

<210> 120
<211> 577
<212> PRT
<213> Artificial Sequence

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

<400> 120
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Leu

565 570 575

Gly

<210> 121
<211> 578
<212> PRT
<213> Artificial Sequence

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

<400> 121
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro

515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Leu
565 570 575

Gly Lys

<210> 122
<211> 227
<212> PRT
<213> Artificial Sequence

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

<400> 122
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys
225

<210> 123
<211> 813
<212> PRT
<213> Artificial Sequence

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

polypeptide"

<400> 123
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg

770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Pro Leu
805 810

<210> 124
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 124
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp

500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Pro Tyr Leu
805 810

<210> 125
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 125
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys

225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Arg Leu
805 810

<210> 126
<211> 813
<212> PRT
<213> Artificial Sequence

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

<400> 126
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val
180 185 190

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

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

Pro Gly Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Thr Arg Cys
225 230 235 240

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
245 250 255

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
260 265 270

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
275 280 285

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
290 295 300

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
305 310 315 320

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
325 330 335

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
340 345 350

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
355 360 365

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
370 375 380

Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
385 390 395 400

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

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
420 425 430

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
435 440 445

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
450 455 460

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
465 470 475 480

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
485 490 495

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
500 505 510

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
515 520 525

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
530 535 540

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
545 550 555 560

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
565 570 575

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
580 585 590

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
595 600 605

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
610 615 620

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
625 630 635 640

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
645 650 655

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
660 665 670

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
675 680 685

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
690 695 700

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
705 710 715 720

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
725 730 735

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr

740 745 750

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
755 760 765

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
770 775 780

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
785 790 795 800

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln His Leu
805 810

<210> 127
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 127
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala
435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys

465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Tyr
565 570 575

<210> 128
<211> 576
<212> PRT
<213> Artificial Sequence

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

<400> 128
Thr Arg Cys Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp
1 5 10 15

Pro Gly Gly Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp
20 25 30

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

His Cys Ser Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser
50 55 60

Ser Cys Cys Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His
65 70 75 80

Cys Cys Pro Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe
85 90 95

Gln Arg Ser Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser
100 105 110

Gln Phe Glu Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly
115 120 125

Ser Trp Gly Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg
130 135 140

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

Cys Ile Thr Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala
165 170 175

Gln Arg Thr Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro
180 185 190

Asp Ala Arg Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro
195 200 205

Ser Gly Lys Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser
210 215 220

Asp His Leu His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln
225 230 235 240

Ser Lys Cys Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys
245 250 255

Leu Pro Ala His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser
260 265 270

Cys Pro Asp Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly
275 280 285

Cys Cys Pro Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys
290 295 300

Cys Pro Ala Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln
305 310 315 320

Gly Pro His Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser
325 330 335

Leu Pro Asp Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val
340 345 350

Ser Ser Cys Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu
355 360 365

Trp Gly Cys Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln
370 375 380

His Cys Cys Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln
385 390 395 400

Arg Gly Ser Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg
405 410 415

Ala Ser Leu Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser
420 425 430

Cys Pro Val Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala

435 440 445

Cys Cys Gln Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys
450 455 460

Cys Pro Ala Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys
465 470 475 480

Glu Val Val Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His
485 490 495

Val Gly Val Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp
500 505 510

Asn Gln Thr Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro
515 520 525

Tyr Arg Gln Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala
530 535 540

Gly Phe Arg Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala
545 550 555 560

Pro Arg Trp Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Pro
565 570 575

<210> 129
<211> 216
<212> PRT
<213> Artificial Sequence

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

<400> 129
Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Tyr Gly Thr Glu Trp Ala Asn
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly
210 215

<210> 130
<211> 226
<212> PRT
<213> Artificial Sequence

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

<400> 130
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

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

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly
225

<210> 131
<211> 216
<212> PRT
<213> Artificial Sequence

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

<400> 131
Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu
115 120 125

Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Leu Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser
145 150 155 160

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

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

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
195 200 205

Lys Ser Leu Ser Leu Ser Pro Gly
210 215

<210> 132
<211> 226
<212> PRT
<213> Artificial Sequence

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

<400> 132
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly
1 5 10 15

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

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

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

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

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

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

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

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

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

Trp Glu Ser Tyr Gly Thr Glu Trp Ser Ser Tyr Lys Thr Thr Pro Pro
165 170 175

Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
180 185 190

Thr Lys Glu Glu Trp Gln Gln Gly Phe Val Phe Ser Cys Ser Val Met
195 200 205

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

Pro Gly
225

<210> 133
<211> 50
<212> PRT
<213> Artificial Sequence

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

<220>
<221> SITE
<222> (1)..(50)
<223> /note="This sequence may encompass 1-10 'Gly Gly Gly Gly Ser' repeating units"

<400> 133
Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
1 5 10 15

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

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly
35 40 45

Gly Ser
50

<210> 134
<211> 40
<212> PRT
<213> Artificial Sequence

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

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

<400> 134
Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly
1 5 10 15

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

Gly Gly Ser Gly Gly Gly Ser Gly
35 40

<210> 135
<211> 40
<212> PRT
<213> Artificial Sequence

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

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

<400> 135
Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly
1 5 10 15

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

Ser Gly Gly Gly Ser Gly Gly Gly
35 40

<210> 136
<211> 27
<212> PRT
<213> Artificial Sequence

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

<220>
<221> SITE
<222> (2)..(26)
<223> /note="This sequence may encompass 1-5 'Glu Ala Ala Ala Lys' repeating units"

<400> 136
Ala Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys
1 5 10 15

Glu Ala Ala Ala Lys Glu Ala Ala Ala Lys Ala
20 25

<210> 137
<211> 5
<212> PRT
<213> Artificial Sequence

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

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace=" "

<220>
<221> VARIANT
<222> (2)..(2)
<223> /replace=" "

<220>
<221> SITE
<222> (1)..(5)
<223> /note="Variant residues given in the sequence have no
preference with respect to those in the annotations
for variant positions"

<400> 137
Leu Arg Gln Leu Leu
1 5

<210> 138
<211> 10
<212> PRT
<213> Artificial Sequence

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

<220>
<221> SITE
<222> (1)..(10)
<223> /note="This sequence may encompass 1-10 residues"

<400> 138
Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
1 5 10

<210> 139
<211> 20
<212> PRT
<213> Artificial Sequence

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

<220>
<221> SITE
<222> (1)..(20)
<223> /note="This sequence may encompass 1-10 'Gly Ser'
repeating units"

<400> 139
Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser
1 5 10 15

Gly Ser Gly Ser
20

<210> 140
<211> 30
<212> PRT
<213> Artificial Sequence

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

<220>
<221> SITE
<222> (1)..(30)
<223> /note="This sequence may encompass 1-10 'Gly Gly Ser'
repeating units"

<400> 140
Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly Gly Ser Gly
1 5 10 15

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

<210> 141
<211> 20

<212> PRT
<213> Artificial Sequence

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

<220>
<221> VARIANT
<222> (1)..(1)
<223> /replace="Lys" or "Glu"

<220>
<221> VARIANT
<222> (3)..(3)
<223> /replace="Lys" or "Glu"

<220>
<221> VARIANT
<222> (5)..(5)
<223> /replace="Lys" or "Glu"

<220>
<221> VARIANT
<222> (7)..(7)
<223> /replace="Lys" or "Glu"

<220>
<221> VARIANT
<222> (9)..(9)
<223> /replace="Lys" or "Glu"

<220>
<221> VARIANT
<222> (11)..(11)
<223> /replace="Lys" or "Glu"

<220>
<221> VARIANT
<222> (13)..(13)
<223> /replace="Lys" or "Glu"

<220>
<221> VARIANT
<222> (15)..(15)
<223> /replace="Lys" or "Glu"

<220>
<221> VARIANT
<222> (17)..(17)
<223> /replace="Lys" or "Glu"

<220>
<221> VARIANT
<222> (19)..(19)
<223> /replace="Lys" or "Glu"

<220>
<221> SITE
<222> (1)..(20)
<223> /note="Variant residues given in the sequence have no
preference with respect to those in the annotations
for variant positions"

<220>
<221> SITE
<222> (1)..(20)
<223> /note="This sequence may encompass 1-10 'Ala Pro'
repeating units"

<400> 141
Ala Pro Ala Pro Ala Pro Ala Pro Ala Pro Ala Pro Ala Pro Ala Pro
1 5 10 15

Ala Pro Ala Pro
20

<210> 142
<211> 4
<212> PRT
<213> Artificial Sequence

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

<400> 142
Gln Leu Leu Gly
1

<210> 143
<211> 5

<212> PRT
<213> Artificial Sequence

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

<400> 143
Gln Leu Leu Gly Lys
1 5