

SEQUENCE LISTING

<110> MCB I Inc.

<120> DETERMINATION SUPPORTING INFORMATION GENERATING METHOD,
DETERMINATION SUPPORTING INFORMATION GENERATING SYSTEM, AND
INFORMATION PROCESSING DEVICE

<130> 20P01018

<140> PCT/JP2021/018970

<141> 2021-05-19

<150> JP2020-219399

<151> 2020-12-28

<160> 20

<170> PatentIn version 3.5

<210> 1

<211> 495

<212> PRT

<213> Homo sapiens

<400> 1

Met	Ser	Met	Leu	Val	Val	Phe	Leu	Leu	Leu	Trp	Gly	Val	Thr	Trp	Gly
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Pro	Val	Thr	Glu	Ala	Ala	Ile	Phe	Tyr	Glu	Thr	Gln	Pro	Ser	Leu	Trp
			20					25					30		

Ala	Glu	Ser	Glu	Ser	Leu	Leu	Lys	Pro	Leu	Ala	Asn	Val	Thr	Leu	Thr
		35					40					45			

Cys	Gln	Ala	His	Leu	Glu	Thr	Pro	Asp	Phe	Gln	Leu	Phe	Lys	Asn	Gly
	50					55					60				

Val	Ala	Gln	Glu	Pro	Val	His	Leu	Asp	Ser	Pro	Ala	Ile	Lys	His	Gln
65					70					75					80

Phe	Leu	Leu	Thr	Gly	Asp	Thr	Gln	Gly	Arg	Tyr	Arg	Cys	Arg	Ser	Gly
				85					90					95	

Leu Ser Thr Gly Trp Thr Gln Leu Ser Lys Leu Leu Glu Leu Thr Gly
100 105 110

Pro Lys Ser Leu Pro Ala Pro Trp Leu Ser Met Ala Pro Val Ser Trp
115 120 125

Ile Thr Pro Gly Leu Lys Thr Thr Ala Val Cys Arg Gly Val Leu Arg
130 135 140

Gly Val Thr Phe Leu Leu Arg Arg Glu Gly Asp His Glu Phe Leu Glu
145 150 155 160

Val Pro Glu Ala Gln Glu Asp Val Glu Ala Thr Phe Pro Val His Gln
165 170 175

Pro Gly Asn Tyr Ser Cys Ser Tyr Arg Thr Asp Gly Glu Gly Ala Leu
180 185 190

Ser Glu Pro Ser Ala Thr Val Thr Ile Glu Glu Leu Ala Ala Pro Pro
195 200 205

Pro Pro Val Leu Met His His Gly Glu Ser Ser Gln Val Leu His Pro
210 215 220

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

Phe Gln Leu Arg Arg Gly Glu Lys Glu Leu Leu Val Pro Arg Ser Ser
245 250 255

Thr Ser Pro Asp Arg Ile Phe Phe His Leu Asn Ala Val Ala Leu Gly
260 265 270

Asp Gly Gly His Tyr Thr Cys Arg Tyr Arg Leu His Asp Asn Gln Asn
275 280 285

Gly Trp Ser Gly Asp Ser Ala Pro Val Glu Leu Ile Leu Ser Asp Glu

290

295

300

Thr Leu Pro Ala Pro Glu Phe Ser Pro Glu Pro Glu Ser Gly Arg Ala
 305 310 315 320

Leu Arg Leu Arg Cys Leu Ala Pro Leu Glu Gly Ala Arg Phe Ala Leu
 325 330 335

Val Arg Glu Asp Arg Gly Gly Arg Arg Val His Arg Phe Gln Ser Pro
 340 345 350

Ala Gly Thr Glu Ala Leu Phe Glu Leu His Asn Ile Ser Val Ala Asp
 355 360 365

Ser Ala Asn Tyr Ser Cys Val Tyr Val Asp Leu Lys Pro Pro Phe Gly
 370 375 380

Gly Ser Ala Pro Ser Glu Arg Leu Glu Leu His Val Asp Gly Pro Pro
 385 390 395 400

Pro Arg Pro Gln Leu Arg Ala Thr Trp Ser Gly Ala Val Leu Ala Gly
 405 410 415

Arg Asp Ala Val Leu Arg Cys Glu Gly Pro Ile Pro Asp Val Thr Phe
 420 425 430

Glu Leu Leu Arg Glu Gly Glu Thr Lys Ala Val Lys Thr Val Arg Thr
 435 440 445

Pro Gly Ala Ala Ala Asn Leu Glu Leu Ile Phe Val Gly Pro Gln His
 450 455 460

Ala Gly Asn Tyr Arg Cys Arg Tyr Arg Ser Trp Val Pro His Thr Phe
 465 470 475 480

Glu Ser Glu Leu Ser Asp Pro Val Glu Leu Leu Val Ala Glu Ser
 485 490 495

<210> 2
 <211> 491
 <212> PRT
 <213> Homo sapiens

<400> 2

Met Ala Leu Leu Trp Gly Leu Leu Val Leu Ser Trp Ser Cys Leu Gln
 1 5 10 15

Gly Pro Cys Ser Val Phe Ser Pro Val Ser Ala Met Glu Pro Leu Gly
 20 25 30

Arg Gln Leu Thr Ser Gly Pro Asn Gln Glu Gln Val Ser Pro Leu Thr
 35 40 45

Leu Leu Lys Leu Gly Asn Gln Glu Pro Gly Gly Gln Thr Ala Leu Lys
 50 55 60

Ser Pro Pro Gly Val Cys Ser Arg Asp Pro Thr Pro Glu Gln Thr His
 65 70 75 80

Arg Leu Ala Arg Ala Met Met Ala Phe Thr Ala Asp Leu Phe Ser Leu
 85 90 95

Val Ala Gln Thr Ser Thr Cys Pro Asn Leu Ile Leu Ser Pro Leu Ser
 100 105 110

Val Ala Leu Ala Leu Ser His Leu Ala Leu Gly Ala Gln Asn His Thr
 115 120 125

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

Pro His Leu Leu Ser Arg Leu Cys Gln Asp Leu Gly Pro Gly Ala Phe
 145 150 155 160

Arg Leu Ala Ala Arg Met Tyr Leu Gln Lys Gly Phe Pro Ile Lys Glu
 165 170 175

Asp Phe Leu Glu Gln Ser Glu Gln Leu Phe Gly Ala Lys Pro Val Ser
180 185 190

Leu Thr Gly Lys Gln Glu Asp Asp Leu Ala Asn Ile Asn Gln Trp Val
195 200 205

Lys Glu Ala Thr Glu Gly Lys Ile Gln Glu Phe Leu Ser Gly Leu Pro
210 215 220

Glu Asp Thr Val Leu Leu Leu Leu Asn Ala Ile His Phe Gln Gly Phe
225 230 235 240

Trp Arg Asn Lys Phe Asp Pro Ser Leu Thr Gln Arg Asp Ser Phe His
245 250 255

Leu Asp Glu Gln Phe Thr Val Pro Val Glu Met Met Gln Ala Arg Thr
260 265 270

Tyr Pro Leu Arg Trp Phe Leu Leu Glu Gln Pro Glu Ile Gln Val Ala
275 280 285

His Phe Pro Phe Lys Asn Asn Met Ser Phe Val Val Leu Val Pro Thr
290 295 300

His Phe Glu Trp Asn Val Ser Gln Val Leu Ala Asn Leu Ser Trp Asp
305 310 315 320

Thr Leu His Pro Pro Leu Val Trp Glu Arg Pro Thr Lys Val Arg Leu
325 330 335

Pro Lys Leu Tyr Leu Lys His Gln Met Asp Leu Val Ala Thr Leu Ser
340 345 350

Gln Leu Gly Leu Gln Glu Leu Phe Gln Ala Pro Asp Leu Arg Gly Ile
355 360 365

Ser Glu Gln Ser Leu Val Val Ser Gly Val Gln His Gln Ser Thr Leu
370 375 380

Glu Leu Ser Glu Val Gly Val Glu Ala Ala Ala Ala Thr Ser Ile Ala
385 390 395 400

Met Ser Arg Met Ser Leu Ser Ser Phe Ser Val Asn Arg Pro Phe Leu
405 410 415

Phe Phe Ile Phe Glu Asp Thr Thr Gly Leu Pro Leu Phe Val Gly Ser
420 425 430

Val Arg Asn Pro Asn Pro Ser Ala Pro Arg Glu Leu Lys Glu Gln Gln
435 440 445

Asp Ser Pro Gly Asn Lys Asp Phe Leu Gln Ser Leu Lys Gly Phe Pro
450 455 460

Arg Gly Asp Lys Leu Phe Gly Pro Asp Leu Lys Leu Val Pro Pro Met
465 470 475 480

Glu Glu Asp Tyr Pro Gln Phe Gly Ser Pro Lys
485 490

<210> 3
<211> 1474
<212> PRT
<213> Homo sapiens

<400> 3

Met Gly Lys Asn Lys Leu Leu His Pro Ser Leu Val Leu Leu Leu Leu
1 5 10 15

Val Leu Leu Pro Thr Asp Ala Ser Val Ser Gly Lys Pro Gln Tyr Met
20 25 30

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

Val Leu Leu Ser Tyr Leu Asn Glu Thr Val Thr Val Ser Ala Ser Leu
50 55 60

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

Asn Asp Val Leu His Cys Val Ala Phe Ala Val Pro Lys Ser Ser Ser
85 90 95

Asn Glu Glu Val Met Phe Leu Thr Val Gln Val Lys Gly Pro Thr Gln
100 105 110

Glu Phe Lys Lys Arg Thr Thr Val Met Val Lys Asn Glu Asp Ser Leu
115 120 125

Val Phe Val Gln Thr Asp Lys Ser Ile Tyr Lys Pro Gly Gln Thr Val
130 135 140

Lys Phe Arg Val Val Ser Met Asp Glu Asn Phe His Pro Leu Asn Glu
145 150 155 160

Leu Ile Pro Leu Val Tyr Ile Gln Asp Pro Lys Gly Asn Arg Ile Ala
165 170 175

Gln Trp Gln Ser Phe Gln Leu Glu Gly Gly Leu Lys Gln Phe Ser Phe
180 185 190

Pro Leu Ser Ser Glu Pro Phe Gln Gly Ser Tyr Lys Val Val Val Gln
195 200 205

Lys Lys Ser Gly Gly Arg Thr Glu His Pro Phe Thr Val Glu Glu Phe
210 215 220

Val Leu Pro Lys Phe Glu Val Gln Val Thr Val Pro Lys Ile Ile Thr
225 230 235 240

Ile Leu Glu Glu Glu Met Asn Val Ser Val Cys Gly Leu Tyr Thr Tyr

245

250

255

Gly Lys Pro Val Pro Gly His Val Thr Val Ser Ile Cys Arg Lys Tyr
 260 265 270

Ser Asp Ala Ser Asp Cys His Gly Glu Asp Ser Gln Ala Phe Cys Glu
 275 280 285

Lys Phe Ser Gly Gln Leu Asn Ser His Gly Cys Phe Tyr Gln Gln Val
 290 295 300

Lys Thr Lys Val Phe Gln Leu Lys Arg Lys Glu Tyr Glu Met Lys Leu
 305 310 315 320

His Thr Glu Ala Gln Ile Gln Glu Glu Gly Thr Val Val Glu Leu Thr
 325 330 335

Gly Arg Gln Ser Ser Glu Ile Thr Arg Thr Ile Thr Lys Leu Ser Phe
 340 345 350

Val Lys Val Asp Ser His Phe Arg Gln Gly Ile Pro Phe Phe Gly Gln
 355 360 365

Val Arg Leu Val Asp Gly Lys Gly Val Pro Ile Pro Asn Lys Val Ile
 370 375 380

Phe Ile Arg Gly Asn Glu Ala Asn Tyr Tyr Ser Asn Ala Thr Thr Asp
 385 390 395 400

Glu His Gly Leu Val Gln Phe Ser Ile Asn Thr Thr Asn Val Met Gly
 405 410 415

Thr Ser Leu Thr Val Arg Val Asn Tyr Lys Asp Arg Ser Pro Cys Tyr
 420 425 430

Gly Tyr Gln Trp Val Ser Glu Glu His Glu Glu Ala His His Thr Ala
 435 440 445

Tyr Leu Val Phe Ser Pro Ser Lys Ser Phe Val His Leu Glu Pro Met
450 455 460

Ser His Glu Leu Pro Cys Gly His Thr Gln Thr Val Gln Ala His Tyr
465 470 475 480

Ile Leu Asn Gly Gly Thr Leu Leu Gly Leu Lys Lys Leu Ser Phe Tyr
485 490 495

Tyr Leu Ile Met Ala Lys Gly Gly Ile Val Arg Thr Gly Thr His Gly
500 505 510

Leu Leu Val Lys Gln Glu Asp Met Lys Gly His Phe Ser Ile Ser Ile
515 520 525

Pro Val Lys Ser Asp Ile Ala Pro Val Ala Arg Leu Leu Ile Tyr Ala
530 535 540

Val Leu Pro Thr Gly Asp Val Ile Gly Asp Ser Ala Lys Tyr Asp Val
545 550 555 560

Glu Asn Cys Leu Ala Asn Lys Val Asp Leu Ser Phe Ser Pro Ser Gln
565 570 575

Ser Leu Pro Ala Ser His Ala His Leu Arg Val Thr Ala Ala Pro Gln
580 585 590

Ser Val Cys Ala Leu Arg Ala Val Asp Gln Ser Val Leu Leu Met Lys
595 600 605

Pro Asp Ala Glu Leu Ser Ala Ser Ser Val Tyr Asn Leu Leu Pro Glu
610 615 620

Lys Asp Leu Thr Gly Phe Pro Gly Pro Leu Asn Asp Gln Asp Asn Glu
625 630 635 640

Asp Cys Ile Asn Arg His Asn Val Tyr Ile Asn Gly Ile Thr Tyr Thr

645

650

655

Pro Val Ser Ser Thr Asn Glu Lys Asp Met Tyr Ser Phe Leu Glu Asp
 660 665 670

Met Gly Leu Lys Ala Phe Thr Asn Ser Lys Ile Arg Lys Pro Lys Met
 675 680 685

Cys Pro Gln Leu Gln Gln Tyr Glu Met His Gly Pro Glu Gly Leu Arg
 690 695 700

Val Gly Phe Tyr Glu Ser Asp Val Met Gly Arg Gly His Ala Arg Leu
 705 710 715 720

Val His Val Glu Glu Pro His Thr Glu Thr Val Arg Lys Tyr Phe Pro
 725 730 735

Glu Thr Trp Ile Trp Asp Leu Val Val Val Asn Ser Ala Gly Val Ala
 740 745 750

Glu Val Gly Val Thr Val Pro Asp Thr Ile Thr Glu Trp Lys Ala Gly
 755 760 765

Ala Phe Cys Leu Ser Glu Asp Ala Gly Leu Gly Ile Ser Ser Thr Ala
 770 775 780

Ser Leu Arg Ala Phe Gln Pro Phe Phe Val Glu Leu Thr Met Pro Tyr
 785 790 795 800

Ser Val Ile Arg Gly Glu Ala Phe Thr Leu Lys Ala Thr Val Leu Asn
 805 810 815

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

Ala Phe Leu Ala Val Pro Val Glu Lys Glu Gln Ala Pro His Cys Ile
 835 840 845

Cys Ala Asn Gly Arg Gln Thr Val Ser Trp Ala Val Thr Pro Lys Ser
850 855 860

Leu Gly Asn Val Asn Phe Thr Val Ser Ala Glu Ala Leu Glu Ser Gln
865 870 875 880

Glu Leu Cys Gly Thr Glu Val Pro Ser Val Pro Glu His Gly Arg Lys
885 890 895

Asp Thr Val Ile Lys Pro Leu Leu Val Glu Pro Glu Gly Leu Glu Lys
900 905 910

Glu Thr Thr Phe Asn Ser Leu Leu Cys Pro Ser Gly Gly Glu Val Ser
915 920 925

Glu Glu Leu Ser Leu Lys Leu Pro Pro Asn Val Val Glu Glu Ser Ala
930 935 940

Arg Ala Ser Val Ser Val Leu Gly Asp Ile Leu Gly Ser Ala Met Gln
945 950 955 960

Asn Thr Gln Asn Leu Leu Gln Met Pro Tyr Gly Cys Gly Glu Gln Asn
965 970 975

Met Val Leu Phe Ala Pro Asn Ile Tyr Val Leu Asp Tyr Leu Asn Glu
980 985 990

Thr Gln Gln Leu Thr Pro Glu Ile Lys Ser Lys Ala Ile Gly Tyr Leu
995 1000 1005

Asn Thr Gly Tyr Gln Arg Gln Leu Asn Tyr Lys His Tyr Asp Gly
1010 1015 1020

Ser Tyr Ser Thr Phe Gly Glu Arg Tyr Gly Arg Asn Gln Gly Asn
1025 1030 1035

Thr Trp Leu Thr Ala Phe Val Leu Lys Thr Phe Ala Gln Ala Arg

1040		1045		1050
Ala Tyr Ile Phe Ile Asp Glu	Ala His Ile Thr Gln	Ala Leu Ile		
1055	1060	1065		
Trp Leu Ser Gln Arg Gln Lys	Asp Asn Gly Cys Phe	Arg Ser Ser		
1070	1075	1080		
Gly Ser Leu Leu Asn Asn Ala	Ile Lys Gly Gly Val	Glu Asp Glu		
1085	1090	1095		
Val Thr Leu Ser Ala Tyr Ile	Thr Ile Ala Leu Leu	Glu Ile Pro		
1100	1105	1110		
Leu Thr Val Thr His Pro Val	Val Arg Asn Ala Leu	Phe Cys Leu		
1115	1120	1125		
Glu Ser Ala Trp Lys Thr Ala	Gln Glu Gly Asp His	Gly Ser His		
1130	1135	1140		
Val Tyr Thr Lys Ala Leu Leu	Ala Tyr Ala Phe Ala	Leu Ala Gly		
1145	1150	1155		
Asn Gln Asp Lys Arg Lys Glu	Val Leu Lys Ser Leu	Asn Glu Glu		
1160	1165	1170		
Ala Val Lys Lys Asp Asn Ser	Val His Trp Glu Arg	Pro Gln Lys		
1175	1180	1185		
Pro Lys Ala Pro Val Gly His	Phe Tyr Glu Pro Gln	Ala Pro Ser		
1190	1195	1200		
Ala Glu Val Glu Met Thr Ser	Tyr Val Leu Leu Ala	Tyr Leu Thr		
1205	1210	1215		
Ala Gln Pro Ala Pro Thr Ser	Glu Asp Leu Thr Ser	Ala Thr Asn		
1220	1225	1230		

Ile Val Lys Trp Ile Thr Lys Gln Gln Asn Ala Gln Gly Gly Phe
1235 1240 1245

Ser Ser Thr Gln Asp Thr Val Val Ala Leu His Ala Leu Ser Lys
1250 1255 1260

Tyr Gly Ala Ala Thr Phe Thr Arg Thr Gly Lys Ala Ala Gln Val
1265 1270 1275

Thr Ile Gln Ser Ser Gly Thr Phe Ser Ser Lys Phe Gln Val Asp
1280 1285 1290

Asn Asn Asn Arg Leu Leu Leu Gln Gln Val Ser Leu Pro Glu Leu
1295 1300 1305

Pro Gly Glu Tyr Ser Met Lys Val Thr Gly Glu Gly Cys Val Tyr
1310 1315 1320

Leu Gln Thr Ser Leu Lys Tyr Asn Ile Leu Pro Glu Lys Glu Glu
1325 1330 1335

Phe Pro Phe Ala Leu Gly Val Gln Thr Leu Pro Gln Thr Cys Asp
1340 1345 1350

Glu Pro Lys Ala His Thr Ser Phe Gln Ile Ser Leu Ser Val Ser
1355 1360 1365

Tyr Thr Gly Ser Arg Ser Ala Ser Asn Met Ala Ile Val Asp Val
1370 1375 1380

Lys Met Val Ser Gly Phe Ile Pro Leu Lys Pro Thr Val Lys Met
1385 1390 1395

Leu Glu Arg Ser Asn His Val Ser Arg Thr Glu Val Ser Ser Asn
1400 1405 1410

His Val Leu Ile Tyr Leu Asp Lys Val Ser Asn Gln Thr Leu Ser

1415

1420

1425

Leu Phe Phe Thr Val Leu Gln Asp Val Pro Val Arg Asp Leu Lys
 1430 1435 1440

Pro Ala Ile Val Lys Val Tyr Asp Tyr Tyr Glu Thr Asp Glu Phe
 1445 1450 1455

Ala Ile Ala Glu Tyr Asn Ala Pro Cys Ser Lys Asp Leu Gly Asn
 1460 1465 1470

Ala

<210> 4
 <211> 609
 <212> PRT
 <213> Homo sapiens

<400> 4

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

Tyr Ser Arg Gly Val Phe Arg Arg Asp Ala His Lys Ser Glu Val Ala
 20 25 30

His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val Leu
 35 40 45

Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His Val
 50 55 60

Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala Asp
 65 70 75 80

Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly Asp
 85 90 95

Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met Ala
100 105 110

Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu Gln
115 120 125

His Lys Asp Asp Asn Pro Asn Leu Pro Arg Leu Val Arg Pro Glu Val
130 135 140

Asp Val Met Cys Thr Ala Phe His Asp Asn Glu Glu Thr Phe Leu Lys
145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
165 170 175

Glu Leu Leu Phe Phe Ala Lys Arg Tyr Lys Ala Ala Phe Thr Glu Cys
180 185 190

Cys Gln Ala Ala Asp Lys Ala Ala Cys Leu Leu Pro Lys Leu Asp Glu
195 200 205

Leu Arg Asp Glu Gly Lys Ala Ser Ser Ala Lys Gln Arg Leu Lys Cys
210 215 220

Ala Ser Leu Gln Lys Phe Gly Glu Arg Ala Phe Lys Ala Trp Ala Val
225 230 235 240

Ala Arg Leu Ser Gln Arg Phe Pro Lys Ala Glu Phe Ala Glu Val Ser
245 250 255

Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly
260 265 270

Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
275 280 285

Cys Glu Asn Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu
290 295 300

Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp
305 310 315 320

Glu Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser
325 330 335

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

Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val Val
355 360 365

Leu Leu Leu Arg Leu Ala Lys Thr Tyr Glu Thr Thr Leu Glu Lys Cys
370 375 380

Cys Ala Ala Ala Asp Pro His Glu Cys Tyr Ala Lys Val Phe Asp Glu
385 390 395 400

Phe Lys Pro Leu Val Glu Glu Pro Gln Asn Leu Ile Lys Gln Asn Cys
405 410 415

Glu Leu Phe Glu Gln Leu Gly Glu Tyr Lys Phe Gln Asn Ala Leu Leu
420 425 430

Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val
435 440 445

Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys His
450 455 460

Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val Val
465 470 475 480

Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp Arg
485 490 495

Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe
500 505 510

Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn Ala
515 520 525

Glu Thr Phe Thr Phe His Ala Asp Ile Cys Thr Leu Ser Glu Lys Glu
530 535 540

Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His Lys
545 550 555 560

Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe Ala
565 570 575

Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys Phe
580 585 590

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

Leu

<210> 5
<211> 267
<212> PRT
<213> Homo sapiens

<400> 5

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

Gln Ala Arg His Phe Trp Gln Gln Asp Glu Pro Pro Gln Ser Pro Trp
20 25 30

Asp Arg Val Lys Asp Leu Ala Thr Val Tyr Val Asp Val Leu Lys Asp
35 40 45

Ser Gly Arg Asp Tyr Val Ser Gln Phe Glu Gly Ser Ala Leu Gly Lys
50 55 60

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

Phe Ser Lys Leu Arg Glu Gln Leu Gly Pro Val Thr Gln Glu Phe Trp
85 90 95

Asp Asn Leu Glu Lys Glu Thr Glu Gly Leu Arg Gln Glu Met Ser Lys
100 105 110

Asp Leu Glu Glu Val Lys Ala Lys Val Gln Pro Tyr Leu Asp Asp Phe
115 120 125

Gln Lys Lys Trp Gln Glu Glu Met Glu Leu Tyr Arg Gln Lys Val Glu
130 135 140

Pro Leu Arg Ala Glu Leu Gln Glu Gly Ala Arg Gln Lys Leu His Glu
145 150 155 160

Leu Gln Glu Lys Leu Ser Pro Leu Gly Glu Glu Met Arg Asp Arg Ala
165 170 175

Arg Ala His Val Asp Ala Leu Arg Thr His Leu Ala Pro Tyr Ser Asp
180 185 190

Glu Leu Arg Gln Arg Leu Ala Ala Arg Leu Glu Ala Leu Lys Glu Asn
195 200 205

Gly Gly Ala Arg Leu Ala Glu Tyr His Ala Lys Ala Thr Glu His Leu
210 215 220

Ser Thr Leu Ser Glu Lys Ala Lys Pro Ala Leu Glu Asp Leu Arg Gln
225 230 235 240

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

245

250

255

Leu Glu Glu Tyr Thr Lys Lys Leu Asn Thr Gln
 260 265

<210> 6
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 6

Met Arg Leu Phe Leu Ser Leu Pro Val Leu Val Val Val Leu Ser Ile
 1 5 10 15

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

Ala Leu Asp Lys Leu Lys Glu Phe Gly Asn Thr Leu Glu Asp Lys Ala
 35 40 45

Arg Glu Leu Ile Ser Arg Ile Lys Gln Ser Glu Leu Ser Ala Lys Met
 50 55 60

Arg Glu Trp Phe Ser Glu Thr Phe Gln Lys Val Lys Glu Lys Leu Lys
 65 70 75 80

Ile Asp Ser

<210> 7
 <211> 1663
 <212> PRT
 <213> Homo sapiens

<400> 7

Met Gly Pro Thr Ser Gly Pro Ser Leu Leu Leu Leu Leu Thr His
 1 5 10 15

Leu Pro Leu Ala Leu Gly Ser Pro Met Tyr Ser Ile Ile Thr Pro Asn

20

25

30

Ile Leu Arg Leu Glu Ser Glu Glu Thr Met Val Leu Glu Ala His Asp
 35 40 45

Ala Gln Gly Asp Val Pro Val Thr Val Thr Val His Asp Phe Pro Gly
 50 55 60

Lys Lys Leu Val Leu Ser Ser Glu Lys Thr Val Leu Thr Pro Ala Thr
 65 70 75 80

Asn His Met Gly Asn Val Thr Phe Thr Ile Pro Ala Asn Arg Glu Phe
 85 90 95

Lys Ser Glu Lys Gly Arg Asn Lys Phe Val Thr Val Gln Ala Thr Phe
 100 105 110

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

Tyr Leu Phe Ile Gln Thr Asp Lys Thr Ile Tyr Thr Pro Gly Ser Thr
 130 135 140

Val Leu Tyr Arg Ile Phe Thr Val Asn His Lys Leu Leu Pro Val Gly
 145 150 155 160

Arg Thr Val Met Val Asn Ile Glu Asn Pro Glu Gly Ile Pro Val Lys
 165 170 175

Gln Asp Ser Leu Ser Ser Gln Asn Gln Leu Gly Val Leu Pro Leu Ser
 180 185 190

Trp Asp Ile Pro Glu Leu Val Asn Met Gly Gln Trp Lys Ile Arg Ala
 195 200 205

Tyr Tyr Glu Asn Ser Pro Gln Gln Val Phe Ser Thr Glu Phe Glu Val
 210 215 220

Lys Glu Tyr Val Leu Pro Ser Phe Glu Val Ile Val Glu Pro Thr Glu
225 230 235 240

Lys Phe Tyr Tyr Ile Tyr Asn Glu Lys Gly Leu Glu Val Thr Ile Thr
245 250 255

Ala Arg Phe Leu Tyr Gly Lys Lys Val Glu Gly Thr Ala Phe Val Ile
260 265 270

Phe Gly Ile Gln Asp Gly Glu Gln Arg Ile Ser Leu Pro Glu Ser Leu
275 280 285

Lys Arg Ile Pro Ile Glu Asp Gly Ser Gly Glu Val Val Leu Ser Arg
290 295 300

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

Gly Lys Ser Leu Tyr Val Ser Ala Thr Val Ile Leu His Ser Gly Ser
325 330 335

Asp Met Val Gln Ala Glu Arg Ser Gly Ile Pro Ile Val Thr Ser Pro
340 345 350

Tyr Gln Ile His Phe Thr Lys Thr Pro Lys Tyr Phe Lys Pro Gly Met
355 360 365

Pro Phe Asp Leu Met Val Phe Val Thr Asn Pro Asp Gly Ser Pro Ala
370 375 380

Tyr Arg Val Pro Val Ala Val Gln Gly Glu Asp Thr Val Gln Ser Leu
385 390 395 400

Thr Gln Gly Asp Gly Val Ala Lys Leu Ser Ile Asn Thr His Pro Ser
405 410 415

Gln Lys Pro Leu Ser Ile Thr Val Arg Thr Lys Lys Gln Glu Leu Ser

420	425	430
Glu Ala Glu Gln Ala Thr Arg Thr Met Gln Ala Leu Pro Tyr Ser Thr		
435	440	445
Val Gly Asn Ser Asn Asn Tyr Leu His Leu Ser Val Leu Arg Thr Glu		
450	455	460
Leu Arg Pro Gly Glu Thr Leu Asn Val Asn Phe Leu Leu Arg Met Asp		
465	470	475
Arg Ala His Glu Ala Lys Ile Arg Tyr Tyr Thr Tyr Leu Ile Met Asn		
485	490	495
Lys Gly Arg Leu Leu Lys Ala Gly Arg Gln Val Arg Glu Pro Gly Gln		
500	505	510
Asp Leu Val Val Leu Pro Leu Ser Ile Thr Thr Asp Phe Ile Pro Ser		
515	520	525
Phe Arg Leu Val Ala Tyr Tyr Thr Leu Ile Gly Ala Ser Gly Gln Arg		
530	535	540
Glu Val Val Ala Asp Ser Val Trp Val Asp Val Lys Asp Ser Cys Val		
545	550	555
Gly Ser Leu Val Val Lys Ser Gly Gln Ser Glu Asp Arg Gln Pro Val		
565	570	575
Pro Gly Gln Gln Met Thr Leu Lys Ile Glu Gly Asp His Gly Ala Arg		
580	585	590
Val Val Leu Val Ala Val Asp Lys Gly Val Phe Val Leu Asn Lys Lys		
595	600	605
Asn Lys Leu Thr Gln Ser Lys Ile Trp Asp Val Val Glu Lys Ala Asp		
610	615	620

Ile Gly Cys Thr Pro Gly Ser Gly Lys Asp Tyr Ala Gly Val Phe Ser
625 630 635 640

Asp Ala Gly Leu Thr Phe Thr Ser Ser Ser Gly Gln Gln Thr Ala Gln
645 650 655

Arg Ala Glu Leu Gln Cys Pro Gln Pro Ala Ala Arg Arg Arg Arg Ser
660 665 670

Val Gln Leu Thr Glu Lys Arg Met Asp Lys Val Gly Lys Tyr Pro Lys
675 680 685

Glu Leu Arg Lys Cys Cys Glu Asp Gly Met Arg Glu Asn Pro Met Arg
690 695 700

Phe Ser Cys Gln Arg Arg Thr Arg Phe Ile Ser Leu Gly Glu Ala Cys
705 710 715 720

Lys Lys Val Phe Leu Asp Cys Cys Asn Tyr Ile Thr Glu Leu Arg Arg
725 730 735

Gln His Ala Arg Ala Ser His Leu Gly Leu Ala Arg Ser Asn Leu Asp
740 745 750

Glu Asp Ile Ile Ala Glu Glu Asn Ile Val Ser Arg Ser Glu Phe Pro
755 760 765

Glu Ser Trp Leu Trp Asn Val Glu Asp Leu Lys Glu Pro Pro Lys Asn
770 775 780

Gly Ile Ser Thr Lys Leu Met Asn Ile Phe Leu Lys Asp Ser Ile Thr
785 790 795 800

Thr Trp Glu Ile Leu Ala Val Ser Met Ser Asp Lys Lys Gly Ile Cys
805 810 815

Val Ala Asp Pro Phe Glu Val Thr Val Met Gln Asp Phe Phe Ile Asp

820	825	830
Leu Arg Leu Pro Tyr Ser Val Val Arg Asn Glu Gln Val Glu Ile Arg		
835	840	845
Ala Val Leu Tyr Asn Tyr Arg Gln Asn Gln Glu Leu Lys Val Arg Val		
850	855	860
Glu Leu Leu His Asn Pro Ala Phe Cys Ser Leu Ala Thr Thr Lys Arg		
865	870	875 880
Arg His Gln Gln Thr Val Thr Ile Pro Pro Lys Ser Ser Leu Ser Val		
	885	890 895
Pro Tyr Val Ile Val Pro Leu Lys Thr Gly Leu Gln Glu Val Glu Val		
	900	905 910
Lys Ala Ala Val Tyr His His Phe Ile Ser Asp Gly Val Arg Lys Ser		
	915	920 925
Leu Lys Val Val Pro Glu Gly Ile Arg Met Asn Lys Thr Val Ala Val		
	930	935 940
Arg Thr Leu Asp Pro Glu Arg Leu Gly Arg Glu Gly Val Gln Lys Glu		
945	950	955 960
Asp Ile Pro Pro Ala Asp Leu Ser Asp Gln Val Pro Asp Thr Glu Ser		
	965	970 975
Glu Thr Arg Ile Leu Leu Gln Gly Thr Pro Val Ala Gln Met Thr Glu		
	980	985 990
Asp Ala Val Asp Ala Glu Arg Leu Lys His Leu Ile Val Thr Pro Ser		
	995	1000 1005
Gly Cys Gly Glu Gln Asn Met Ile Gly Met Thr Pro Thr Val Ile		
1010	1015	1020

Ala Val His Tyr Leu Asp Glu Thr Glu Gln Trp Glu Lys Phe Gly
1025 1030 1035

Leu Glu Lys Arg Gln Gly Ala Leu Glu Leu Ile Lys Lys Gly Tyr
1040 1045 1050

Thr Gln Gln Leu Ala Phe Arg Gln Pro Ser Ser Ala Phe Ala Ala
1055 1060 1065

Phe Val Lys Arg Ala Pro Ser Thr Trp Leu Thr Ala Tyr Val Val
1070 1075 1080

Lys Val Phe Ser Leu Ala Val Asn Leu Ile Ala Ile Asp Ser Gln
1085 1090 1095

Val Leu Cys Gly Ala Val Lys Trp Leu Ile Leu Glu Lys Gln Lys
1100 1105 1110

Pro Asp Gly Val Phe Gln Glu Asp Ala Pro Val Ile His Gln Glu
1115 1120 1125

Met Ile Gly Gly Leu Arg Asn Asn Asn Glu Lys Asp Met Ala Leu
1130 1135 1140

Thr Ala Phe Val Leu Ile Ser Leu Gln Glu Ala Lys Asp Ile Cys
1145 1150 1155

Glu Glu Gln Val Asn Ser Leu Pro Gly Ser Ile Thr Lys Ala Gly
1160 1165 1170

Asp Phe Leu Glu Ala Asn Tyr Met Asn Leu Gln Arg Ser Tyr Thr
1175 1180 1185

Val Ala Ile Ala Gly Tyr Ala Leu Ala Gln Met Gly Arg Leu Lys
1190 1195 1200

Gly Pro Leu Leu Asn Lys Phe Leu Thr Thr Ala Lys Asp Lys Asn

1205		1210		1215
Arg Trp Glu Asp Pro Gly Lys Gln Leu Tyr Asn Val Glu Ala Thr	1220	1225		1230
Ser Tyr Ala Leu Leu Ala Leu Leu Gln Leu Lys Asp Phe Asp Phe	1235	1240		1245
Val Pro Pro Val Val Arg Trp Leu Asn Glu Gln Arg Tyr Tyr Gly	1250	1255		1260
Gly Gly Tyr Gly Ser Thr Gln Ala Thr Phe Met Val Phe Gln Ala	1265	1270		1275
Leu Ala Gln Tyr Gln Lys Asp Ala Pro Asp His Gln Glu Leu Asn	1280	1285		1290
Leu Asp Val Ser Leu Gln Leu Pro Ser Arg Ser Ser Lys Ile Thr	1295	1300		1305
His Arg Ile His Trp Glu Ser Ala Ser Leu Leu Arg Ser Glu Glu	1310	1315		1320
Thr Lys Glu Asn Glu Gly Phe Thr Val Thr Ala Glu Gly Lys Gly	1325	1330		1335
Gln Gly Thr Leu Ser Val Val Thr Met Tyr His Ala Lys Ala Lys	1340	1345		1350
Asp Gln Leu Thr Cys Asn Lys Phe Asp Leu Lys Val Thr Ile Lys	1355	1360		1365
Pro Ala Pro Glu Thr Glu Lys Arg Pro Gln Asp Ala Lys Asn Thr	1370	1375		1380
Met Ile Leu Glu Ile Cys Thr Arg Tyr Arg Gly Asp Gln Asp Ala	1385	1390		1395

Thr	Met	Ser	Ile	Leu	Asp	Ile	Ser	Met	Met	Thr	Gly	Phe	Ala	Pro
1400						1405					1410			
Asp	Thr	Asp	Asp	Leu	Lys	Gln	Leu	Ala	Asn	Gly	Val	Asp	Arg	Tyr
1415						1420					1425			
Ile	Ser	Lys	Tyr	Glu	Leu	Asp	Lys	Ala	Phe	Ser	Asp	Arg	Asn	Thr
1430						1435					1440			
Leu	Ile	Ile	Tyr	Leu	Asp	Lys	Val	Ser	His	Ser	Glu	Asp	Asp	Cys
1445						1450					1455			
Leu	Ala	Phe	Lys	Val	His	Gln	Tyr	Phe	Asn	Val	Glu	Leu	Ile	Gln
1460						1465					1470			
Pro	Gly	Ala	Val	Lys	Val	Tyr	Ala	Tyr	Tyr	Asn	Leu	Glu	Glu	Ser
1475						1480					1485			
Cys	Thr	Arg	Phe	Tyr	His	Pro	Glu	Lys	Glu	Asp	Gly	Lys	Leu	Asn
1490						1495					1500			
Lys	Leu	Cys	Arg	Asp	Glu	Leu	Cys	Arg	Cys	Ala	Glu	Glu	Asn	Cys
1505						1510					1515			
Phe	Ile	Gln	Lys	Ser	Asp	Asp	Lys	Val	Thr	Leu	Glu	Glu	Arg	Leu
1520						1525					1530			
Asp	Lys	Ala	Cys	Glu	Pro	Gly	Val	Asp	Tyr	Val	Tyr	Lys	Thr	Arg
1535						1540					1545			
Leu	Val	Lys	Val	Gln	Leu	Ser	Asn	Asp	Phe	Asp	Glu	Tyr	Ile	Met
1550						1555					1560			
Ala	Ile	Glu	Gln	Thr	Ile	Lys	Ser	Gly	Ser	Asp	Glu	Val	Gln	Val
1565						1570					1575			
Gly	Gln	Gln	Arg	Thr	Phe	Ile	Ser	Pro	Ile	Lys	Cys	Arg	Glu	Ala

1580

1585

1590

Leu Lys Leu Glu Glu Lys Lys His Tyr Leu Met Trp Gly Leu Ser
 1595 1600 1605

Ser Asp Phe Trp Gly Glu Lys Pro Asn Leu Ser Tyr Ile Ile Gly
 1610 1615 1620

Lys Asp Thr Trp Val Glu His Trp Pro Glu Glu Asp Glu Cys Gln
 1625 1630 1635

Asp Glu Glu Asn Gln Lys Gln Cys Gln Asp Leu Gly Ala Phe Thr
 1640 1645 1650

Glu Ser Met Val Val Phe Gly Cys Pro Asn
 1655 1660

<210> 8
 <211> 291
 <212> PRT
 <213> Homo sapiens

<400> 8

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

Val Cys Ile Trp Arg Asn Gly Lys Val Gly Leu Ser Gly Met Ala Ile
 20 25 30

Ala Asp Val Thr Leu Leu Ser Gly Phe His Ala Leu Arg Ala Asp Leu
 35 40 45

Glu Lys Leu Thr Ser Leu Ser Asp Arg Tyr Val Ser His Phe Glu Thr
 50 55 60

Glu Gly Pro His Val Leu Leu Tyr Phe Asp Ser Val Pro Thr Ser Arg
 65 70 75 80

Glu Cys Val Gly Phe Glu Ala Val Gln Glu Val Pro Val Gly Leu Val
85 90 95

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

Cys Ser Val Phe Tyr Gly Ala Pro Ser Lys Ser Arg Leu Leu Ala Thr
115 120 125

Leu Cys Ser Ala Glu Val Cys Gln Cys Ala Glu Gly Lys Cys Pro Arg
130 135 140

Gln Arg Arg Ala Leu Glu Arg Gly Leu Gln Asp Glu Asp Gly Tyr Arg
145 150 155 160

Met Lys Phe Ala Cys Tyr Tyr Pro Arg Val Glu Tyr Gly Phe Gln Val
165 170 175

Lys Val Leu Arg Glu Asp Ser Arg Ala Ala Phe Arg Leu Phe Glu Thr
180 185 190

Lys Ile Thr Gln Val Leu His Phe Thr Lys Asp Val Lys Ala Ala Ala
195 200 205

Asn Gln Met Arg Asn Phe Leu Val Arg Ala Ser Cys Arg Leu Arg Leu
210 215 220

Glu Pro Gly Lys Glu Tyr Leu Ile Met Gly Leu Asp Gly Ala Thr Tyr
225 230 235 240

Asp Leu Glu Gly His Pro Gln Tyr Leu Leu Asp Ser Asn Ser Trp Ile
245 250 255

Glu Glu Met Pro Ser Glu Arg Leu Cys Arg Ser Thr Arg Gln Arg Ala
260 265 270

Ala Cys Ala Gln Leu Asn Asp Phe Leu Gln Glu Tyr Gly Thr Gln Gly
275 280 285

Cys Gln Val
290

<210> 9
<211> 462
<212> PRT
<213> Homo sapiens

<400> 9

Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu
1 5 10 15

Cys Trp Ser Leu Ala Ile Ala Thr Pro Leu Pro Pro Thr Ser Ala His
20 25 30

Gly Asn Val Ala Glu Gly Glu Thr Lys Pro Asp Pro Asp Val Thr Glu
35 40 45

Arg Cys Ser Asp Gly Trp Ser Phe Asp Ala Thr Thr Leu Asp Asp Asn
50 55 60

Gly Thr Met Leu Phe Phe Lys Gly Glu Phe Val Trp Lys Ser His Lys
65 70 75 80

Trp Asp Arg Glu Leu Ile Ser Glu Arg Trp Lys Asn Phe Pro Ser Pro
85 90 95

Val Asp Ala Ala Phe Arg Gln Gly His Asn Ser Val Phe Leu Ile Lys
100 105 110

Gly Asp Lys Val Trp Val Tyr Pro Pro Glu Lys Lys Glu Lys Gly Tyr
115 120 125

Pro Lys Leu Leu Gln Asp Glu Phe Pro Gly Ile Pro Ser Pro Leu Asp
130 135 140

Ala Ala Val Glu Cys His Arg Gly Glu Cys Gln Ala Glu Gly Val Leu

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

His Gly Ile Ile Leu Asp Ser Val Asp Ala Ala Phe Ile Cys Pro Gly
355 360 365

Ser Ser Arg Leu His Ile Met Ala Gly Arg Arg Leu Trp Trp Leu Asp
370 375 380

Leu Lys Ser Gly Ala Gln Ala Thr Trp Thr Glu Leu Pro Trp Pro His
385 390 395 400

Glu Lys Val Asp Gly Ala Leu Cys Met Glu Lys Ser Leu Gly Pro Asn
405 410 415

Ser Cys Ser Ala Asn Gly Pro Gly Leu Tyr Leu Ile His Gly Pro Asn
420 425 430

Leu Tyr Cys Tyr Ser Asp Val Glu Lys Leu Asn Ala Ala Lys Ala Leu
435 440 445

Pro Gln Pro Gln Asn Val Thr Ser Leu Leu Gly Cys Thr His
450 455 460

<210> 10
<211> 147
<212> PRT
<213> Homo sapiens

<400> 10

Met Ala Ser His Arg Leu Leu Leu Leu Cys Leu Ala Gly Leu Val Phe
1 5 10 15

Val Ser Glu Ala Gly Pro Thr Gly Thr Gly Glu Ser Lys Cys Pro Leu
20 25 30

Met Val Lys Val Leu Asp Ala Val Arg Gly Ser Pro Ala Ile Asn Val
35 40 45

Ala Val His Val Phe Arg Lys Ala Ala Asp Asp Thr Trp Glu Pro Phe
50 55 60

Ala Ser Gly Lys Thr Ser Glu Ser Gly Glu Leu His Gly Leu Thr Thr
65 70 75 80

Glu Glu Glu Phe Val Glu Gly Ile Tyr Lys Val Glu Ile Asp Thr Lys
85 90 95

Ser Tyr Trp Lys Ala Leu Gly Ile Ser Pro Phe His Glu His Ala Glu
100 105 110

Val Val Phe Thr Ala Asn Asp Ser Gly Pro Arg Arg Tyr Thr Ile Ala
115 120 125

Ala Leu Leu Ser Pro Tyr Ser Tyr Ser Thr Thr Ala Val Val Thr Asn
130 135 140

Pro Lys Glu
145

<210> 11
<211> 10
<212> PRT
<213> Homo sapiens

<400> 11

Leu Glu Thr Pro Asp Phe Gln Leu Phe Lys
1 5 10

<210> 12
<211> 13
<212> PRT
<213> Homo sapiens

<400> 12

Leu Gly Asn Gln Glu Pro Gly Gly Gln Thr Ala Leu Lys
1 5 10

<210> 13
<211> 18

<212> PRT
<213> Homo sapiens

<400> 13

Leu Leu Ile Tyr Ala Val Leu Pro Thr Gly Asp Val Ile Gly Asp Ser
1 5 10 15

Ala Lys

<210> 14
<211> 10
<212> PRT
<213> Homo sapiens

<400> 14

Leu Val Asn Glu Val Thr Glu Phe Ala Lys
1 5 10

<210> 15
<211> 11
<212> PRT
<213> Homo sapiens

<400> 15

Ala Thr Glu His Leu Ser Thr Leu Ser Glu Lys
1 5 10

<210> 16
<211> 10
<212> PRT
<213> Homo sapiens

<400> 16

Thr Pro Asp Val Ser Ser Ala Leu Asp Lys
1 5 10

<210> 17
<211> 9
<212> PRT
<213> Homo sapiens

<400> 17

Thr Gly Leu Gln Glu Val Glu Val Lys
1 5

<210> 18

<211> 9

<212> PRT

<213> Homo sapiens

<400> 18

Ile Thr Gln Val Leu His Phe Thr Lys
1 5

<210> 19

<211> 11

<212> PRT

<213> Homo sapiens

<400> 19

Asn Phe Pro Ser Pro Val Asp Ala Ala Phe Arg
1 5 10

<210> 20

<211> 13

<212> PRT

<213> Homo sapiens

<400> 20

Ala Ala Asp Asp Thr Trp Glu Pro Phe Ala Ser Gly Lys
1 5 10