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35 40 45

Leu Tyr Lys Leu Tyr Glu Arg Cys Glu Val Val Met Gly Asn Leu Glu
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Ile Val Leu Thr Gly His Asn Ala Asp Leu Ser Phe Leu Gln Trp Ile
65 70 75 80

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

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

His Ala Leu Arg Gln Leu Arg Leu Thr Gln Leu Thr Glu Ile Leu Ser
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Gly Gly Val Tyr Ile Glu Lys Asn Asp Lys Leu Cys His Met Asp Thr
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Ile Asp Trp Arg Asp₁₆₅ Ile Val Arg Asp Arg₁₇₀ Asp Ala Glu Ile Val₁₇₅ Val
 Lys Asp Asn Gly₁₈₀ Arg Ser Cys Pro Pro₁₈₅ Cys His Glu Val Cys₁₉₀ Lys Gly
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 Glu Pro Asn₂₇₅ Pro His Thr Lys Tyr₂₈₀ Gln Tyr Gly Gly Val₂₈₅ Cys Val Ala
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 His His Ser Leu Asn Trp Thr Lys Val Leu Arg Gly Pro Thr Glu Glu
 465 470 475 480
 Arg Leu Asp Ile Lys His Asn Arg Pro Arg Arg Asp Cys Val Ala Glu
 485 490 495
 Gly Lys Val Cys Asp Pro Leu Cys Ser Ser Gly Gly Cys Trp Gly Pro
 500 505 510
 Gly Pro Gly Gln Cys Leu Ser Cys Arg Asn Tyr Ser Arg Gly Gly Val
 515 520 525
 Cys Val Thr His Cys Asn Phe Leu Asn Gly Glu Pro Arg Glu Phe Ala
 530 535 540
 His Glu Ala Glu Cys Phe Ser Cys His Pro Glu Cys Gln Pro Met Glu
 545 550 555 560
 Gly Thr Ala Thr Cys Asn Gly Ser Gly Ser Asp Thr Cys Ala Gln Cys
 565 570 575
 Ala His Phe Arg Asp Gly Pro His Cys Val Ser Ser Cys Pro His Gly
 580 585 590
 Val Leu Gly Ala Lys Gly Pro Ile Tyr Lys Tyr Pro Asp Val Gln Asn
 595 600 605
 Glu Cys Arg Pro Cys His Glu Asn Cys Thr Gln Gly Cys Lys Gly Pro
 610 615 620
 Glu Leu Gln Asp Cys Leu Gly Gln Thr Leu Val Leu Ile Gly Lys Thr
 625 630 635 640
 His Leu Thr Met Ala Leu Thr Val Ile Ala Gly Leu Val Val Ile Phe
 645 650 655
 Met Met Leu Gly Gly Thr Phe Leu Tyr Trp Arg Gly Arg Arg Ile Gln
 660 665 670
 Asn Lys Arg Ala Met Arg Arg Tyr Leu Glu Arg Gly Glu Ser Ile Glu
 675 680 685
 Pro Leu Asp Pro Ser Glu Lys Ala Asn Lys Val Leu Ala Arg Ile Phe
 690 695 700
 Lys Glu Thr Glu Leu Arg Lys Leu Lys Val Leu Gly Ser Gly Val Phe
 705 710 715 720
 Gly Thr Val His Lys Gly Val Trp Ile Pro Glu Gly Glu Ser Ile Lys
 725 730 735

Ile Pro Val Cys Ile Lys Val Ile Glu Asp Lys Ser Gly Arg Gln Ser
 740 745 750
 Phe Gln Ala Val Thr Asp His Met Leu Ala Ile Gly Ser Leu Asp His
 755 760 765
 Ala His Ile Val Arg Leu Leu Gly Leu Cys Pro Gly Ser Ser Leu Gln
 770 775 780
 Leu Val Thr Gln Tyr Leu Pro Leu Gly Ser Leu Leu Asp His Val Arg
 785 790 795 800
 Gln His Arg Gly Ala Leu Gly Pro Gln Leu Leu Leu Asn Trp Gly Val
 805 810 815
 Gln Ile Ala Lys Gly Met Tyr Tyr Leu Glu Glu His Gly Met Val His
 820 825 830
 Arg Asn Leu Ala Ala Arg Asn Val Leu Leu Lys Ser Pro Ser Gln Val
 835 840 845
 Gln Val Ala Asp Phe Gly Val Ala Asp Leu Leu Pro Pro Asp Asp Lys
 850 855 860
 Gln Leu Leu Tyr Ser Glu Ala Lys Thr Pro Ile Lys Trp Met Ala Leu
 865 870 875 880
 Glu Ser Ile His Phe Gly Lys Tyr Thr His Gln Ser Asp Val Trp Ser
 885 890 895
 Tyr Gly Val Thr Val Trp Glu Leu Met Thr Phe Gly Ala Glu Pro Tyr
 900 905 910
 Ala Gly Leu Arg Leu Ala Glu Val Pro Asp Leu Leu Glu Lys Gly Glu
 915 920 925
 Arg Leu Ala Gln Pro Gln Ile Cys Thr Ile Asp Val Tyr Met Val Met
 930 935 940
 Val Lys Cys Trp Met Ile Asp Glu Asn Ile Arg Pro Thr Phe Lys Glu
 945 950 955 960
 Leu Ala Asn Glu Phe Thr Arg Met Ala Arg Asp Pro Pro Arg Tyr Leu
 965 970 975
 Val Ile Lys Arg Glu Ser Gly Pro Gly Ile Ala Pro Gly Pro Glu Pro
 980 985 990
 His Gly Leu Thr Asn Lys Lys Leu Glu Glu Val Glu Leu Glu Pro Glu
 995 1000 1005
 Leu Asp Leu Asp Leu Asp Leu Glu Ala Glu Glu Asp Asn Leu Ala
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1010					1015					1020				
Thr	Thr	Thr	Leu	Gly	Ser	Ala	Leu	Ser	Leu	Pro	Val	Gly	Thr	Leu
	1025					1030					1035			
Asn	Arg	Pro	Arg	Gly	Ser	Gln	Ser	Leu	Leu	Ser	Pro	Ser	Ser	Gly
	1040					1045					1050			
Tyr	Met	Pro	Met	Asn	Gln	Gly	Asn	Leu	Gly	Glu	Ser	Cys	Gln	Glu
	1055					1060					1065			
Ser	Ala	Val	Ser	Gly	Ser	Ser	Glu	Arg	Cys	Pro	Arg	Pro	Val	Ser
	1070					1075					1080			
Leu	His	Pro	Met	Pro	Arg	Gly	Cys	Leu	Ala	Ser	Glu	Ser	Ser	Glu
	1085					1090					1095			
Gly	His	Val	Thr	Gly	Ser	Glu	Ala	Glu	Leu	Gln	Glu	Lys	Val	Ser
	1100					1105					1110			
Met	Cys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Pro	Arg	Pro	Arg	Gly
	1115					1120					1125			
Asp	Ser	Ala	Tyr	His	Ser	Gln	Arg	His	Ser	Leu	Leu	Thr	Pro	Val
	1130					1135					1140			
Thr	Pro	Leu	Ser	Pro	Pro	Gly	Leu	Glu	Glu	Glu	Asp	Val	Asn	Gly
	1145					1150					1155			
Tyr	Val	Met	Pro	Asp	Thr	His	Leu	Lys	Gly	Thr	Pro	Ser	Ser	Arg
	1160					1165					1170			
Glu	Gly	Thr	Leu	Ser	Ser	Val	Gly	Leu	Ser	Ser	Val	Leu	Gly	Thr
	1175					1180					1185			
Glu	Glu	Glu	Asp	Glu	Asp	Glu	Glu	Tyr	Glu	Tyr	Met	Asn	Arg	Arg
	1190					1195					1200			
Arg	Arg	His	Ser	Pro	Pro	His	Pro	Pro	Arg	Pro	Ser	Ser	Leu	Glu
	1205					1210					1215			
Glu	Leu	Gly	Tyr	Glu	Tyr	Met	Asp	Val	Gly	Ser	Asp	Leu	Ser	Ala
	1220					1225					1230			
Ser	Leu	Gly	Ser	Thr	Gln	Ser	Cys	Pro	Leu	His	Pro	Val	Pro	Ile
	1235					1240					1245			
Met	Pro	Thr	Ala	Gly	Thr	Thr	Pro	Asp	Glu	Asp	Tyr	Glu	Tyr	Met
	1250					1255					1260			
Asn	Arg	Gln	Arg	Asp	Gly	Gly	Gly	Pro	Gly	Gly	Asp	Tyr	Ala	Ala
	1265					1270					1275			

Met Gly Ala Cys Pro Ala Ser Glu Gln Gly Tyr Glu Glu Met Arg
1280 1285 1290

Ala Phe Gln Gly Pro Gly His Gln Ala Pro His Val His Tyr Ala
1295 1300 1305

Arg Leu Lys Thr Leu Arg Ser Leu Glu Ala Thr Asp Ser Ala Phe
1310 1315 1320

Asp Asn Pro Asp Tyr Trp His Ser Arg Leu Phe Pro Lys Ala Asn
1325 1330 1335

Ala Gln Arg Thr
1340

<210> 127
<211> 1339
<212> PRT
<213> Mus musculus

<400> 127
Met Ser Ala Ile Gly Thr Leu Gln Val Leu Gly Phe Leu Leu Ser Leu
1 5 10 15

Ala Arg Gly Ser Glu Met Gly Asn Ser Gln Ala Val Cys Pro Gly Thr
20 25 30

Leu Asn Gly Leu Ser Val Thr Gly Asp Ala Asp Asn Gln Tyr Gln Thr
35 40 45

Leu Tyr Lys Leu Tyr Glu Lys Cys Glu Val Val Met Gly Asn Leu Glu
50 55 60

Ile Val Leu Thr Gly His Asn Ala Asp Leu Ser Phe Leu Gln Trp Ile
65 70 75 80

Arg Glu Val Thr Gly Tyr Val Leu Val Ala Met Asn Glu Phe Ser Val
85 90 95

Leu Pro Leu Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp
100 105 110

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

His Ala Leu Arg Gln Leu Arg Phe Thr Gln Leu Thr Glu Ile Leu Leu
130 135 140

Gly Gly Val Tyr Ile Glu Lys Asn Asp Lys Leu Cys His Met Asp Thr
145 150 155 160

Ile Asp Trp Arg Asp Ile Val Arg Val Pro Asp Ala Glu Ile Val Val
165 170 175

Lys Asn Asn Gly Gly Asn Cys Pro Pro Cys His Glu Val Cys Lys Gly
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180						185						190					
Arg	Cys	Trp	Gly	Pro	Gly	Pro	Glu	Asp	Cys	Gln	Ile	Leu	Thr	Lys	Thr		
		195					200					205					
Ile	Cys	Ala	Pro	Gln	Cys	Asn	Gly	Arg	Cys	Phe	Gly	Pro	Asn	Pro	Asn		
	210					215					220						
Gln	Cys	Cys	His	Asp	Glu	Cys	Ala	Gly	Gly	Cys	Ser	Gly	Pro	Gln	Asp		
225					230					235					240		
Thr	Asp	Cys	Phe	Ala	Cys	Arg	His	Phe	Asn	Asp	Ser	Gly	Ala	Cys	Val		
				245					250					255			
Pro	Arg	Cys	Pro	Ala	Pro	Leu	Val	Tyr	Asn	Lys	Leu	Thr	Phe	Gln	Leu		
			260					265					270				
Glu	Pro	Asn	Pro	His	Ile	Lys	Tyr	Gln	Tyr	Gly	Gly	Val	Cys	Val	Ala		
		275					280					285					
Ser	Cys	Pro	His	Asn	Phe	Val	Val	Asp	Gln	Thr	Phe	Cys	Val	Arg	Ala		
	290					295					300						
Cys	Pro	Ala	Asp	Lys	Met	Glu	Val	Asp	Lys	Asn	Gly	Leu	Lys	Met	Cys		
305					310					315					320		
Glu	Pro	Cys	Arg	Gly	Leu	Cys	Pro	Lys	Ala	Cys	Glu	Gly	Thr	Gly	Ser		
				325					330					335			
Gly	Ser	Arg	Tyr	Gln	Thr	Val	Asp	Ser	Ser	Asn	Ile	Asp	Gly	Phe	Val		
			340					345					350				
Asn	Cys	Thr	Lys	Ile	Leu	Gly	Asn	Leu	Asp	Phe	Leu	Ile	Thr	Gly	Leu		
		355					360					365					
Asn	Gly	Asp	Pro	Trp	His	Lys	Ile	Pro	Ala	Leu	Asp	Pro	Glu	Lys	Leu		
	370					375					380						
Asn	Val	Phe	Arg	Thr	Val	Arg	Glu	Ile	Thr	Gly	Tyr	Leu	Asn	Ile	Gln		
385					390					395					400		
Ser	Trp	Pro	Pro	His	Met	His	Asn	Phe	Ser	Val	Phe	Ser	Asn	Leu	Thr		
				405					410					415			
Thr	Ile	Gly	Gly	Arg	Ser	Leu	Tyr	Asn	Arg	Gly	Phe	Ser	Leu	Leu	Ile		
			420					425					430				
Met	Lys	Asn	Leu	Asn	Val	Thr	Ser	Leu	Gly	Phe	Arg	Ser	Leu	Lys	Glu		
		435					440					445					
Ile	Ser	Ala	Gly	Arg	Val	Tyr	Ile	Ser	Ala	Asn	Gln	Gln	Leu	Cys	Tyr		
	450					455					460						

His 465 His Ser Leu Asn 470 Trp Thr Arg Leu Leu Arg 475 Gly Pro Ala Glu Glu 480
 Arg Leu Asp Ile Lys 485 Tyr Asn Arg Pro Leu 490 Gly Glu Cys Val Ala 495 Glu
 Gly Lys Val Cys 500 Asp Pro Leu Cys 505 Ser Ser Gly Gly Cys Trp 510 Gly Pro
 Gly Pro Gly 515 Gln Cys Leu Ser Cys 520 Arg Asn Tyr Ser Arg 525 Glu Gly Val
 Cys Val 530 Thr His Cys Asn Val 535 Leu Gln Gly Glu Pro 540 Arg Glu Phe Val
 His 545 Glu Ala His Cys Phe 550 Ser Cys His Pro Glu 555 Cys Gln Pro Met Glu 560
 Gly Thr Ser Thr Cys 565 Asn Gly Ser Gly 570 Asp Ala Cys Ala Arg 575 Cys
 Ala His Phe Arg 580 Asp Gly Pro His Cys 585 Val Asn Ser Cys Pro 590 His Gly
 Ile Leu Gly 595 Ala Lys Gly Pro Ile 600 Tyr Lys Tyr Pro Asp 605 Ala Gln Asn
 Glu Cys 610 Arg Pro Cys His Glu 615 Asn Cys Thr Gln Gly 620 Cys Lys Gly Pro
 Glu 625 Leu Gln Asp Cys Leu 630 Gly Gln Ala Glu Val 635 Leu Met Ser Lys Pro 640
 His Leu Val Ile Ala 645 Val Thr Val Gly Leu 650 Thr Val Ile Phe Leu 655 Ile
 Leu Gly Gly Ser 660 Phe Leu Tyr Trp Arg 665 Gly Arg Arg Ile Gln 670 Asn Lys
 Arg Ala Met 675 Arg Arg Tyr Leu Glu 680 Arg Gly Glu Ser Ile 685 Glu Pro Leu
 Asp Pro 690 Ser Glu Lys Ala Asn 695 Lys Val Leu Ala Arg 700 Ile Phe Lys Glu
 Thr 705 Glu Leu Arg Lys Leu 710 Lys Val Leu Gly Ser 715 Gly Val Phe Gly Thr 720
 Val His Lys Gly Ile 725 Trp Ile Pro Glu Gly 730 Glu Ser Ile Lys Ile 735 Pro
 Val Cys Ile Lys 740 Val Ile Glu Asp Lys 745 Ser Gly Arg Gln Ser 750 Phe Gln

Ala Val Thr Asp His Met Leu Ala Val Gly Ser Leu Asp His Ala His
 755 760 765
 Ile Val Arg Leu Leu Gly Leu Cys Pro Gly Ser Ser Leu Gln Leu Val
 770 775 780
 Thr Gln Tyr Leu Pro Leu Gly Ser Leu Leu Asp His Val Arg Gln His
 785 790 795 800
 Arg Glu Thr Leu Gly Pro Gln Leu Leu Leu Asn Trp Gly Val Gln Ile
 805 810 815
 Ala Lys Gly Met Tyr Tyr Leu Glu Glu His Ser Met Val His Arg Asp
 820 825 830
 Leu Ala Leu Arg Asn Val Met Leu Lys Ser Pro Ser Gln Val Gln Val
 835 840 845
 Ala Asp Phe Gly Val Ala Asp Leu Leu Pro Pro Asp Asp Lys Gln Leu
 850 855 860
 Leu His Ser Glu Ala Lys Thr Pro Ile Lys Trp Met Ala Leu Glu Ser
 865 870 875 880
 Ile His Phe Gly Lys Tyr Thr His Gln Ser Asp Val Trp Ser Tyr Gly
 885 890 895
 Val Thr Val Trp Glu Leu Met Thr Phe Gly Ala Glu Pro Tyr Ala Gly
 900 905 910
 Leu Arg Leu Ala Glu Ile Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu
 915 920 925
 Ala Gln Pro Gln Ile Cys Thr Ile Asp Val Tyr Met Val Met Val Lys
 930 935 940
 Cys Trp Met Ile Asp Glu Asn Ile Arg Pro Thr Phe Lys Glu Leu Ala
 945 950 955 960
 Asn Glu Phe Thr Arg Met Ala Arg Asp Pro Pro Arg Tyr Leu Val Ile
 965 970 975
 Lys Arg Ala Ser Gly Pro Gly Ile Pro Pro Ala Ala Glu Pro Ser Ala
 980 985 990
 Leu Ser Thr Lys Glu Leu Gln Asp Ala Glu Leu Glu Pro Asp Leu Asp
 995 1000 1005
 Leu Asp Leu Asp Val Glu Val Glu Glu Glu Gly Leu Ala Thr Thr
 1010 1015 1020
 Leu Gly Ser Ala Leu Ser Leu Pro Thr Gly Thr Leu Thr Arg Pro
 1025 1030 1035

Arg	Gly 1040	Ser	Gln	Ser	Leu	Leu 1045	Ser	Pro	Ser	Ser	Gly 1050	Tyr	Met	Pro
Met	Asn 1055	Gln	Ser	Asn	Leu	Gly 1060	Glu	Ala	Cys	Leu	Asp 1065	Ser	Ala	Val
Leu	Gly 1070	Gly	Arg	Glu	Gln	Phe 1075	Ser	Arg	Pro	Ile	Ser 1080	Leu	His	Pro
Ile	Pro 1085	Arg	Gly	Arg	Gln	Thr 1090	Ser	Glu	Ser	Ser	Glu 1095	Gly	His	Val
Thr	Gly 1100	Ser	Glu	Ala	Glu	Leu 1105	Gln	Glu	Arg	Val	Ser 1110	Met	Cys	Arg
Ser	Arg 1115	Ser	Arg	Ser	Arg	Ser 1120	Pro	Arg	Pro	Arg	Gly 1125	Asp	Ser	Ala
Tyr	His 1130	Ser	Gln	Arg	His	Ser 1135	Leu	Leu	Thr	Pro	Val 1140	Thr	Pro	Leu
Ser	Pro 1145	Pro	Gly	Leu	Glu	Glu 1150	Glu	Asp	Gly	Asn	Gly 1155	Tyr	Val	Met
Pro	Asp 1160	Thr	His	Leu	Arg	Gly 1165	Thr	Ser	Ser	Ser	Arg 1170	Glu	Gly	Thr
Leu	Ser 1175	Ser	Val	Gly	Leu	Ser 1180	Ser	Val	Leu	Gly	Thr 1185	Glu	Glu	Glu
Asp	Glu 1190	Asp	Glu	Glu	Tyr	Glu 1195	Tyr	Met	Asn	Arg	Lys 1200	Arg	Arg	Gly
Ser	Pro 1205	Ala	Arg	Pro	Pro	Arg 1210	Pro	Gly	Ser	Leu	Glu 1215	Glu	Leu	Gly
Tyr	Glu 1220	Tyr	Met	Asp	Val	Gly 1225	Ser	Asp	Leu	Ser	Ala 1230	Ser	Leu	Gly
Ser	Thr 1235	Gln	Ser	Cys	Pro	Leu 1240	His	Pro	Met	Ala	Ile 1245	Val	Pro	Ser
Ala	Gly 1250	Thr	Thr	Pro	Asp	Glu 1255	Asp	Tyr	Glu	Tyr	Met 1260	Asn	Arg	Arg
Arg	Gly 1265	Ala	Gly	Gly	Ser	Gly 1270	Gly	Asp	Tyr	Ala	Ala 1275	Met	Gly	Ala
Cys	Pro 1280	Ala	Ala	Glu	Gln	Gly 1285	Tyr	Glu	Glu	Met	Arg 1290	Ala	Phe	Gln
Gly	Pro	Gly	His	Gln	Ala	Pro	His	Val	Arg	Tyr	Ala	Arg	Leu	Lys

1295

1300

1305

Thr Leu Arg Ser Leu Glu Ala Thr Asp Ser Ala Phe Asp Asn Pro
 1310 1315 1320

Asp Tyr Trp His Ser Arg Leu Phe Pro Lys Ala Asn Ala Gln Arg
 1325 1330 1335

Ile

<210> 128

<211> 1339

<212> PRT

<213> Rattus norvegicus

<400> 128

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

Leu Asn Gly Leu Ser Val Thr Gly Asp Ala Asp Asn Gln Tyr Gln Thr
 35 40 45

Leu Tyr Lys Leu Tyr Glu Lys Cys Glu Val Val Met Gly Asn Leu Glu
 50 55 60

Ile Val Leu Thr Gly His Asn Ala Asp Leu Ser Phe Leu Gln Trp Ile
 65 70 75 80

Arg Glu Val Thr Gly Tyr Val Leu Val Ala Met Asn Glu Phe Ser Val
 85 90 95

Leu Pro Leu Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp
 100 105 110

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

His Ala Leu Arg Gln Leu Lys Phe Thr Gln Leu Thr Glu Ile Leu Ser
 130 135 140

Gly Gly Val Tyr Ile Glu Lys Asn Asp Lys Leu Cys His Met Asp Thr
 145 150 155 160

Ile Asp Trp Arg Asp Ile Val Arg Val Arg Gly Ala Glu Ile Val Val
 165 170 175

Lys Asn Asn Gly Ala Asn Cys Pro Pro Cys His Glu Val Cys Lys Gly
 180 185 190

Arg Cys Trp Gly Pro Gly Pro Asp Asp Cys Gln Ile Leu Thr Lys Thr
 195 200 205

Ile Cys Ala Pro Gln Cys Asn Gly Arg Cys Phe Gly Pro Asn Pro Asn
 210 215 220
 Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys Ser Gly Pro Gln Asp
 225 230 235 240
 Thr Asp Cys Phe Ala Cys Arg Arg Phe Asn Asp Ser Gly Ala Cys Val
 245 250 255
 Pro Arg Cys Pro Glu Pro Leu Val Tyr Asn Lys Leu Thr Phe Gln Leu
 260 265 270
 Glu Pro Asn Pro His Thr Lys Tyr Gln Tyr Gly Gly Val Cys Val Ala
 275 280 285
 Ser Cys Pro His Asn Phe Val Val Asp Gln Thr Phe Cys Val Arg Ala
 290 295 300
 Cys Pro Pro Asp Lys Met Glu Val Asp Lys His Gly Leu Lys Met Cys
 305 310 315 320
 Glu Pro Cys Gly Gly Leu Cys Pro Lys Ala Cys Glu Gly Thr Gly Ser
 325 330 335
 Gly Ser Arg Tyr Gln Thr Val Asp Ser Ser Asn Ile Asp Gly Phe Val
 340 345 350
 Asn Cys Thr Lys Ile Leu Gly Asn Leu Asp Phe Leu Ile Thr Gly Leu
 355 360 365
 Asn Val Asp Pro Trp His Lys Ile Pro Ala Leu Asp Pro Glu Lys Leu
 370 375 380
 Asn Val Phe Arg Thr Val Arg Glu Ile Thr Gly Tyr Leu Asn Ile Gln
 385 390 395 400
 Ser Trp Pro Pro His Met His Asn Phe Ser Val Phe Ser Asn Leu Thr
 405 410 415
 Thr Ile Gly Gly Arg Ser Leu Tyr Asn Arg Gly Phe Ser Leu Leu Ile
 420 425 430
 Met Lys Asn Leu Asn Val Thr Ser Leu Gly Phe Arg Ser Leu Lys Glu
 435 440 445
 Ile Ser Ala Gly Arg Val Tyr Ile Ser Ala Asn Gln Gln Leu Cys Tyr
 450 455 460
 His His Ser Leu Asn Trp Thr Arg Leu Leu Arg Gly Pro Ser Glu Glu
 465 470 475 480
 Arg Leu Asp Ile Lys Tyr Asp Arg Pro Leu Gly Glu Cys Leu Ala Glu
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			485				490				495				
Gly	Lys	Val	Cys 500	Asp	Pro	Leu	Cys	Ser 505	Ser	Gly	Gly	Cys	Trp 510	Gly	Pro
Gly	Pro	Gly 515	Gln	Cys	Leu	Ser	Cys 520	Arg	Asn	Tyr	Ser	Arg 525	Glu	Gly	Val
Cys	Val 530	Thr	His	Cys	Asn	Phe 535	Leu	Gln	Gly	Glu	Pro 540	Arg	Glu	Phe	Val
His 545	Glu	Ala	Gln	Cys	Phe 550	Ser	Cys	His	Pro	Glu 555	Cys	Leu	Pro	Met	Glu 560
Gly	Thr	Ser	Thr	Cys 565	Asn	Gly	Ser	Gly	Ser 570	Asp	Ala	Cys	Ala	Arg 575	Cys
Ala	His	Phe	Arg 580	Asp	Gly	Pro	His	Cys 585	Val	Asn	Ser	Cys	Pro 590	His	Gly
Ile	Leu	Gly 595	Ala	Lys	Gly	Pro	Ile 600	Tyr	Lys	Tyr	Pro	Asp 605	Ala	Gln	Asn
Glu	Cys 610	Arg	Pro	Cys	His	Glu 615	Asn	Cys	Thr	Gln	Gly 620	Cys	Asn	Gly	Pro
Glu 625	Leu	Gln	Asp	Cys	Leu 630	Gly	Gln	Ala	Glu	Val 635	Leu	Met	Ser	Lys	Pro 640
His	Leu	Val	Ile	Ala 645	Val	Thr	Val	Gly	Leu 650	Ala	Val	Ile	Leu	Met 655	Ile
Leu	Gly	Gly	Ser 660	Phe	Leu	Tyr	Trp	Arg 665	Gly	Arg	Arg	Ile	Gln 670	Asn	Lys
Arg	Ala	Met 675	Arg	Arg	Tyr	Leu	Glu 680	Arg	Gly	Glu	Ser	Ile 685	Glu	Pro	Leu
Asp	Pro 690	Ser	Glu	Lys	Ala	Asn 695	Lys	Val	Leu	Ala	Arg 700	Ile	Phe	Lys	Glu
Thr 705	Glu	Leu	Arg	Lys	Leu 710	Lys	Val	Leu	Gly	Ser 715	Gly	Val	Phe	Gly	Thr 720
Val	His	Lys	Gly	Ile 725	Trp	Ile	Pro	Glu	Gly 730	Glu	Ser	Ile	Lys	Ile 735	Pro
Val	Cys	Ile	Lys 740	Val	Ile	Glu	Asp	Lys 745	Ser	Gly	Arg	Gln	Ser 750	Phe	Gln
Ala	Val	Thr 755	Asp	His	Met	Leu	Ala 760	Val	Gly	Ser	Leu	Asp 765	His	Ala	His

Ile Val Arg Leu Leu Gly Leu Cys Pro Gly Ser Ser Leu Gln Leu Val
 770 775 780
 Thr Gln Tyr Leu Pro Leu Gly Ser Leu Leu Asp His Val Lys Gln His
 785 790 795 800
 Arg Glu Thr Leu Gly Pro Gln Leu Leu Leu Asn Trp Gly Val Gln Ile
 805 810 815
 Ala Lys Gly Met Tyr Tyr Leu Glu Glu His Ser Met Val His Arg Asp
 820 825 830
 Leu Ala Leu Arg Asn Val Met Leu Lys Ser Pro Ser Gln Val Gln Val
 835 840 845
 Ala Asp Phe Gly Val Ala Asp Leu Leu Pro Pro Asp Asp Lys Gln Leu
 850 855 860
 Leu His Ser Glu Ala Lys Thr Pro Ile Lys Trp Met Ala Leu Glu Ser
 865 870 875 880
 Ile His Phe Gly Lys Tyr Thr His Gln Ser Asp Val Trp Ser Tyr Gly
 885 890 895
 Val Thr Val Trp Glu Leu Met Thr Phe Gly Ala Glu Pro Tyr Ala Gly
 900 905 910
 Leu Arg Leu Ala Glu Ile Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu
 915 920 925
 Ala Gln Pro Gln Ile Cys Thr Ile Asp Val Tyr Met Val Met Val Lys
 930 935 940
 Cys Trp Met Ile Asp Glu Asn Ile Arg Pro Thr Phe Lys Glu Leu Ala
 945 950 955 960
 Asn Glu Phe Thr Arg Met Ala Arg Asp Pro Pro Arg Tyr Leu Val Ile
 965 970 975
 Lys Arg Ala Ser Gly Pro Gly Thr Pro Pro Ala Ala Glu Pro Ser Val
 980 985 990
 Leu Thr Thr Lys Glu Leu Gln Glu Ala Glu Leu Glu Pro Glu Leu Asp
 995 1000 1005
 Leu Asp Leu Asp Leu Glu Ala Glu Glu Glu Gly Leu Ala Thr Ser
 1010 1015 1020
 Leu Gly Ser Ala Leu Ser Leu Pro Thr Gly Thr Leu Thr Arg Pro
 1025 1030 1035
 Arg Gly Ser Gln Ser Leu Leu Ser Pro Ser Ser Gly Tyr Met Pro
 1040 1045 1050

Met	Asn 1055	Gln	Ser	Ser	Leu	Gly 1060	Glu	Ala	Cys	Leu	Asp 1065	Ser	Ala	Val
Leu	Gly 1070	Gly	Arg	Glu	Gln	Phe 1075	Ser	Arg	Pro	Ile	Ser 1080	Leu	His	Pro
Ile	Pro 1085	Arg	Gly	Arg	Pro	Ala 1090	Ser	Glu	Ser	Ser	Glu 1095	Gly	His	Val
Thr	Gly 1100	Ser	Glu	Ala	Glu	Leu 1105	Gln	Glu	Lys	Val	Ser 1110	Val	Cys	Arg
Ser	Arg 1115	Ser	Arg	Ser	Arg	Ser 1120	Pro	Arg	Pro	Arg	Gly 1125	Asp	Ser	Ala
Tyr	His 1130	Ser	Gln	Arg	His	Ser 1135	Leu	Leu	Thr	Pro	Val 1140	Thr	Pro	Leu
Ser	Pro 1145	Pro	Gly	Leu	Glu	Glu 1150	Glu	Asp	Gly	Asn	Gly 1155	Tyr	Val	Met
Pro	Asp 1160	Thr	His	Leu	Arg	Gly 1165	Ala	Ser	Ser	Ser	Arg 1170	Glu	Gly	Thr
Leu	Ser 1175	Ser	Val	Gly	Leu	Ser 1180	Ser	Val	Leu	Gly	Thr 1185	Glu	Glu	Glu
Asp	Glu 1190	Asp	Glu	Glu	Tyr	Glu 1195	Tyr	Met	Asn	Arg	Lys 1200	Arg	Arg	Gly
Ser	Pro 1205	Pro	Arg	Pro	Pro	Arg 1210	Pro	Gly	Ser	Leu	Glu 1215	Glu	Leu	Gly
Tyr	Glu 1220	Tyr	Met	Asp	Val	Gly 1225	Ser	Asp	Leu	Ser	Ala 1230	Ser	Leu	Gly
Ser	Thr 1235	Gln	Ser	Cys	Pro	Leu 1240	His	Pro	Met	Ala	Ile 1245	Val	Pro	Ser
Ala	Gly 1250	Thr	Thr	Pro	Asp	Glu 1255	Asp	Tyr	Glu	Tyr	Met 1260	Asn	Arg	Arg
Arg	Gly 1265	Ala	Gly	Gly	Ala	Gly 1270	Gly	Asp	Tyr	Ala	Ala 1275	Met	Gly	Ala
Cys	Pro 1280	Ala	Ala	Glu	Gln	Gly 1285	Tyr	Glu	Glu	Met	Arg 1290	Ala	Phe	Gln
Gly	Pro 1295	Gly	His	His	Ala	Pro 1300	His	Val	Arg	Tyr	Ala 1305	Arg	Leu	Lys
Thr	Leu 1310	Arg	Ser	Leu	Glu	Ala 1315	Thr	Asp	Ser	Ala	Phe 1320	Asp	Asn	Pro

Asp Tyr Trp His Ser Arg Leu Phe Pro Lys Ala Asn Ala Gln Arg
 1325 1330 1335

Thr

<210> 129
 <211> 1336
 <212> PRT
 <213> Bos taurus

<400> 129
 Met Arg Val Asn Arg Ala Leu Gln Val Leu Gly Phe Leu Leu Ser Leu
 1 5 10 15

Ala Arg Gly Ser Glu Val Gly Asn Ser Gln Ala Val Cys Pro Gly Thr
 20 25 30

Leu Asn Gly Leu Ser Val Thr Gly Asp Ala Glu Asn Gln Tyr Gln Thr
 35 40 45

Leu His Lys Leu Tyr Glu Lys Cys Glu Val Val Met Gly Asn Leu Glu
 50 55 60

Ile Val Leu Thr Gly His Asn Ala Asp Leu Ser Phe Leu Gln Trp Ile
 65 70 75 80

Arg Glu Val Thr Gly Tyr Val Leu Val Ala Met Asn Glu Phe Ser Thr
 85 90 95

Leu Pro Leu Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp
 100 105 110

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

His Ala Leu Arg Gln Leu Arg Leu Thr Gln Leu Thr Glu Ile Leu Ser
 130 135 140

Gly Gly Val Tyr Ile Glu Lys Asn Glu Lys Leu Cys His Met Asp Thr
 145 150 155 160

Ile Asp Trp Arg Asp Ile Val Arg Asp Arg Asp Ala Glu Ile Val Val
 165 170 175

Lys Asn Asn Gly Lys Thr Cys Pro Pro Cys His Glu Ala Cys Lys Gly
 180 185 190

Arg Cys Trp Gly Pro Gly Pro Glu Asp Cys Gln Thr Leu Thr Lys Thr
 195 200 205

Ile Cys Ala Pro Gln Cys Asn Gly His Cys Phe Gly Pro Asn Pro Asn
 210 215 220

Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys Ser Gly Pro Gln Asn
 225 230 235 240
 Thr Asp Cys Phe Ala Cys Arg Leu Phe Asn Asp Ser Gly Ala Cys Val
 245 250 255
 Arg Gln Cys Pro Gln Pro Leu Val Tyr Asn Lys Leu Thr Phe Gln Leu
 260 265 270
 Glu Pro Asn Pro His Thr Lys Tyr Gln Tyr Gly Gly Val Cys Val Ala
 275 280 285
 Ser Cys Pro His Asn Phe Val Val Asp Gln Thr Ser Cys Val Arg Ala
 290 295 300
 Cys Pro Pro Asp Lys Met Glu Val Asp Lys Asn Gly Leu Lys Ile Cys
 305 310 315 320
 Glu Pro Cys Gly Gly Leu Cys Pro Lys Ala Cys Glu Gly Thr Gly Ser
 325 330 335
 Gly Ser Arg Phe Gln Thr Val Asp Ser Ser Asn Ile Asp Gly Phe Val
 340 345 350
 Asn Cys Thr Lys Ile Leu Gly Asn Leu Asp Phe Leu Ile Thr Gly Leu
 355 360 365
 Asn Gly Asp Pro Trp His Lys Ile Pro Ala Leu Asp Pro Glu Lys Leu
 370 375 380
 Asn Val Phe Arg Thr Val Arg Glu Ile Thr Gly Tyr Leu Asn Ile Gln
 385 390 395 400
 Ser Trp Pro Pro His Met His Asn Phe Ser Val Phe Ser Asn Leu Thr
 405 410 415
 Thr Ile Gly Gly Arg Ser Leu Tyr Asn Arg Gly Phe Ser Leu Leu Ile
 420 425 430
 Met Lys Asn Leu Asn Val Thr Ser Leu Gly Phe Arg Ser Leu Lys Glu
 435 440 445
 Ile Ser Ala Gly Arg Ile Tyr Ile Ser Ala Asn Arg Gln Leu Cys Tyr
 450 455 460
 His His Ser Leu Asn Trp Thr Arg Leu Leu Arg Gly Pro Ser Glu Glu
 465 470 475 480
 Arg Leu Asp Ile Lys His Asn Arg Pro Arg Arg Asp Cys Val Ala Glu
 485 490 495
 Gly Lys Val Cys Asp Pro Leu Cys Ser Gly Gly Cys Trp Gly Pro Gly
 500 505 510

Pro Gly Gln Cys Leu Ser Cys Arg Asn Tyr Ser Arg Gly Gly Val Cys
 515 520 525
 Val Thr His Cys Asn Phe Leu Asn Gly Glu Pro Arg Glu Phe Ala His
 530 535 540
 Glu Ala Glu Cys Phe Ser Cys His Gln Glu Cys Gln Pro Met Glu Gly
 545 550 555 560
 Thr Val Thr Cys Asn Gly Ser Gly Ser Asp Ala Cys Ala Gln Cys Ala
 565 570 575
 His Phe Arg Asp Gly Pro His Cys Val Ser Ser Cys Pro Phe Gly Val
 580 585 590
 Leu Gly Ala Lys Gly Pro Ile Tyr Lys Tyr Pro Asp Ala Gln Asn Glu
 595 600 605
 Cys Arg Pro Cys His Glu Asn Cys Thr Gln Gly Cys Lys Gly Pro Glu
 610 615 620
 Leu Gln Asp Cys Leu Gly Gln Leu Leu Pro Leu Ile Ser Lys Thr His
 625 630 635 640
 Leu Ala Met Ala Leu Thr Val Val Val Gly Leu Ala Val Thr Phe Leu
 645 650 655
 Ile Leu Gly Ser Thr Phe Leu Tyr Trp Arg Gly Arg Lys Ile Gln Asn
 660 665 670
 Lys Arg Ala Met Arg Arg Tyr Leu Glu Arg Gly Glu Ser Val Glu Pro
 675 680 685
 Leu Asp Pro Ser Glu Lys Ala Asn Lys Val Leu Ala Arg Val Phe Lys
 690 695 700
 Glu Thr Glu Leu Arg Lys Leu Lys Val Leu Gly Ser Gly Ile Phe Gly
 705 710 715 720
 Thr Val His Lys Gly Val Trp Ile Pro Glu Gly Glu Ser Ile Lys Ile
 725 730 735
 Pro Val Cys Ile Lys Val Ile Glu Asp Lys Ser Gly Arg Gln Ser Phe
 740 745 750
 Gln Ala Val Thr Asp His Met Leu Ala Ile Gly Ser Leu Asp His Ala
 755 760 765
 His Ile Val Arg Leu Leu Gly Leu Cys Pro Gly Ser Ser Leu Gln Leu
 770 775 780
 Val Thr Gln Tyr Leu Pro Leu Gly Ser Leu Leu Asp His Val Arg Gln
 50/92

785					790					795				800
His	Arg	Gly	Ala	Leu	Gly	Pro	Gln	Leu	Leu	Leu	Asn	Trp	Gly	Gln
				805					810				815	
Ile	Ala	Lys	Gly	Met	Tyr	Tyr	Leu	Glu	Glu	His	Gly	Met	Val	Arg
			820					825					830	
Asn	Leu	Ala	Ala	Arg	Asn	Val	Leu	Leu	Lys	Ser	Pro	Ser	Gln	Gln
		835					840					845		
Val	Ala	Asp	Phe	Gly	Val	Ala	Asp	Leu	Leu	Pro	Pro	Asp	Asp	Gln
	850					855					860			
Leu	Leu	Tyr	Asn	Glu	Ala	Lys	Thr	Pro	Ile	Lys	Trp	Met	Ala	Glu
865					870					875				880
Ser	Ile	His	Phe	Gly	Lys	Tyr	Thr	His	Gln	Ser	Asp	Val	Trp	Tyr
				885					890					895
Gly	Val	Thr	Val	Trp	Glu	Leu	Met	Thr	Phe	Gly	Ala	Glu	Pro	Ala
			900					905					910	
Gly	Leu	Arg	Leu	Ala	Glu	Ile	Pro	Asp	Leu	Leu	Glu	Lys	Gly	Arg
		915					920					925		
Leu	Ala	Gln	Pro	Gln	Ile	Cys	Thr	Ile	Asp	Val	Tyr	Met	Val	Val
	930					935					940			
Lys	Cys	Trp	Met	Ile	Asp	Glu	Asn	Ile	Arg	Pro	Thr	Phe	Lys	Glu
945					950					955				960
Ala	Asn	Glu	Phe	Thr	Arg	Met	Ala	Arg	Asp	Pro	Pro	Arg	Tyr	Val
				965					970					975
Ile	Lys	Arg	Glu	Ser	Gly	Pro	Gly	Ile	Thr	Pro	Gly	Ala	Glu	Pro
			980					985					990	
Pro	Leu	Thr	Asn	Lys	Glu	Leu	Glu	Glu	Val	Glu	Leu	Glu	Pro	Leu
		995					1000					1005		
Asp	Leu	Asp	Leu	Glu	Leu	Glu	Ala	Glu	Glu	Glu	Asn	Leu	Ala	Thr
	1010					1015					1020			
Thr	Leu	Gly	Ser	Ala	Leu	Ser	Leu	Pro	Ile	Gly	Thr	Leu	Asn	Arg
	1025					1030					1035			
Pro	Arg	Gly	Ser	Gln	Ser	Leu	Val	Ser	Pro	Ser	Ser	Gly	Tyr	Met
	1040					1045					1050			
Pro	Met	Asn	Gln	Gly	Asn	Leu	Gly	Glu	Val	Gly	Gln	Glu	Ser	Ala
	1055					1060					1065			

Val	Phe	Gly	Gly	Asn	Glu	Arg	Tyr	Pro	Arg	Pro	Ala	Ser	Leu	His
	1070					1075					1080			
Pro	Met	Pro	Arg	Gly	Arg	Leu	Ala	Ser	Glu	Ser	Ser	Glu	Gly	His
	1085					1090					1095			
Val	Thr	Gly	Ser	Glu	Ala	Glu	Leu	Gln	Glu	Lys	Val	Ser	Met	Cys
	1100					1105					1110			
Arg	Ser	Gln	Ser	Arg	Ser	Pro	Arg	Pro	Arg	Gly	Asp	Ser	Ala	Tyr
	1115					1120					1125			
His	Ser	Gln	Arg	His	Ser	Leu	Leu	Thr	Pro	Val	Thr	Pro	Gln	Ser
	1130					1135					1140			
Pro	Pro	Gly	Leu	Glu	Glu	Glu	Asp	Val	Asn	Gly	Tyr	Val	Met	Pro
	1145					1150					1155			
Asp	Thr	His	Ile	Lys	Gly	Thr	Ser	Ser	Arg	Glu	Gly	Thr	Leu	Ser
	1160					1165					1170			
Ser	Val	Gly	Leu	Ser	Ser	Val	Leu	Gly	Thr	Glu	Asp	Asp	Asp	Asp
	1175					1180					1185			
Glu	Glu	Tyr	Glu	Tyr	Met	Asn	Arg	Arg	Arg	Arg	Cys	Ser	Pro	Ser
	1190					1195					1200			
Arg	Pro	Pro	Arg	Pro	Ser	Ser	Leu	Glu	Glu	Leu	Gly	Tyr	Glu	Tyr
	1205					1210					1215			
Met	Asp	Val	Gly	Ser	Asp	Leu	Ser	Ala	Ser	Leu	Gly	Ser	Thr	Gln
	1220					1225					1230			
Ser	Cys	Pro	Leu	Asn	Pro	Val	Pro	Asn	Met	Pro	Asn	Ala	Ser	Thr
	1235					1240					1245			
Thr	Pro	Asp	Glu	Asp	Tyr	Glu	Tyr	Met	Asn	Arg	Arg	Arg	Gly	Gly
	1250					1255					1260			
Gly	Gly	Pro	Gly	Gly	Asp	Tyr	Ala	Ala	Met	Asp	Ala	Cys	Pro	Ala
	1265					1270					1275			
Ser	Glu	Gln	Gly	Tyr	Glu	Glu	Met	Arg	Ala	Phe	Gln	Gly	Pro	Val
	1280					1285					1290			
Leu	His	Gly	Pro	Gln	Val	His	Tyr	Ala	Arg	Leu	Lys	Thr	Leu	Arg
	1295					1300					1305			
Ser	Leu	Glu	Ala	Thr	Asp	Ser	Ala	Phe	Asp	Asn	Pro	Asp	Tyr	Trp
	1310					1315					1320			
His	Ser	Arg	Leu	Phe	Pro	Lys	Ala	Asn	Ala	Gln	Arg	Ile		
	1325					1330					1335			

<210> 130
 <211> 1342
 <212> PRT
 <213> Pan troglodytes

<400> 130
 Met Arg Ala Asn Asp Ala Leu Gln Val Leu Gly Leu Leu Phe Ser Leu
 1 5 10 15

Ala Arg Gly Ser Glu Val Gly Asn Ser Gln Ala Val Cys Pro Gly Thr
 20 25 30

Leu Asn Gly Leu Ser Val Thr Gly Asp Ala Glu Asn Gln Tyr Gln Thr
 35 40 45

Leu Tyr Lys Leu Tyr Glu Arg Cys Glu Val Val Met Gly Asn Leu Glu
 50 55 60

Ile Val Leu Thr Gly His Asn Ala Asp Leu Ser Phe Leu Gln Trp Ile
 65 70 75 80

Arg Glu Val Thr Gly Tyr Val Leu Val Ala Met Asn Glu Phe Ser Thr
 85 90 95

Leu Pro Leu Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp
 100 105 110

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

His Ala Leu Arg Gln Leu Arg Leu Thr Gln Leu Thr Glu Ile Leu Ser
 130 135 140

Gly Gly Val Tyr Ile Glu Lys Asn Asp Lys Leu Cys His Met Asp Thr
 145 150 155 160

Ile Asp Trp Arg Asp Ile Val Arg Asp Arg Asp Ala Glu Ile Val Val
 165 170 175

Lys Asp Asn Gly Arg Ser Cys Pro Pro Cys His Glu Val Cys Lys Gly
 180 185 190

Arg Cys Trp Gly Pro Gly Ser Glu Asp Cys Gln Thr Leu Thr Lys Thr
 195 200 205

Ile Cys Ala Pro Gln Cys Asn Gly His Cys Phe Gly Pro Asn Pro Asn
 210 215 220

Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys Ser Gly Pro Gln Asp
 225 230 235 240

Thr Asp Cys Phe Ala Cys Arg His Phe Asn Asp Ser Gly Ala Cys Val
 245 250 255

Pro Arg Cys Pro Gln Pro Leu Val Tyr Asn Lys Leu Thr Phe Gln Leu
 260 265 270
 Glu Pro Asn Pro His Thr Lys Tyr Gln Tyr Gly Gly Val Cys Val Ala
 275 280 285
 Ser Cys Pro His Asn Phe Val Val Asp Gln Thr Ser Cys Val Arg Ala
 290 300
 Cys Pro Pro Asp Lys Met Glu Val Asp Lys Asn Gly Leu Lys Met Cys
 305 310 315 320
 Glu Pro Cys Gly Gly Leu Cys Pro Lys Ala Cys Glu Gly Thr Gly Ser
 325 330 335
 Gly Ser Arg Phe Gln Thr Val Asp Ser Ser Asn Ile Asp Gly Phe Val
 340 345 350
 Asn Cys Thr Lys Ile Leu Gly Asn Leu Asp Phe Leu Ile Thr Gly Leu
 355 360 365
 Asn Gly Asp Pro Trp His Lys Ile Pro Ala Leu Asp Pro Glu Lys Leu
 370 375 380
 Asn Val Phe Arg Thr Val Arg Glu Ile Thr Gly Tyr Leu Asn Ile Gln
 385 390 395 400
 Ser Trp Pro Pro His Met His Asn Phe Ser Val Phe Ser Asn Leu Thr
 405 410 415
 Thr Ile Gly Gly Arg Ser Leu Tyr Asn Arg Gly Phe Ser Leu Leu Ile
 420 425 430
 Met Lys Asn Leu Asn Val Thr Ser Leu Gly Phe Arg Ser Leu Lys Glu
 435 440 445
 Ile Ser Ala Gly Arg Ile Tyr Ile Ser Ala Asn Arg Gln Leu Cys Tyr
 450 455 460
 His His Ser Leu Asn Trp Thr Lys Val Leu Arg Gly Pro Thr Glu Glu
 465 470 475 480
 Arg Leu Asp Ile Lys His Asn Arg Pro Arg Arg Asp Cys Val Ala Glu
 485 490 495
 Gly Lys Val Cys Asp Pro Leu Cys Ser Ser Gly Gly Cys Trp Gly Pro
 500 505 510
 Gly Pro Gly Gln Cys Leu Ser Cys Arg Asn Tyr Ser Arg Gly Gly Val
 515 520 525
 Cys Val Thr His Cys Asn Phe Leu Asn Gly Glu Pro Arg Glu Phe Ala
 530 535 540

His Glu Ala Glu Cys Phe Ser Cys His Pro Glu Cys Gln Pro Met Glu
 545 550 555 560
 Gly Thr Ala Thr Cys Asn Gly Ser Gly Ser Asp Thr Cys Ala Gln Cys
 565 570 575
 Ala His Phe Arg Asp Gly Pro His Cys Val Ser Ser Cys Pro His Gly
 580 585 590
 Val Leu Gly Ala Lys Gly Pro Ile Tyr Lys Tyr Pro Asp Val Gln Asn
 595 600 605
 Glu Cys Arg Pro Cys His Glu Asn Cys Thr Gln Gly Cys Lys Gly Pro
 610 615 620
 Glu Leu Gln Asp Cys Leu Gly Gln Thr Leu Val Leu Ile Gly Lys Thr
 625 630 635 640
 His Leu Thr Met Ala Leu Thr Val Ile Ala Gly Leu Val Val Ile Phe
 645 650 655
 Met Met Leu Gly Gly Thr Phe Leu Tyr Trp Arg Gly Arg Arg Ile Gln
 660 665 670
 Asn Lys Arg Ala Met Arg Arg Tyr Leu Glu Arg Gly Glu Ser Ile Glu
 675 680 685
 Pro Leu Asp Pro Ser Glu Lys Ala Asn Lys Val Leu Ala Arg Ile Phe
 690 695 700
 Lys Glu Thr Glu Leu Arg Lys Leu Lys Val Leu Gly Ser Gly Val Phe
 705 710 715 720
 Gly Thr Val His Lys Gly Val Trp Ile Pro Glu Gly Glu Ser Ile Lys
 725 730 735
 Ile Pro Val Cys Ile Lys Val Ile Glu Asp Lys Ser Gly Arg Gln Ser
 740 745 750
 Phe Gln Ala Val Thr Asp His Met Leu Ala Ile Gly Ser Leu Asp His
 755 760 765
 Ala His Ile Val Arg Leu Leu Gly Leu Cys Pro Gly Ser Ser Leu Gln
 770 775 780
 Leu Val Thr Gln Tyr Leu Pro Leu Gly Ser Leu Leu Asp His Val Arg
 785 790 795 800
 Gln His Arg Gly Ala Leu Gly Pro Gln Leu Leu Leu Asn Trp Gly Val
 805 810 815
 Gln Ile Ala Lys Gly Met Tyr Tyr Leu Glu Glu His Gly Met Val His
 820 825 830

Arg Asn Leu Ala Ala Arg Asn Val Leu Leu Lys Ser Pro Ser Gln Val
 835 840 845
 Gln Val Ala Asp Phe Gly Val Ala Asp Leu Leu Pro Pro Asp Asp Lys
 850 855 860
 Gln Leu Leu Tyr Ser Glu Ala Lys Thr Pro Ile Lys Trp Met Ala Leu
 865 870 875 880
 Glu Ser Ile His Phe Gly Lys Tyr Thr His Gln Ser Asp Val Trp Ser
 885 890 895
 Tyr Gly Val Thr Val Trp Glu Leu Met Thr Phe Gly Ala Glu Pro Tyr
 900 905 910
 Ala Gly Leu Arg Leu Ala Glu Val Pro Asp Leu Leu Glu Lys Gly Glu
 915 920 925
 Arg Leu Ala Gln Pro Gln Ile Cys Thr Ile Asp Val Tyr Met Val Met
 930 935 940
 Val Lys Cys Trp Met Ile Asp Glu Asn Ile Arg Pro Thr Phe Lys Glu
 945 950 955 960
 Leu Ala Asn Glu Phe Thr Arg Met Ala Arg Asp Pro Pro Arg Tyr Leu
 965 970 975
 Val Ile Lys Arg Glu Ser Gly Pro Gly Ile Ala Pro Gly Pro Glu Pro
 980 985 990
 His Gly Leu Thr Asn Lys Lys Leu Glu Glu Val Glu Leu Glu Pro Glu
 995 1000 1005
 Leu Asp Leu Asp Leu Asp Leu Glu Ala Glu Glu Asp Asn Leu Ala
 1010 1015 1020
 Thr Thr Thr Leu Gly Ser Ala Leu Ser Leu Pro Val Gly Thr Leu
 1025 1030 1035
 Asn Arg Pro Arg Gly Ser Gln Ser Leu Leu Ser Pro Ser Ser Gly
 1040 1045 1050
 Tyr Met Pro Met Asn Gln Gly Asn Leu Gly Glu Ser Cys Gln Glu
 1055 1060 1065
 Ser Ala Val Ser Gly Ser Ser Glu Arg Cys Pro Arg Pro Val Ser
 1070 1075 1080
 Leu His Pro Met Pro Arg Gly Cys Leu Ala Ser Glu Ser Ser Glu
 1085 1090 1095
 Gly His Val Thr Gly Ser Glu Thr Glu Leu Gln Glu Lys Val Ser
 56/92

1100	1105	1110
Met Cys Arg Ser Arg Ser	Arg Ser Arg Ser Pro	Arg Pro Arg Gly
1115	1120	1125
Asp Ser Ala Tyr His Ser	Gln Arg His Ser Leu	Leu Thr Pro Val
1130	1135	1140
Thr Pro Leu Ser Pro Pro	Gly Leu Glu Glu Glu	Asp Val Asn Gly
1145	1150	1155
Tyr Val Met Pro Asp Thr	His Leu Lys Gly Thr	Pro Ser Ser Arg
1160	1165	1170
Glu Gly Thr Leu Ser Ser	Val Gly Leu Ser Ser	Val Leu Gly Thr
1175	1180	1185
Glu Glu Glu Asp Glu Asp	Glu Glu Tyr Glu Tyr	Met Asn Arg Arg
1190	1195	1200
Arg Arg His Ser Pro Pro	His Pro Pro Arg Pro	Ser Ser Leu Glu
1205	1210	1215
Glu Leu Gly Tyr Glu Tyr	Met Asp Val Gly Ser	Asp Leu Ser Ala
1220	1225	1230
Ser Leu Gly Ser Thr Gln	Ser Cys Pro Leu His	Pro Ile Pro Ile
1235	1240	1245
Met Pro Thr Ala Gly Thr	Thr Pro Asp Glu Asp	Tyr Glu Tyr Met
1250	1255	1260
Asn Arg Gln Arg Asp Gly	Gly Gly Pro Gly Gly	Asp Tyr Ala Ala
1265	1270	1275
Met Gly Ala Cys Pro Ala	Ser Glu Gln Gly Tyr	Glu Glu Met Arg
1280	1285	1290
Ala Phe Gln Gly Pro Gly	His Gln Ala Pro His	Val His Tyr Ala
1295	1300	1305
Arg Leu Lys Thr Leu Arg	Ser Leu Glu Ala Thr	Asp Ser Ala Phe
1310	1315	1320
Asp Asn Pro Asp Tyr Trp	His Ser Arg Leu Phe	Pro Lys Ala Asn
1325	1330	1335
Ala Gln Arg Thr		
1340		

<210> 131
 <211> 1536
 <212> PRT
 <213> Canis lupus

<400> 131

Met Gly Pro Asp His Pro Glu Val Met Thr Gly Glu Glu Ala Lys Ser
1 5 10 15

Trp Ala Pro Ala Arg Gly Ala Ala Lys Gly Leu Ser Pro Arg Ala Pro
20 25 30

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

Leu Pro Pro Gly Ala Gln Leu Leu Arg Gly Glu Thr Ser Ala Pro Gly
50 55 60

Gly Pro Gly Ala Arg Ala Gly Ser Glu Pro Arg Pro Gly Gly Pro Trp
65 70 75 80

Lys Gly Ser Arg Leu Gly Ala Glu Ala Ala Arg Thr Leu Ser Pro Arg
85 90 95

Ser Cys Ser Leu Cys Gly Gly Asn Arg Arg Ser Pro Ala Leu Leu Arg
100 105 110

Ile Arg Leu Ala Leu Arg Leu Gly Gly Pro Pro Arg Arg Gln Ala Pro
115 120 125

Arg Ala Val Leu Pro Pro Thr Gly Ala Arg Val Gly Ala Ala Glu Gly
130 135 140

Pro Ala Gly Leu Gly Gly Arg Ala Pro Val Pro Thr Gln Pro Arg Ala
145 150 155 160

Arg Thr Arg Glu Arg Pro Pro Glu Pro Pro Arg Arg Arg Cys Arg Ser
165 170 175

Leu Ala Ala Gln Val Ala Pro Leu Gly Cys Pro Ser Arg Gly Pro Arg
180 185 190

Asp Gly Ser Arg Gly Ala Ser Ala Ala Ser Ala Gly Leu Met Arg Ala
195 200 205

Thr Ala Pro Leu Gln Val Leu Gly Phe Leu Leu Ser Leu Val Arg Ala
210 215 220

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

Leu Ser Val Thr Gly Asp Ala Glu Asn Gln Tyr Gln Thr Leu Tyr Lys
245 250 255

Leu Tyr Glu Arg Cys Glu Val Val Met Gly Asn Leu Glu Ile Val Leu
260 265 270

Thr Gly His Asn Ala Asp Leu Ser Phe Leu Gln Trp Ile Arg Glu Val
58/92

275					280					285					
Thr	Gly	Tyr	Val	Leu	Val	Ala	Met	Asn	Glu	Phe	Pro	Thr	Leu	Pro	Leu
	290					295					300				
Pro	Asn	Leu	Arg	Val	Val	Arg	Gly	Thr	Gln	Val	Tyr	Asp	Gly	Lys	Phe
305					310					315					320
Ala	Ile	Phe	Val	Met	Leu	Asn	Tyr	Asn	Thr	Asn	Ser	Ser	His	Ala	Leu
				325					330					335	
Arg	Gln	Leu	Arg	Phe	Thr	Gln	Leu	Thr	Glu	Ile	Leu	Ala	Gly	Gly	Val
			340					345					350		
Tyr	Ile	Glu	Lys	Asn	Asp	Lys	Leu	Cys	His	Met	Asp	Thr	Ile	Asp	Trp
		355					360					365			
Arg	Asp	Ile	Val	Arg	Asp	Arg	Asp	Ala	Glu	Ile	Val	Val	Lys	Asp	Asn
	370					375					380				
Gly	Arg	Ser	Cys	Pro	Pro	Cys	His	Glu	Thr	Cys	Lys	Gly	Arg	Cys	Trp
385					390					395					400
Gly	Pro	Arg	Pro	Glu	Asp	Cys	Gln	Thr	Leu	Thr	Lys	Thr	Ile	Cys	Ala
				405					410					415	
Pro	Gln	Cys	Asn	Gly	His	Cys	Phe	Gly	Pro	Asn	Pro	Asn	Gln	Cys	Cys
			420					425					430		
His	Asp	Glu	Cys	Ala	Gly	Gly	Cys	Ser	Gly	Pro	Gln	Asp	Thr	Asp	Cys
		435					440					445			
Phe	Ala	Cys	Arg	Leu	Phe	Asn	Asp	Ser	Gly	Ala	Cys	Val	Arg	Gln	Cys
	450					455					460				
Pro	Gln	Pro	Leu	Val	Tyr	Asn	Lys	Leu	Thr	Phe	Gln	Leu	Glu	Pro	Asn
465					470					475					480
Pro	His	Thr	Lys	Tyr	Gln	Tyr	Gly	Gly	Val	Cys	Val	Ala	Ser	Cys	Pro
				485					490					495	
Arg	Lys	Cys	Leu	Arg	Arg	Gly	Thr	Met	Ile	Met	Glu	Val	Asp	Lys	Asn
			500					505					510		
Gly	Ser	Lys	Met	Cys	Glu	Pro	Cys	Gly	Gly	Leu	Cys	Pro	Lys	Ala	Cys
		515					520					525			
Glu	Gly	Thr	Gly	Ser	Gly	Ser	Arg	Phe	Gln	Thr	Val	Asp	Ser	Ser	Asn
	530					535					540				
Ile	Asp	Gly	Phe	Val	Asn	Cys	Thr	Lys	Ile	Leu	Gly	Asn	Leu	Asp	Phe
545					550					555					560

Leu Ile Thr Gly Leu Asn Gly Asp Pro Trp His Lys Ile Pro Ala Leu
 565 570 575
 Asp Pro Glu Lys Leu Asn Val Phe Arg Thr Val Arg Glu Ile Thr Gly
 580 585 590
 Tyr Leu Asn Ile Gln Ser Trp Pro Pro His Met His Asn Phe Ser Val
 595 600 605
 Phe Ser Asn Leu Thr Thr Ile Gly Gly Arg Ser Leu Tyr Asn Arg Gly
 610 615 620
 Phe Ser Leu Leu Ile Met Lys Asn Leu Asn Ile Thr Ser Leu Gly Leu
 625 630 635 640
 Arg Ser Leu Lys Glu Ile Ser Ala Gly Arg Ile Tyr Ile Ser Ala Asn
 645 650 655
 Lys Gln Leu Cys Tyr His His Ser Leu Asn Trp Thr Arg Leu Leu Arg
 660 665 670
 Gly Pro Pro Glu Glu Arg Leu Asp Ile Lys His Asn Arg Pro Arg Arg
 675 680 685
 Asp Cys Val Ala Glu Gly Lys Val Cys Asp Pro Leu Cys Ser Ser Gly
 690 695 700
 Gly Cys Trp Gly Pro Gly Pro Gly Gln Cys Leu Ser Cys Arg Asn Tyr
 705 710 715 720
 Ser Arg Gly Gly Val Cys Val Thr His Cys Asn Phe Leu Asn Gly Glu
 725 730 735
 Pro Arg Glu Phe Ala His Glu Ala Glu Cys Phe Ser Cys His Pro Glu
 740 745 750
 Cys Gln Pro Met Glu Gly Thr Ala Thr Cys Asn Gly Ser Gly Ser Asp
 755 760 765
 Ala Cys Ala Gln Cys Ala His Phe Arg Asp Gly Pro His Cys Val Ser
 770 775 780
 Ser Cys Pro Asn Gly Val Leu Gly Ala Lys Gly Pro Ile Tyr Lys Tyr
 785 790 795 800
 Pro Asp Thr His Asn Glu Cys Arg Pro Cys His Glu Asn Cys Thr Gln
 805 810 815
 Gly Cys Lys Gly Pro Glu Leu Gln Asp Cys Leu Gly Gln Thr Leu Ala
 820 825 830
 Leu Ile Ser Lys Thr His Leu Ala Val Gly Leu Thr Val Val Val Gly
 835 840 845

Leu Ala Val Ile Phe Leu Ile Leu Gly Gly Thr Leu Leu Tyr Trp Arg
 850 855 860

Gly Arg Arg Ile Gln Asn Lys Arg Ala Met Arg Arg Tyr Leu Glu Arg
 865 870 875 880

Gly Glu Ser Ile Glu Pro Leu Asp Pro Ser Glu Lys Ala Asn Lys Val
 885 890 895

Leu Ala Arg Ile Phe Lys Glu Thr Glu Leu Arg Lys Leu Lys Val Leu
 900 905 910

Gly Ser Gly Val Phe Gly Thr Val His Lys Gly Val Trp Ile Pro Glu
 915 920 925

Gly Glu Ser Ile Lys Ile Pro Val Cys Ile Lys Val Ile Glu Asp Lys
 930 935 940

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

Gly Ser Leu Asp His Ala His Ile Val Arg Leu Leu Gly Leu Cys Pro
 965 970 975

Gly Ser Ser Leu Gln Leu Val Thr Gln Tyr Leu Pro Leu Gly Ser Leu
 980 985 990

Leu Asp His Val Arg Gln His Arg Gly Ala Leu Gly Pro Gln Leu Leu
 995 1000 1005

Leu Asn Trp Gly Val Gln Ile Ala Lys Gly Met Tyr Tyr Leu Glu
 1010 1015 1020

Glu His Gly Met Val His Arg Asn Leu Ala Ala Arg Asn Val Leu
 1025 1030 1035

Leu Lys Ser Pro Ser Gln Val Gln Val Ala Asp Phe Gly Val Ala
 1040 1045 1050

Asp Leu Leu Pro Pro Asp Asp Lys Gln Leu Leu His Ser Glu Ala
 1055 1060 1065

Lys Thr Pro Ile Lys Trp Met Ala Leu Glu Ser Ile His Phe Gly
 1070 1075 1080

Lys Tyr Thr His Gln Ser Asp Val Trp Ser Tyr Gly Val Thr Val
 1085 1090 1095

Trp Glu Leu Met Thr Phe Gly Ala Glu Pro Tyr Ala Gly Leu Arg
 1100 1105 1110

Leu Ala Glu Val Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu Ala
 1115 1120 1125

Gln	Pro 1130	Gln	Ile	Cys	Thr	Ile 1135	Asp	Val	Tyr	Met	Val 1140	Met	Val	Lys
Cys	Trp 1145	Met	Ile	Asp	Glu	Asn 1150	Ile	Arg	Pro	Thr	Phe 1155	Lys	Glu	Leu
Ala	Asn 1160	Glu	Phe	Thr	Arg	Met 1165	Ala	Arg	Asp	Pro	Pro 1170	Arg	Tyr	Leu
Val	Ile 1175	Lys	Arg	Glu	Ser	Gly 1180	Pro	Gly	Ile	Pro	Pro 1185	Gly	Ala	Glu
Pro	Pro 1190	Ala	Leu	Thr	Asn	Lys 1195	Glu	Leu	Glu	Glu	Val 1200	Glu	Leu	Glu
Pro	Glu 1205	Leu	Glu	Leu	Asp	Leu 1210	Asp	Leu	Glu	Thr	Glu 1215	Glu	Asp	Gly
Leu	Ala 1220	Ala	Thr	Leu	Asn	Ser 1225	Ala	Leu	Gly	Leu	Pro 1230	Val	Gly	Thr
Leu	Asn 1235	Arg	Pro	Arg	Gly	Ser 1240	Gln	Ser	Leu	Leu	Ser 1245	Pro	Ser	Ser
Gly	Tyr 1250	Met	Pro	Met	Asn	Gln 1255	Gly	Asn	Leu	Gly	Asp 1260	Thr	Cys	Gln
Glu	Ser 1265	Ala	Ile	Cys	Gly	Thr 1270	Gly	Glu	Arg	Cys	Pro 1275	Arg	Pro	Ala
Ser	Leu 1280	His	Pro	Met	Pro	Arg 1285	Gly	Arg	Leu	Ala	Ser 1290	Glu	Ser	Ser
Glu	Gly 1295	His	Val	Thr	Gly	Ser 1300	Glu	Ala	Glu	Leu	Gln 1305	Glu	Lys	Ala
Ser	Met 1310	Cys	Arg	Ser	Arg	Ser 1315	Arg	Ser	Pro	Arg	Pro 1320	Arg	Gly	Asp
Ser	Ala 1325	Tyr	His	Ser	Gln	Arg 1330	His	Ser	Leu	Leu	Thr 1335	Pro	Val	Thr
Pro	Leu 1340	Ser	Pro	Pro	Gly	Leu 1345	Glu	Glu	Glu	Asp	Val 1350	Asn	Gly	Tyr
Val	Met 1355	Pro	Asp	Ala	His	Leu 1360	Lys	Gly	Thr	Pro	Ser 1365	Ser	Arg	Glu
Gly	Thr 1370	Leu	Ser	Ser	Val	Gly 1375	Ile	Ser	Ser	Val	Leu 1380	Gly	Thr	Glu
Glu	Glu	Glu	Glu	Asp	Glu	Glu	Tyr	Glu	Tyr	Met	Asn	Arg	Arg	Arg

1385		1390		1395
Arg His 1400	Ser Pro Pro Arg	His 1405	Pro Arg Pro Ser	Ser 1410
Leu Gly 1415	Tyr Glu Tyr Met	Asp 1420	Val Gly Ser Asp	Leu 1425
Leu Gly 1430	Ser Thr Gln Ser	Cys 1435	Pro Leu Asn Pro	Val 1440
Pro Ala 1445	Ala Gly Thr Thr	Pro 1450	Asp Glu Asp Tyr	Glu 1455
Arg Arg 1460	His Ala Gly Gly	Ala 1465	Pro Gly Gly Asp	Tyr 1470
Gly Ala 1475	Cys Pro Ala Ala	Glu 1480	Gln Gly Tyr Glu	Glu 1485
Phe Gln 1490	Gly Pro Gly Asn	His 1495	Ala Pro His Val	His 1500
Leu Lys 1505	Pro Leu Arg Ser	Leu 1510	Glu Ala Thr Asp	Ser 1515
Asn Pro 1520	Asp Tyr Trp His	Ser 1525	Arg Leu Phe Pro	Lys 1530
Gln Arg 1535	Thr			

<210> 132
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 132
 Met Arg Ala Asn Asp Ala Leu Gln Val Leu Gly Leu Leu Phe Ser Leu
 1 5 10 15

Ala Arg Gly Ser
20

<210> 133
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 133
 Tyr Lys Leu Tyr Glu Arg Cys Glu Val Val Met Gly Asn Leu Glu Ile
 1 5 10 15

Val Leu Thr Gly His
20

<210> 134
<211> 21
<212> PRT
<213> Homo sapiens

<400> 134
Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp Gly Lys Phe
1 5 10 15

Ala Ile Phe Val Met
20

<210> 135
<211> 21
<212> PRT
<213> Homo sapiens

<400> 135
Gly Arg Ser Cys Pro Pro Cys His Glu Val Cys Lys Gly Arg Cys Trp
1 5 10 15

Gly Pro Gly Ser Glu
20

<210> 136
<211> 21
<212> PRT
<213> Homo sapiens

<400> 136
Gly Pro Asn Pro Asn Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys
1 5 10 15

Ser Gly Pro Gln Asp
20

<210> 137
<211> 21
<212> PRT
<213> Homo sapiens

<400> 137
Asn Asp Ser Gly Ala Cys Val Pro Arg Cys Pro Gln Pro Leu Val Tyr
1 5 10 15

Asn Lys Leu Thr Phe
20

<210> 138
<211> 21
<212> PRT
<213> Homo sapiens

<400> 138
Tyr Gln Tyr Gly Gly Val Cys Val Ala Ser Cys Pro His Asn Phe Val
1 5 10 15

Val Asp Gln Thr Ser
20

<210> 139

<211> 21
<212> PRT
<213> Homo sapiens

<400> 139
Met Glu Val Asp Lys Asn Gly Leu Lys Met Cys Glu Pro Cys Gly Gly
1 5 10 15

Leu Cys Pro Lys Ala
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<210> 140
<211> 21
<212> PRT
<213> Homo sapiens

<400> 140
Gly Asp Pro Trp His Lys Ile Pro Ala Leu Asp Pro Glu Lys Leu Asn
1 5 10 15

Val Phe Arg Thr Val
20

<210> 141
<211> 21
<212> PRT
<213> Homo sapiens

<400> 141
Gln Ser Trp Pro Pro His Met His Asn Phe Ser Val Phe Ser Asn Leu
1 5 10 15

Thr Thr Ile Gly Gly
20

<210> 142
<211> 21
<212> PRT
<213> Homo sapiens

<400> 142
Leu Leu Ile Met Lys Asn Leu Asn Val Thr Ser Leu Gly Phe Arg Ser
1 5 10 15

Leu Lys Glu Ile Ser
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<210> 143
<211> 21
<212> PRT
<213> Homo sapiens

<400> 143
Glu Arg Leu Asp Ile Lys His Asn Arg Pro Arg Arg Asp Cys Val Ala
1 5 10 15

Glu Gly Lys Val Cys
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<210> 144
<211> 21

<212> PRT
<213> Homo sapiens

<400> 144
Leu Ala Arg Ile Phe Lys Glu Thr Glu Leu Arg Lys Leu Lys Val Leu
1 5 10 15

Gly Ser Gly Val Phe
20

<210> 145
<211> 21
<212> PRT
<213> Homo sapiens

<400> 145
Arg Gln His Arg Gly Ala Leu Gly Pro Gln Leu Leu Leu Asn Trp Gly
1 5 10 15

Val Gln Ile Ala Lys
20

<210> 146
<211> 21
<212> PRT
<213> Homo sapiens

<400> 146
Val Leu Leu Lys Ser Pro Ser Gln Val Gln Val Ala Asp Phe Gly Val
1 5 10 15

Ala Asp Leu Leu Pro
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<210> 147
<211> 21
<212> PRT
<213> Homo sapiens

<400> 147
Val Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu Ala Gln Pro Gln Ile
1 5 10 15

Cys Thr Ile Asp Val
20

<210> 148
<211> 21
<212> PRT
<213> Homo sapiens

<400> 148
Ala Leu Ser Leu Pro Val Gly Thr Leu Asn Arg Pro Arg Gly Ser Gln
1 5 10 15

Ser Leu Leu Ser Pro
20

<210> 149
<211> 21
<212> PRT

<213> Homo sapiens

<400> 149

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

Ser Ser Glu Gly His
20

<210> 150

<211> 21

<212> PRT

<213> Homo sapiens

<400> 150

Val Met Pro Asp Thr His Leu Lys Gly Thr Pro Ser Ser Arg Glu Gly
1 5 10 15

Thr Leu Ser Ser Val
20

<210> 151

<211> 21

<212> PRT

<213> Homo sapiens

<400> 151

Glu Glu Asp Glu Asp Glu Glu Tyr Glu Tyr Met Asn Arg Arg Arg Arg
1 5 10 15

His Ser Pro Pro His
20

<210> 152

<211> 20

<212> PRT

<213> Mus musculus

<400> 152

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

Ala Arg Gly Ser
20

<210> 153

<211> 21

<212> PRT

<213> Mus musculus

<400> 153

Tyr Lys Leu Tyr Glu Lys Cys Glu Val Val Met Gly Asn Leu Glu Ile
1 5 10 15

Val Leu Thr Gly His
20

<210> 154

<211> 21

<212> PRT

<213> Mus musculus

<400> 154
Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp Gly Lys Phe
1 5 10 15

Ala Ile Phe Val Met
20

<210> 155
<211> 21
<212> PRT
<213> Mus musculus

<400> 155
Gly Gly Asn Cys Pro Pro Cys His Glu Val Cys Lys Gly Arg Cys Trp
1 5 10 15

Gly Pro Gly Pro Glu
20

<210> 156
<211> 21
<212> PRT
<213> Mus musculus

<400> 156
Gly Pro Asn Pro Asn Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys
1 5 10 15

Ser Gly Pro Gln Asp
20

<210> 157
<211> 21
<212> PRT
<213> Mus musculus

<400> 157
Asn Asp Ser Gly Ala Cys Val Pro Arg Cys Pro Ala Pro Leu Val Tyr
1 5 10 15

Asn Lys Leu Thr Phe
20

<210> 158
<211> 21
<212> PRT
<213> Mus musculus

<400> 158
Tyr Gln Tyr Gly Gly Val Cys Val Ala Ser Cys Pro His Asn Phe Val
1 5 10 15

Val Asp Gln Thr Phe
20

<210> 159
<211> 21
<212> PRT
<213> Mus musculus

<400> 159
Met Glu Val Asp Lys Asn Gly Leu Lys Met Cys Glu Pro Cys Arg Gly
1 5 10 15

Leu Cys Pro Lys Ala
20

<210> 160
<211> 21
<212> PRT
<213> Mus musculus

<400> 160
Gly Asp Pro Trp His Lys Ile Pro Ala Leu Asp Pro Glu Lys Leu Asn
1 5 10 15

Val Phe Arg Thr Val
20

<210> 161
<211> 21
<212> PRT
<213> Mus musculus

<400> 161
Gln Ser Trp Pro Pro His Met His Asn Phe Ser Val Phe Ser Asn Leu
1 5 10 15

Thr Thr Ile Gly Gly
20

<210> 162
<211> 21
<212> PRT
<213> Mus musculus

<400> 162
Leu Leu Ile Met Lys Asn Leu Asn Val Thr Ser Leu Gly Phe Arg Ser
1 5 10 15

Leu Lys Glu Ile Ser
20

<210> 163
<211> 21
<212> PRT
<213> Mus musculus

<400> 163
Glu Arg Leu Asp Ile Lys Tyr Asn Arg Pro Leu Gly Glu Cys Val Ala
1 5 10 15

Glu Gly Lys Val Cys
20

<210> 164
<211> 21
<212> PRT
<213> Mus musculus

<400> 164

Leu Ala Arg Ile Phe Lys Glu Thr Glu Leu Arg Lys Leu Lys Val Leu
1 5 10 15

Gly Ser Gly Val Phe
20

<210> 165
<211> 21
<212> PRT
<213> Mus musculus

<400> 165
Arg Gln His Arg Glu Thr Leu Gly Pro Gln Leu Leu Leu Asn Trp Gly
1 5 10 15

Val Gln Ile Ala Lys
20

<210> 166
<211> 21
<212> PRT
<213> Mus musculus

<400> 166
Val Met Leu Lys Ser Pro Ser Gln Val Gln Val Ala Asp Phe Gly Val
1 5 10 15

Ala Asp Leu Leu Pro
20

<210> 167
<211> 21
<212> PRT
<213> Mus musculus

<400> 167
Ile Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu Ala Gln Pro Gln Ile
1 5 10 15

Cys Thr Ile Asp Val
20

<210> 168
<211> 21
<212> PRT
<213> Mus musculus

<400> 168
Ala Leu Ser Leu Pro Thr Gly Thr Leu Thr Arg Pro Arg Gly Ser Gln
1 5 10 15

Ser Leu Leu Ser Pro
20

<210> 169
<211> 21
<212> PRT
<213> Mus musculus

<400> 169
Arg Pro Ile Ser Leu His Pro Ile Pro Arg Gly Arg Gln Thr Ser Glu
70/92

1 5 10 15

Ser Ser Glu Gly His
20

<210> 170
<211> 21
<212> PRT
<213> Mus musculus

<400> 170
Val Met Pro Asp Thr His Leu Arg Gly Thr Ser Ser Ser Arg Glu Gly
1 5 10 15

Thr Leu Ser Ser Val
20

<210> 171
<211> 21
<212> PRT
<213> Mus musculus

<400> 171
Glu Glu Asp Glu Asp Glu Glu Tyr Glu Tyr Met Asn Arg Lys Arg Arg
1 5 10 15

Gly Ser Pro Ala Arg
20

<210> 172
<211> 20
<212> PRT
<213> Rattus norvegicus

<400> 172
Met Arg Ala Thr Gly Thr Leu Gln Val Leu Cys Phe Leu Leu Ser Leu
1 5 10 15

Ala Arg Gly Ser
20

<210> 173
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 173
Tyr Lys Leu Tyr Glu Lys Cys Glu Val Val Met Gly Asn Leu Glu Ile
1 5 10 15

Val Leu Thr Gly His
20

<210> 174
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 174
Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp Gly Lys Phe
1 5 10 15

Ala Ile Phe Val Met
20

<210> 175
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 175
Gly Ala Asn Cys Pro Pro Cys His Glu Val Cys Lys Gly Arg Cys Trp
1 5 10 15

Gly Pro Gly Pro Asp
20

<210> 176
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 176
Gly Pro Asn Pro Asn Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys
1 5 10 15

Ser Gly Pro Gln Asp
20

<210> 177
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 177
Asn Asp Ser Gly Ala Cys Val Pro Arg Cys Pro Glu Pro Leu Val Tyr
1 5 10 15

Asn Lys Leu Thr Phe
20

<210> 178
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 178
Tyr Gln Tyr Gly Gly Val Cys Val Ala Ser Cys Pro His Asn Phe Val
1 5 10 15

Val Asp Gln Thr Phe
20

<210> 179
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 179
Met Glu Val Asp Lys His Gly Leu Lys Met Cys Glu Pro Cys Gly Gly
1 5 10 15

Leu Cys Pro Lys Ala
20

<210> 180
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 180
Val Asp Pro Trp His Lys Ile Pro Ala Leu Asp Pro Glu Lys Leu Asn
1 5 10 15

Val Phe Arg Thr Val
20

<210> 181
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 181
Gln Ser Trp Pro Pro His Met His Asn Phe Ser Val Phe Ser Asn Leu
1 5 10 15

Thr Thr Ile Gly Gly
20

<210> 182
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 182
Leu Leu Ile Met Lys Asn Leu Asn Val Thr Ser Leu Gly Phe Arg Ser
1 5 10 15

Leu Lys Glu Ile Ser
20

<210> 183
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 183
Glu Arg Leu Asp Ile Lys Tyr Asp Arg Pro Leu Gly Glu Cys Leu Ala
1 5 10 15

Glu Gly Lys Val Cys
20

<210> 184
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 184
Leu Ala Arg Ile Phe Lys Glu Thr Glu Leu Arg Lys Leu Lys Val Leu
1 5 10 15

Gly Ser Gly Val Phe
20

<210> 185
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 185
Lys Gln His Arg Glu Thr Leu Gly Pro Gln Leu Leu Leu Asn Trp Gly
1 5 10 15

Val Gln Ile Ala Lys
20

<210> 186
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 186
Val Met Leu Lys Ser Pro Ser Gln Val Gln Val Ala Asp Phe Gly Val
1 5 10 15

Ala Asp Leu Leu Pro
20

<210> 187
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 187
Ile Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu Ala Gln Pro Gln Ile
1 5 10 15

Cys Thr Ile Asp Val
20

<210> 188
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 188
Ala Leu Ser Leu Pro Thr Gly Thr Leu Thr Arg Pro Arg Gly Ser Gln
1 5 10 15

Ser Leu Leu Ser Pro
20

<210> 189
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 189
Arg Pro Ile Ser Leu His Pro Ile Pro Arg Gly Arg Pro Ala Ser Glu
1 5 10 15

Ser Ser Glu Gly His

20

<210> 190
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 190
Val Met Pro Asp Thr His Leu Arg Gly Ala Ser Ser Ser Arg Glu Gly
1 5 10 15

Thr Leu Ser Ser Val
20

<210> 191
<211> 21
<212> PRT
<213> Rattus norvegicus

<400> 191
Glu Glu Asp Glu Asp Glu Glu Tyr Glu Tyr Met Asn Arg Lys Arg Arg
1 5 10 15

Gly Ser Pro Pro Arg
20

<210> 192
<211> 20
<212> PRT
<213> Bos taurus

<400> 192
Met Arg Val Asn Arg Ala Leu Gln Val Leu Gly Phe Leu Leu Ser Leu
1 5 10 15

Ala Arg Gly Ser
20

<210> 193
<211> 21
<212> PRT
<213> Bos taurus

<400> 193
His Lys Leu Tyr Glu Lys Cys Glu Val Val Met Gly Asn Leu Glu Ile
1 5 10 15

Val Leu Thr Gly His
20

<210> 194
<211> 21
<212> PRT
<213> Bos taurus

<400> 194
Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp Gly Lys Phe
1 5 10 15

Ala Ile Phe Val Met
20

<210> 195
<211> 21
<212> PRT
<213> Bos taurus

<400> 195
Gly Lys Thr Cys Pro Pro Cys His Glu Ala Cys Lys Gly Arg Cys Trp
1 5 10 15

Gly Pro Gly Pro Glu
20

<210> 196
<211> 21
<212> PRT
<213> Bos taurus

<400> 196
Gly Pro Asn Pro Asn Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys
1 5 10 15

Ser Gly Pro Gln Asn
20

<210> 197
<211> 21
<212> PRT
<213> Bos taurus

<400> 197
Asn Asp Ser Gly Ala Cys Val Arg Gln Cys Pro Gln Pro Leu Val Tyr
1 5 10 15

Asn Lys Leu Thr Phe
20

<210> 198
<211> 21
<212> PRT
<213> Bos taurus

<400> 198
Tyr Gln Tyr Gly Gly Val Cys Val Ala Ser Cys Pro His Asn Phe Val
1 5 10 15

Val Asp Gln Thr Ser
20

<210> 199
<211> 21
<212> PRT
<213> Bos taurus

<400> 199
Met Glu Val Asp Lys Asn Gly Leu Lys Ile Cys Glu Pro Cys Gly Gly
1 5 10 15

Leu Cys Pro Lys Ala
20

<210> 200
<211> 21
<212> PRT
<213> Bos taurus

<400> 200
Gly Asp Pro Trp His Lys Ile Pro Ala Leu Asp Pro Glu Lys Leu Asn
1 5 10 15

Val Phe Arg Thr Val
20

<210> 201
<211> 21
<212> PRT
<213> Bos taurus

<400> 201
Gln Ser Trp Pro Pro His Met His Asn Phe Ser Val Phe Ser Asn Leu
1 5 10 15

Thr Thr Ile Gly Gly
20

<210> 202
<211> 21
<212> PRT
<213> Bos taurus

<400> 202
Leu Leu Ile Met Lys Asn Leu Asn Val Thr Ser Leu Gly Phe Arg Ser
1 5 10 15

Leu Lys Glu Ile Ser
20

<210> 203
<211> 21
<212> PRT
<213> Bos taurus

<400> 203
Glu Arg Leu Asp Ile Lys His Asn Arg Pro Arg Arg Asp Cys Val Ala
1 5 10 15

Glu Gly Lys Val Cys
20

<210> 204
<211> 21
<212> PRT
<213> Bos taurus

<400> 204
Leu Ala Arg Val Phe Lys Glu Thr Glu Leu Arg Lys Leu Lys Val Leu
1 5 10 15

Gly Ser Gly Ile Phe
20

<210> 205
<211> 21
<212> PRT
<213> Bos taurus

<400> 205
Arg Gln His Arg Gly Ala Leu Gly Pro Gln Leu Leu Leu Asn Trp Gly
1 5 10 15

Val Gln Ile Ala Lys
20

<210> 206
<211> 21
<212> PRT
<213> Bos taurus

<400> 206
Val Leu Leu Lys Ser Pro Ser Gln Val Gln Val Ala Asp Phe Gly Val
1 5 10 15

Ala Asp Leu Leu Pro
20

<210> 207
<211> 21
<212> PRT
<213> Bos taurus

<400> 207
Ile Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu Ala Gln Pro Gln Ile
1 5 10 15

Cys Thr Ile Asp Val
20

<210> 208
<211> 21
<212> PRT
<213> Bos taurus

<400> 208
Ala Leu Ser Leu Pro Ile Gly Thr Leu Asn Arg Pro Arg Gly Ser Gln
1 5 10 15

Ser Leu Val Ser Pro
20

<210> 209
<211> 21
<212> PRT
<213> Bos taurus

<400> 209
Arg Pro Ala Ser Leu His Pro Met Pro Arg Gly Arg Leu Ala Ser Glu
1 5 10 15

Ser Ser Glu Gly His
20

<210> 210

<211> 20
<212> PRT
<213> Bos taurus

<400> 210
Val Met Pro Asp Thr His Ile Lys Gly Thr Ser Ser Arg Glu Gly Thr
1 5 10 15

Leu Ser Ser Val
20

<210> 211
<211> 20
<212> PRT
<213> Bos taurus

<400> 211
Asp Asp Asp Asp Glu Glu Tyr Glu Tyr Met Asn Arg Arg Arg Arg Cys
1 5 10 15

Ser Pro Ser Arg
20

<210> 212
<211> 21
<212> PRT
<213> Pan troglodytes

<400> 212
Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp Gly Lys Phe
1 5 10 15

Ala Ile Phe Val Met
20

<210> 213
<211> 21
<212> PRT
<213> Pan troglodytes

<400> 213
Gly Arg Ser Cys Pro Pro Cys His Glu Val Cys Lys Gly Arg Cys Trp
1 5 10 15

Gly Pro Gly Ser Glu
20

<210> 214
<211> 21
<212> PRT
<213> Pan troglodytes

<400> 214
Gly Pro Asn Pro Asn Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys
1 5 10 15

Ser Gly Pro Gln Asp
20

<210> 215
<211> 21

<212> PRT
<213> Pan troglodytes

<400> 215
Asn Asp Ser Gly Ala Cys Val Pro Arg Cys Pro Gln Pro Leu Val Tyr
1 5 10 15

Asn Lys Leu Thr Phe
20

<210> 216
<211> 21
<212> PRT
<213> Pan troglodytes

<400> 216
Tyr Gln Tyr Gly Gly Val Cys Val Ala Ser Cys Pro His Asn Phe Val
1 5 10 15

Val Asp Gln Thr Ser
20

<210> 217
<211> 21
<212> PRT
<213> Pan troglodytes

<400> 217
Met Glu Val Asp Lys Asn Gly Leu Lys Met Cys Glu Pro Cys Gly Gly
1 5 10 15

Leu Cys Pro Lys Ala
20

<210> 218
<211> 21
<212> PRT
<213> Pan troglodytes

<400> 218
Gly Asp Pro Trp His Lys Ile Pro Ala Leu Asp Pro Glu Lys Leu Asn
1 5 10 15

Val Phe Arg Thr Val
20

<210> 219
<211> 21
<212> PRT
<213> Pan troglodytes

<400> 219
Gln Ser Trp Pro Pro His Met His Asn Phe Ser Val Phe Ser Asn Leu
1 5 10 15

Thr Thr Ile Gly Gly
20

<210> 220
<211> 21
<212> PRT

<213> Pan troglodytes

<400> 220

Leu Leu Ile Met Lys Asn Leu Asn Val Thr Ser Leu Gly Phe Arg Ser
1 5 10 15

Leu Lys Glu Ile Ser
20

<210> 221

<211> 21

<212> PRT

<213> Pan troglodytes

<400> 221

Glu Arg Leu Asp Ile Lys His Asn Arg Pro Arg Arg Asp Cys Val Ala
1 5 10 15

Glu Gly Lys Val Cys
20

<210> 222

<211> 21

<212> PRT

<213> Pan troglodytes

<400> 222

Leu Ala Arg Ile Phe Lys Glu Thr Glu Leu Arg Lys Leu Lys Val Leu
1 5 10 15

Gly Ser Gly Val Phe
20

<210> 223

<211> 21

<212> PRT

<213> Pan troglodytes

<400> 223

Arg Gln His Arg Gly Ala Leu Gly Pro Gln Leu Leu Leu Asn Trp Gly
1 5 10 15

Val Gln Ile Ala Lys
20

<210> 224

<211> 21

<212> PRT

<213> Pan troglodytes

<400> 224

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

Ala Asp Leu Leu Pro
20

<210> 225

<211> 21

<212> PRT

<213> Pan troglodytes

<400> 225
Val Pro Asp Leu Leu Glu Lys Gly Glu Arg Leu Ala Gln Pro Gln Ile
1 5 10 15

Cys Thr Ile Asp Val
20

<210> 226
<211> 21
<212> PRT
<213> Pan troglodytes

<400> 226
Ala Leu Ser Leu Pro Val Gly Thr Leu Asn Arg Pro Arg Gly Ser Gln
1 5 10 15

Ser Leu Leu Ser Pro
20

<210> 227
<211> 21
<212> PRT
<213> Pan troglodytes

<400> 227
Arg Pro Val Ser Leu His Pro Met Pro Arg Gly Cys Leu Ala Ser Glu
1 5 10 15

Ser Ser Glu Gly His
20

<210> 228
<211> 21
<212> PRT
<213> Pan troglodytes

<400> 228
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1 5 10 15

Thr Leu Ser Ser Val
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<210> 229
<211> 21
<212> PRT
<213> Pan troglodytes

<400> 229
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1 5 10 15

His Ser Pro Pro His
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<210> 230
<211> 4029
<212> DNA
<213> Homo sapiens

<220>
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 1 5 10 15
 gcc cgg ggc tcc gag gtg ggc aac tct cag gca gtg tgt cct ggg act 96
 Ala Arg Gly Ser Glu Val Gly Asn Ser Gln Ala Val Cys Pro Gly Thr
 20 25 30
 ctg aat ggc ctg agt gtg acc ggc gat gct gag aac caa tac cag aca 144
 Leu Asn Gly Leu Ser Val Thr Gly Asp Ala Glu Asn Gln Tyr Gln Thr
 35 40 45
 ctg tac aag ctc tac gag agg tgt gag gtg gtg atg ggg aac ctt gag 192
 Leu Tyr Lys Leu Tyr Glu Arg Cys Glu Val Val Met Gly Asn Leu Glu
 50 55 60
 att gtg ctc acg gga cac aat gcc gac ctc tcc ttc ctg cag tgg att 240
 Ile Val Leu Thr Gly His Asn Ala Asp Leu Ser Phe Leu Gln Trp Ile
 65 70 75 80
 cga gaa gtg aca ggc tat gtc ctc gtg gcc atg aat gaa ttc tct act 288
 Arg Glu Val Thr Gly Tyr Val Leu Val Ala Met Asn Glu Phe Ser Thr
 85 90 95
 cta cca ttg ccc aac ctc cgc gtg gtg cga ggg acc cag gtc tac gat 336
 Leu Pro Leu Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp
 100 105 110
 ggg aag ttt gcc atc ttc gtc atg ttg aac tat aac acc aac tcc agc 384
 Gly Lys Phe Ala Ile Phe Val Met Leu Asn Tyr Asn Thr Asn Ser Ser
 115 120 125
 cac gct ctg cgc cag ctc cgc ttg act cag ctc acc gag att ctg tca 432
 His Ala Leu Arg Gln Leu Arg Leu Thr Gln Leu Thr Glu Ile Leu Ser
 130 135 140
 ggg ggt gtt tat att gag aag aac gat aag ctt tgt cac atg gac aca 480
 Gly Gly Val Tyr Ile Glu Lys Asn Asp Lys Leu Cys His Met Asp Thr
 145 150 155 160
 att gac tgg agg gac atc gtg agg gac cga gat gct gag ata gtg gtg 528
 Ile Asp Trp Arg Asp Ile Val Arg Asp Arg Asp Ala Glu Ile Val Val
 165 170 175
 aag gac aat ggc aga agc tgt ccc ccc tgt cat gag gtt tgc aag ggg 576
 Lys Asp Asn Gly Arg Ser Cys Pro Pro Cys His Glu Val Cys Lys Gly
 180 185 190
 cga tgc tgg ggt cct gga tca gaa gac tgc cag aca ttg acc aag acc 624
 Arg Cys Trp Gly Pro Gly Ser Glu Asp Cys Gln Thr Leu Thr Lys Thr
 195 200 205
 atc tgt gct cct cag tgt aat ggt cac tgc ttt ggg ccc aac ccc aac 672
 Ile Cys Ala Pro Gln Cys Asn Gly His Cys Phe Gly Pro Asn Pro Asn
 210 215 220
 cag tgc tgc cat gat gag tgt gcc ggg ggc tgc tca ggc cct cag gac 720
 Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys Ser Gly Pro Gln Asp
 225 230 235 240
 aca gac tgc ttt gcc tgc cgg cac ttc aat gac agt gga gcc tgt gta 768
 Thr Asp Cys Phe Ala Cys Arg His Phe Asn Asp Ser Gly Ala Cys Val
 245 250 255
 cct cgc tgt cca cag cct ctt gtc tac aac aag cta act ttc cag ctg 816

Pro	Arg	Cys	Pro	Gln	Pro	Leu	Val	Tyr	Asn	Lys	Leu	Thr	Phe	Gln	Leu	
			260					265					270			
gaa	ccc	aat	ccc	cac	acc	aag	tat	cag	tat	gga	gga	gtt	tgt	gta	gcc	864
Glu	Pro	Asn	Pro	His	Thr	Lys	Tyr	Gln	Tyr	Gly	Gly	Val	Cys	Val	Ala	
		275					280					285				
agc	tgt	ccc	cat	aac	ttt	gtg	gtg	gat	caa	aca	tcc	tgt	gtc	agg	gcc	912
Ser	Cys	Pro	His	Asn	Phe	Val	Val	Asp	Gln	Thr	Ser	Cys	Val	Arg	Ala	
	290					295					300					
tgt	cct	cct	gac	aag	atg	gaa	gta	gat	aaa	aat	ggg	ctc	aag	atg	tgt	960
Cys	Pro	Pro	Asp	Lys	Met	Glu	Val	Asp	Lys	Asn	Gly	Leu	Lys	Met	Cys	
305					310					315					320	
gag	cct	tgt	ggg	gga	cta	tgt	ccc	aaa	gcc	tgt	gag	gga	aca	ggc	tct	1008
Glu	Pro	Cys	Gly	Gly	Leu	Cys	Pro	Lys	Ala	Cys	Glu	Gly	Thr	Gly	Ser	
				325					330					335		
ggg	agc	cgc	ttc	cag	act	gtg	gac	tcg	agc	aac	att	gat	gga	ttt	gtg	1056
Gly	Ser	Arg	Phe	Gln	Thr	Val	Asp	Ser	Ser	Asn	Ile	Asp	Gly	Phe	Val	
			340					345					350			
aac	tgc	acc	aag	atc	ctg	ggc	aac	ctg	gac	ttt	ctg	atc	acc	ggc	ctc	1104
Asn	Cys	Thr	Lys	Ile	Leu	Gly	Asn	Leu	Asp	Phe	Leu	Ile	Thr	Gly	Leu	
		355					360					365				
aat	gga	gac	ccc	tgg	cac	aag	atc	cct	gcc	ctg	gac	cca	gag	aag	ctc	1152
Asn	Gly	Asp	Pro	Trp	His	Lys	Ile	Pro	Ala	Leu	Asp	Pro	Glu	Lys	Leu	
	370					375					380					
aat	gtc	ttc	cgg	aca	gta	cgg	gag	atc	aca	ggg	tac	ctg	aac	atc	cag	1200
Asn	Val	Phe	Arg	Thr	Val	Arg	Glu	Ile	Thr	Gly	Tyr	Leu	Asn	Ile	Gln	
385					390					395					400	
tcc	tgg	ccg	ccc	cac	atg	cac	aac	ttc	agt	gtt	ttt	tcc	aat	ttg	aca	1248
Ser	Trp	Pro	Pro	His	Met	His	Asn	Phe	Ser	Val	Phe	Ser	Asn	Leu	Thr	
				405					410					415		
acc	att	gga	ggc	aga	agc	ctc	tac	aac	cgg	ggc	ttc	tca	ttg	ttg	atc	1296
Thr	Ile	Gly	Gly	Arg	Ser	Leu	Tyr	Asn	Arg	Gly	Phe	Ser	Leu	Leu	Ile	
			420					425					430			
atg	aag	aac	ttg	aat	gtc	aca	tct	ctg	ggc	ttc	cga	tcc	ctg	aag	gaa	1344
Met	Lys	Asn	Leu	Asn	Val	Thr	Ser	Leu	Gly	Phe	Arg	Ser	Leu	Lys	Glu	
		435					440					445				
att	agt	gct	ggg	cgt	atc	tat	ata	agt	gcc	aat	agg	cag	ctc	tgc	tac	1392
Ile	Ser	Ala	Gly	Arg	Ile	Tyr	Ile	Ser	Ala	Asn	Arg	Gln	Leu	Cys	Tyr	
	450					455				460						
cac	cac	tct	ttg	aac	tgg	acc	aag	gtg	ctt	cgg	ggg	cct	acg	gaa	gag	1440
His	His	Ser	Leu	Asn	Trp	Thr	Lys	Val	Leu	Arg	Gly	Pro	Thr	Glu	Glu	
465					470					475					480	
cga	cta	gac	atc	aag	cat	aat	cgg	ccg	cgc	aga	gac	tgc	gtg	gca	gag	1488
Arg	Leu	Asp	Ile	Lys	His	Asn	Arg	Pro	Arg	Arg	Asp	Cys	Val	Ala	Glu	
				485					490					495		
ggc	aaa	gtg	tgt	gac	cca	ctg	tgc	tcc	tct	ggg	gga	tgc	tgg	ggc	cca	1536
Gly	Lys	Val	Cys	Asp	Pro	Leu	Cys	Ser	Ser	Gly	Gly	Cys	Trp	Gly	Pro	
			500					505					510			
ggc	cct	ggt	cag	tgc	ttg	tcc	tgt	cga	aat	tat	agc	cga	gga	ggt	gtc	1584
Gly	Pro	Gly	Gln	Cys	Leu	Ser	Cys	Arg	Asn	Tyr	Ser	Arg	Gly	Gly	Val	
		515					520					525				
tgt	gtg	acc	cac	tgc	aac	ttt	ctg	aat	ggg	gag	cct	cga	gaa	ttt	gcc	1632
Cys	Val	Thr	His	Cys	Asn	Phe	Leu	Asn	Gly	Glu	Pro	Arg	Glu	Phe	Ala	
	530					535					540					

cat His 545	gag Glu	gcc Ala	gaa Glu	tgc Cys	ttc Phe 550	tcc Ser	tgc Cys	cac His	ccg Pro	gaa Glu 555	tgc Cys	caa Gln	ccc Pro	atg Met	gag Glu 560	1680
ggc Gly	act Thr	gcc Ala	aca Thr	tgc Cys 565	aat Asn	ggc Gly	tgc Ser	ggc Gly	tct Ser 570	gat Asp	act Thr	tgt Cys	gct Ala	caa Gln 575	tgt Cys	1728
gcc Ala	cat His	ttt Phe	cga Arg 580	gat Asp	ggg Gly	ccc Pro	cac His	tgt Cys 585	gtg Val	agc Ser	agc Ser	tgc Cys	ccc Pro 590	cat His	gga Gly	1776
gtc Val	cta Leu	ggt Gly 595	gcc Ala	aag Lys	ggc Gly	cca Pro	atc Ile 600	tac Tyr	aag Lys	tac Tyr	cca Pro	gat Asp 605	ggt Val	cag Gln	aat Asn	1824
gaa Glu	tgt Cys 610	cgg Arg	ccc Pro	tgc Cys	cat His	gag Glu 615	aac Asn	tgc Cys	acc Thr	cag Gln	ggg Gly 620	tgt Cys	aaa Lys	gga Gly	cca Pro	1872
gag Glu 625	ctt Leu	caa Gln	gac Asp	tgt Cys	tta Leu 630	gga Gly	caa Gln	aca Thr	ctg Leu	gtg Val 635	ctg Leu	atc Ile	ggc Gly	aaa Lys	acc Thr 640	1920
cat His	ctg Leu	aca Thr	atg Met	gct Ala 645	ttg Leu	aca Thr	gtg Val	ata Ile	gca Ala 650	gga Gly	ttg Leu	gta Val	gtg Val	att Ile 655	ttc Phe	1968
atg Met	atg Met	ctg Leu	ggc Gly 660	ggc Gly	act Thr	ttt Phe	ctc Leu	tac Tyr 665	tgg Trp	cgt Arg	ggg Gly	cgc Arg	cgg Arg 670	att Ile	cag Gln	2016
aat Asn	aaa Lys	agg Arg 675	gct Ala	atg Met	agg Arg	cga Arg	tac Tyr 680	ttg Leu	gaa Glu	cgg Arg	ggt Gly	gag Glu 685	agc Ser	ata Ile	gag Glu	2064
cct Pro	ctg Leu 690	gac Asp	ccc Pro	agt Ser	gag Glu	aag Lys 695	gct Ala	aac Asn	aaa Lys	gtc Val	ttg Leu 700	gcc Ala	aga Arg	atc Ile	ttc Phe	2112
aaa Lys 705	gag Glu	aca Thr	gag Glu	cta Leu	agg Arg 710	aag Lys	ctt Leu	aaa Lys	gtg Val	ctt Leu 715	ggc Gly	tgc Ser	ggt Gly	gtc Val	ttt Phe 720	2160
gga Gly	act Thr	gtg Val	cac His	aaa Lys 725	gga Gly	gtg Val	tgg Trp	atc Ile	cct Pro 730	gag Glu	ggt Gly	gaa Glu	tca Ser	atc Ile 735	aag Lys	2208
att Ile	cca Pro	gtc Val	tgc Cys 740	att Ile	aaa Lys	gtc Val	att Ile	gag Glu 745	gac Asp	aag Lys	agt Ser	gga Gly	cgg Arg 750	cag Gln	agt Ser	2256
ttt Phe	caa Gln	gct Ala 755	gtg Val	aca Thr	gat Asp	cat His	atg Met 760	ctg Leu	gcc Ala	att Ile	ggc Gly	agc Ser 765	ctg Leu	gac Asp	cat His	2304
gcc Ala	cac His 770	att Ile	gta Val	agg Arg	ctg Leu	ctg Leu 775	gga Gly	cta Leu	tgc Cys	cca Pro	ggg Gly 780	tca Ser	tct Ser	ctg Leu	cag Gln	2352
ctt Leu 785	gtc Val	act Thr	caa Gln	tat Tyr	ttg Leu 790	cct Pro	ctg Leu	ggt Gly	tct Ser	ctg Leu 795	ctg Leu	gat Asp	cat His	gtg Val	aga Arg 800	2400
caa Gln	cac His	cgg Arg	ggg Gly	gca Ala 805	ctg Leu	ggg Gly	cca Pro	cag Gln	ctg Leu 810	ctg Leu	ctc Leu	aac Asn	tgg Trp	gga Gly 815	gta Val	2448
caa Gln	att Ile	gcc Ala	aag Lys 820	gga Gly	atg Met	tac Tyr	tac Tyr	ctt Leu 825	gag Glu	gaa Glu	cat His	ggt Gly	atg Met 830	gtg Val	cat His	2496

aga Arg	aac Asn	ctg Leu 835	gct Ala	gcc Ala	cga Arg	aac Asn	gtg Val 840	cta Leu	ctc Leu	aag Lys	tca Ser 845	ccc Pro	agt Ser	cag Gln	gtt Val	2544
cag Gln	gtg Val 850	gca Ala	gat Asp	ttt Phe	ggg Gly	gtg Val 855	gct Ala	gac Asp	ctg Leu	ctg Leu	cct Pro 860	cct Pro	gat Asp	gat Asp	aag Lys	2592
cag Gln 865	ctg Leu	cta Leu	tac Tyr	agt Ser	gag Glu 870	gcc Ala	aag Lys	act Thr	cca Pro	att Ile 875	aag Lys	tgg Trp	atg Met	gcc Ala	ctt Leu 880	2640
gag Glu	agt Ser	atc Ile	cac His	ttt Phe 885	ggg Gly	aaa Lys	tac Tyr	aca Thr	cac His 890	cag Gln	agt Ser	gat Asp	gtc Val	tgg Trp 895	agc Ser	2688
tat Tyr	ggg Gly	gtg Val	aca Thr 900	gtt Val	tgg Trp	gag Glu	tgt Leu	atg Met 905	acc Thr	ttc Phe	ggg Gly	gca Ala	gag Glu 910	ccc Pro	tat Tyr	2736
gca Ala	ggg Gly	cta Leu 915	cga Arg	tgt Leu	gct Ala	gaa Glu	gta Val 920	cca Pro	gac Asp	ctg Leu	cta Leu	gag Glu 925	aag Lys	ggg Gly	gag Glu	2784
cgg Arg	tgt Leu 930	gca Ala	cag Gln	ccc Pro	cag Gln	atc Ile 935	tgc Cys	aca Thr	att Ile	gat Asp	gtc Val 940	tac Tyr	atg Met	gtg Val	atg Met	2832
gtc Val 945	aag Lys	tgt Cys	tgg Trp	atg Met	att Ile 950	gat Asp	gag Glu	aac Asn	att Ile	cgc Arg 955	cca Pro	acc Thr	ttt Phe	aaa Lys	gaa Glu 960	2880
cta Leu	gcc Ala	aat Asn	gag Glu	ttc Phe 965	acc Thr	agg Arg	atg Met	gcc Ala	cga Arg 970	gac Asp	cca Pro	cca Pro	cgg Arg	tat Tyr 975	ctg Leu	2928
gtc Val	ata Ile	aag Lys	aga Arg 980	gag Glu	agt Ser	ggg Gly	cct Pro	gga Gly 985	ata Ile	gcc Ala	cct Pro	ggg Gly	cca Pro 990	gag Glu	ccc Pro	2976
cat His	ggg Gly	ctg Leu 995	aca Thr	aac Asn	aag Lys	aag Lys	cta Leu 1000	gag Glu	gaa Glu	gta Val	gag Glu	ctg Leu 1005	gag Glu	cca Pro	gaa Glu	3024
cta Leu	gac Asp 1010	cta Leu	gac Asp	cta Leu	gac Asp	ttg Leu 1015	gaa Glu	gca Ala	gag Glu	gag Glu	gac Asp 1020	aac Asn	ctg Leu	gca Ala		3069
acc Thr	acc Thr 1025	aca Thr	ctg Leu	ggc Gly	tcc Ser	gcc Ala 1030	ctc Leu	agc Ser	cta Leu	cca Pro	gtt Val 1035	gga Gly	aca Thr	ctt Leu		3114
aat Asn	cgg Arg 1040	cca Pro	cgt Arg	ggg Gly	agc Ser	cag Gln 1045	agc Ser	ctt Leu	tta Leu	agt Ser	cca Pro 1050	tca Ser	tct Ser	gga Gly		3159
tac Tyr	atg Met 1055	ccc Pro	atg Met	aac Asn	cag Gln	ggg Gly 1060	aat Asn	ctt Leu	ggg Gly	gag Glu	tct Ser 1065	tgc Cys	cag Gln	gag Glu		3204
tct Ser	gca Ala 1070	gtt Val	tct Ser	ggg Gly	agc Ser	agt Ser 1075	gaa Glu	cgg Arg	tgc Cys	ccc Pro	cgt Arg 1080	cca Pro	gtc Val	tct Ser		3249
cta Leu	cac His 1085	cca Pro	atg Met	cca Pro	cgg Arg	gga Gly 1090	tgc Cys	ctg Leu	gca Ala	tca Ser	gag Glu 1095	tca Ser	tca Ser	gag Glu		3294
ggg Gly	cat His	gta Val	aca Thr	ggc Gly	tct Ser	gag Glu	gct Ala	gag Glu	ctc Leu	cag Gln	gag Glu	aaa Lys	gtg Val	tca Ser		3339

1100	1105	1110	
atg tgt agg agc cgg agc Met Cys Arg Ser Arg Ser	agg agc cgg agc Arg Ser Arg Ser	cca cgg cca cgc gga Pro Arg Pro Arg Gly	3384
gat agc gcc tac cat tcc Asp Ser Ala Tyr His Ser	cag cgc cac agt ctg Gln Arg His Ser Leu	ctg act cct gtt Leu Thr Pro Val	3429
acc cca ctc tcc cca ccc Thr Pro Leu Ser Pro Pro	ggg tta gag gaa gag Gly Leu Glu Glu Glu	gat gtc aac ggt Asp Val Asn Gly	3474
tat gtc atg cca gat aca Tyr Val Met Pro Asp Thr	cac ctc aaa ggt act His Leu Lys Gly Thr	ccc tcc tcc cgg Pro Ser Ser Arg	3519
gaa ggc acc ctt tct tca Glu Gly Thr Leu Ser Ser	gtg ggt ctc agt tct Val Gly Leu Ser Ser	gtc ctg ggt act Val Leu Gly Thr	3564
gaa gaa gaa gat gaa gat Glu Glu Glu Asp Glu Asp	gag gag tat gaa tac Glu Glu Tyr Glu Tyr	atg aac cgg agg Met Asn Arg Arg	3609
aga agg cac agt cca cct Arg Arg His Ser Pro Pro	cat ccc cct agg cca His Pro Pro Arg Pro	agt tcc ctt gag Ser Ser Leu Glu	3654
gag ctg ggt tat gag tac Glu Leu Gly Tyr Glu Tyr	atg gat gtg ggg tca Met Asp Val Gly Ser	gac ctc agt gcc Asp Leu Ser Ala	3699
tct ctg ggc agc aca cag Ser Leu Gly Ser Thr Gln	agt tgc cca ctc cac Ser Cys Pro Leu His	cct gta ccc atc Pro Val Pro Ile	3744
atg ccc act gca ggc aca Met Pro Thr Ala Gly Thr	act cca gat gaa gac Thr Pro Asp Glu Asp	tat gaa tat atg Tyr Glu Tyr Met	3789
aat cgg caa cga gat gga Asn Arg Gln Arg Asp Gly	ggt ggt cct ggg ggt Gly Gly Pro Gly Gly	gat tat gca gcc Asp Tyr Ala Ala	3834
atg ggg gcc tgc cca gca Met Gly Ala Cys Pro Ala	tct gag caa ggg tat Ser Glu Gln Gly Tyr	gaa gag atg aga Glu Glu Met Arg	3879
gct ttt cag ggg cct gga Ala Phe Gln Gly Pro Gly	cat cag gcc ccc cat His Gln Ala Pro His	gtc cat tat gcc Val His Tyr Ala	3924
cgc cta aaa act cta cgt Arg Leu Lys Thr Leu Arg	agc tta gag gct aca Ser Leu Glu Ala Thr	gac tct gcc ttt Asp Ser Ala Phe	3969
gat aac cct gat tac tgg Asp Asn Pro Asp Tyr Trp	cat agc agg ctt ttc His Ser Arg Leu Phe	ccc aag gct aat Pro Lys Ala Asn	4014
gcc cag aga acg taa Ala Gln Arg Thr			4029

<210> 231
 <211> 1342
 <212> PRT
 <213> Homo sapiens

<400> 231

Met Arg Ala Asn Asp Ala Leu Gln Val Leu Gly Leu Leu Phe Ser Leu
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Leu Asn Gly Leu Ser Val Thr Gly Asp Ala Glu Asn Gln Tyr Gln Thr
35 40 45

Leu Tyr Lys Leu Tyr Glu Arg Cys Glu Val Val Met Gly Asn Leu Glu
50 55 60

Ile Val Leu Thr Gly His Asn Ala Asp Leu Ser Phe Leu Gln Trp Ile
65 70 75 80

Arg Glu Val Thr Gly Tyr Val Leu Val Ala Met Asn Glu Phe Ser Thr
85 90 95

Leu Pro Leu Pro Asn Leu Arg Val Val Arg Gly Thr Gln Val Tyr Asp
100 105 110

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

His Ala Leu Arg Gln Leu Arg Leu Thr Gln Leu Thr Glu Ile Leu Ser
130 135 140

Gly Gly Val Tyr Ile Glu Lys Asn Asp Lys Leu Cys His Met Asp Thr
145 150 155 160

Ile Asp Trp Arg Asp Ile Val Arg Asp Arg Asp Ala Glu Ile Val Val
165 170 175

Lys Asp Asn Gly Arg Ser Cys Pro Pro Cys His Glu Val Cys Lys Gly
180 185 190

Arg Cys Trp Gly Pro Gly Ser Glu Asp Cys Gln Thr Leu Thr Lys Thr
195 200 205

Ile Cys Ala Pro Gln Cys Asn Gly His Cys Phe Gly Pro Asn Pro Asn
210 215 220

Gln Cys Cys His Asp Glu Cys Ala Gly Gly Cys Ser Gly Pro Gln Asp
225 230 235 240

Thr Asp Cys Phe Ala Cys Arg His Phe Asn Asp Ser Gly Ala Cys Val
245 250 255

Pro Arg Cys Pro Gln Pro Leu Val Tyr Asn Lys Leu Thr Phe Gln Leu
260 265 270

Glu Pro Asn Pro His Thr Lys Tyr Gln Tyr Gly Gly Val Cys Val Ala

275		280		285												
Ser	Cys 290	Pro	His	Asn	Phe	Val 295	Val	Asp	Gln	Thr	Ser	Cys	Val	Arg	Ala	
Cys	305	Pro	Pro	Asp	Lys	Met 310	Glu	Val	Asp	Lys	Asn 315	Gly	Leu	Lys	Met	Cys 320
Glu	Pro	Cys	Gly	Gly 325	Leu	Cys	Pro	Lys	Ala 330	Cys	Glu	Gly	Thr	Gly 335	Ser	
Gly	Ser	Arg	Phe 340	Gln	Thr	Val	Asp	Ser 345	Ser	Asn	Ile	Asp	Gly 350	Phe	Val	
Asn	Cys	Thr 355	Lys	Ile	Leu	Gly	Asn 360	Leu	Asp	Phe	Leu	Ile 365	Thr	Gly	Leu	
Asn	Gly 370	Asp	Pro	Trp	His	Lys 375	Ile	Pro	Ala	Leu	Asp 380	Pro	Glu	Lys	Leu	
Asn	Val	Phe	Arg	Thr	Val 390	Arg	Glu	Ile	Thr	Gly 395	Tyr	Leu	Asn	Ile	Gln 400	
Ser	Trp	Pro	Pro	His 405	Met	His	Asn	Phe	Ser 410	Val	Phe	Ser	Asn	Leu 415	Thr	
Thr	Ile	Gly	Gly 420	Arg	Ser	Leu	Tyr	Asn 425	Arg	Gly	Phe	Ser	Leu 430	Leu	Ile	
Met	Lys	Asn 435	Leu	Asn	Val	Thr	Ser 440	Leu	Gly	Phe	Arg	Ser 445	Leu	Lys	Glu	
Ile	Ser 450	Ala	Gly	Arg	Ile	Tyr 455	Ile	Ser	Ala	Asn	Arg 460	Gln	Leu	Cys	Tyr	
His 465	His	Ser	Leu	Asn	Trp 470	Thr	Lys	Val	Leu	Arg 475	Gly	Pro	Thr	Glu	Glu 480	
Arg	Leu	Asp	Ile	Lys 485	His	Asn	Arg	Pro	Arg 490	Arg	Asp	Cys	Val	Ala 495	Glu	
Gly	Lys	Val	Cys 500	Asp	Pro	Leu	Cys	Ser 505	Ser	Gly	Gly	Cys	Trp 510	Gly	Pro	
Gly	Pro	Gly 515	Gln	Cys	Leu	Ser	Cys 520	Arg	Asn	Tyr	Ser	Arg 525	Gly	Gly	Val	
Cys	Val 530	Thr	His	Cys	Asn	Phe 535	Leu	Asn	Gly	Glu	Pro 540	Arg	Glu	Phe	Ala	
His 545	Glu	Ala	Glu	Cys	Phe 550	Ser	Cys	His	Pro	Glu 555	Cys	Gln	Pro	Met	Glu 560	

Gly Thr Ala Thr Cys₅₆₅ Asn Gly Ser Gly Ser₅₇₀ Asp Thr Cys Ala Gln Cys₅₇₅
 Ala His Phe Arg₅₈₀ Asp Gly Pro His Cys₅₈₅ Val Ser Ser Cys Pro₅₉₀ His Gly
 Val Leu Gly₅₉₅ Ala Lys Gly Pro Ile₆₀₀ Tyr Lys Tyr Pro Asp₆₀₅ Val Gln Asn
 Glu Cys₆₁₀ Arg Pro Cys His Glu₆₁₅ Asn Cys Thr Gln Gly₆₂₀ Cys Lys Gly Pro
 Glu₆₂₅ Leu Gln Asp Cys Leu₆₃₀ Gly Gln Thr Leu Val₆₃₅ Leu Ile Gly Lys Thr₆₄₀
 His Leu Thr Met Ala₆₄₅ Leu Thr Val Ile Ala₆₅₀ Gly Leu Val Val Ile₆₅₅ Phe
 Met Met Leu Gly₆₆₀ Gly Thr Phe Leu Tyr₆₆₅ Trp Arg Gly Arg Arg₆₇₀ Ile Gln
 Asn Lys Arg₆₇₅ Ala Met Arg Arg Tyr₆₈₀ Leu Glu Arg Gly Glu₆₈₅ Ser Ile Glu
 Pro Leu₆₉₀ Asp Pro Ser Glu Lys₆₉₅ Ala Asn Lys Val Leu₇₀₀ Ala Arg Ile Phe
 Lys₇₀₅ Glu Thr Glu Leu Arg₇₁₀ Lys Leu Lys Val Leu₇₁₅ Gly Ser Gly Val Phe₇₂₀
 Gly Thr Val His Lys₇₂₅ Gly Val Trp Ile Pro₇₃₀ Glu Gly Glu Ser Ile₇₃₅ Lys
 Ile Pro Val Cys₇₄₀ Ile Lys Val Ile Glu₇₄₅ Asp Lys Ser Gly Arg₇₅₀ Gln Ser
 Phe Gln Ala₇₅₅ Val Thr Asp His Met₇₆₀ Leu Ala Ile Gly Ser₇₆₅ Leu Asp His
 Ala His₇₇₀ Ile Val Arg Leu Leu₇₇₅ Gly Leu Cys Pro Gly₇₈₀ Ser Ser Leu Gln
 Leu₇₈₅ Val Thr Gln Tyr Leu₇₉₀ Pro Leu Gly Ser Leu₇₉₅ Leu Asp His Val Arg₈₀₀
 Gln His Arg Gly Ala₈₀₅ Leu Gly Pro Gln Leu₈₁₀ Leu Leu Asn Trp Gly₈₁₅ Val
 Gln Ile Ala Lys₈₂₀ Gly Met Tyr Tyr Leu₈₂₅ Glu Glu His Gly Met₈₃₀ Val His
 Arg Asn Leu₈₃₅ Ala Ala Arg Asn Val₈₄₀ Leu Leu Lys Ser Pro₈₄₅ Ser Gln Val

Gln Val Ala Asp Phe Gly Val Ala Asp Leu Leu Pro Pro Asp Asp Lys
 850 855 860

Gln Leu Leu Tyr Ser Glu Ala Lys Thr Pro Ile Lys Trp Met Ala Leu
 865 870 875 880

Glu Ser Ile His Phe Gly Lys Tyr Thr His Gln Ser Asp Val Trp Ser
 885 890 895

Tyr Gly Val Thr Val Trp Glu Leu Met Thr Phe Gly Ala Glu Pro Tyr
 900 905 910

Ala Gly Leu Arg Leu Ala Glu Val Pro Asp Leu Leu Glu Lys Gly Glu
 915 920 925

Arg Leu Ala Gln Pro Gln Ile Cys Thr Ile Asp Val Tyr Met Val Met
 930 935 940

Val Lys Cys Trp Met Ile Asp Glu Asn Ile Arg Pro Thr Phe Lys Glu
 945 950 955 960

Leu Ala Asn Glu Phe Thr Arg Met Ala Arg Asp Pro Pro Arg Tyr Leu
 965 970 975

Val Ile Lys Arg Glu Ser Gly Pro Gly Ile Ala Pro Gly Pro Glu Pro
 980 985 990

His Gly Leu Thr Asn Lys Lys Leu Glu Glu Val Glu Leu Glu Pro Glu
 995 1000 1005

Leu Asp Leu Asp Leu Asp Leu Glu Ala Glu Glu Asp Asn Leu Ala
 1010 1015 1020

Thr Thr Thr Leu Gly Ser Ala Leu Ser Leu Pro Val Gly Thr Leu
 1025 1030 1035

Asn Arg Pro Arg Gly Ser Gln Ser Leu Leu Ser Pro Ser Ser Gly
 1040 1045 1050

Tyr Met Pro Met Asn Gln Gly Asn Leu Gly Glu Ser Cys Gln Glu
 1055 1060 1065

Ser Ala Val Ser Gly Ser Ser Glu Arg Cys Pro Arg Pro Val Ser
 1070 1075 1080

Leu His Pro Met Pro Arg Gly Cys Leu Ala Ser Glu Ser Ser Glu
 1085 1090 1095

Gly His Val Thr Gly Ser Glu Ala Glu Leu Gln Glu Lys Val Ser
 1100 1105 1110

Met Cys Arg Ser Arg Ser Arg Ser Arg Ser Pro Arg Pro Arg Gly
 1115 1120 1125

Asp	Ser	Ala	Tyr	His	Ser	Gln	Arg	His	Ser	Leu	Leu	Thr	Pro	Val
	1130					1135					1140			
Thr	Pro	Leu	Ser	Pro	Pro	Gly	Leu	Glu	Glu	Glu	Asp	Val	Asn	Gly
	1145					1150					1155			
Tyr	Val	Met	Pro	Asp	Thr	His	Leu	Lys	Gly	Thr	Pro	Ser	Ser	Arg
	1160					1165					1170			
Glu	Gly	Thr	Leu	Ser	Ser	Val	Gly	Leu	Ser	Ser	Val	Leu	Gly	Thr
	1175					1180					1185			
Glu	Glu	Glu	Asp	Glu	Asp	Glu	Glu	Tyr	Glu	Tyr	Met	Asn	Arg	Arg
	1190					1195					1200			
Arg	Arg	His	Ser	Pro	Pro	His	Pro	Pro	Arg	Pro	Ser	Ser	Leu	Glu
	1205					1210					1215			
Glu	Leu	Gly	Tyr	Glu	Tyr	Met	Asp	Val	Gly	Ser	Asp	Leu	Ser	Ala
	1220					1225					1230			
Ser	Leu	Gly	Ser	Thr	Gln	Ser	Cys	Pro	Leu	His	Pro	Val	Pro	Ile
	1235					1240					1245			
Met	Pro	Thr	Ala	Gly	Thr	Thr	Pro	Asp	Glu	Asp	Tyr	Glu	Tyr	Met
	1250					1255					1260			
Asn	Arg	Gln	Arg	Asp	Gly	Gly	Gly	Pro	Gly	Gly	Asp	Tyr	Ala	Ala
	1265					1270					1275			
Met	Gly	Ala	Cys	Pro	Ala	Ser	Glu	Gln	Gly	Tyr	Glu	Glu	Met	Arg
	1280					1285					1290			
Ala	Phe	Gln	Gly	Pro	Gly	His	Gln	Ala	Pro	His	Val	His	Tyr	Ala
	1295					1300					1305			
Arg	Leu	Lys	Thr	Leu	Arg	Ser	Leu	Glu	Ala	Thr	Asp	Ser	Ala	Phe
	1310					1315					1320			
Asp	Asn	Pro	Asp	Tyr	Trp	His	Ser	Arg	Leu	Phe	Pro	Lys	Ala	Asn
	1325					1330					1335			
Ala	Gln	Arg	Thr											
	1340													