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SEQUENCE LISTING

<110> F.Hoffmann-La Roche Ltd

<120> Protease-activated T cell bispecific molecules

<130> P33331

<160> 170

<170> PatentIn version 3.5

<210> 1

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<212> PRT

<213> Chimeric

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Asn Tyr Ala Asn Trp Val Gln Glu Lys Pro Gly Gln Ala Phe Arg Gly
35 40 45

Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Thr Pro Ala Arg Phe
50 55 60

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

Gln Pro Glu Asp Glu Ala Glu Tyr Tyr Cys Ala Leu Trp Tyr Ser Asn
85 90 95

Leu Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln Pro
100 105 110

Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu Leu
115 120 125

Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr Pro
130 135 140

Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys Ala
145 150 155 160

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

Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His Arg
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Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys Thr

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Gly Trp Ile Asn Thr Glu Thr Gly Glu Pro Ala Tyr Ala Asp Asp Phe
50 55 60

Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Phe Phe Cys
85 90 95

Ala His Pro Tyr Asp Tyr Asp Val Leu Asp Tyr Trp Gly Gln Gly Thr
100 105 110

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

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

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

Cys Arg Ala Ser Lys Ser Val Ser Thr Ser Asn Tyr Ser Tyr Ile His
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Lys Tyr
180 185 190

Val Ser Tyr Leu Glu Ser Gly Val Pro Ala Arg Phe Ser Gly Ser Gly
195 200 205

Ser Gly Thr Asp Phe Thr Leu Asn Ile His Pro Val Glu Glu Glu Asp
210 215 220

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Ala Ala Thr Tyr Tyr Cys Gln His Ser Arg Glu Phe Pro Trp Thr Phe
225 230 235 240

Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly
245 250 255

Gly Gly Ser Arg Gln Ala Arg Val Val Asn Gly Gly Gly Gly Gly Ser
260 265 270

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Leu Glu
275 280 285

Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
290 295 300

Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr Ala Met Asn Trp Val Arg
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Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Ile Arg Ser Lys
325 330 335

Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
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Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn
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Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Val Arg His Gly
370 375 380

Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe Ala Tyr Trp Gly Gln Gly
385 390 395 400

Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
405 410 415

Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu
420 425 430

Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
435 440 445

Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
450 455 460

Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
465 470 475 480

Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro
485 490 495

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Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Gly
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 Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser
 515 520 525
 Gly Gly Gly Leu Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala
 530 535 540
 Ala Ser Gly Phe Thr Phe Ser Asn Ala Trp Met Ser Trp Val Arg Gln
 545 550 555 560
 Ala Pro Gly Lys Gly Leu Glu Trp Val Gly Arg Ile Lys Ser Lys Thr
 565 570 575
 Asp Gly Gly Thr Thr Asp Tyr Ala Ala Pro Val Lys Gly Arg Phe Thr
 580 585 590
 Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser
 595 600 605
 Leu Lys Thr Glu Asp Thr Ala Val Tyr Tyr Cys Thr Thr Pro Trp Glu
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 Trp Ser Trp Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
 625 630 635 640
 Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser
 645 650 655
 Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
 660 665 670
 Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr
 675 680 685
 Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr
 690 695 700
 Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln
 705 710 715 720
 Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp
 725 730 735
 Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro
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 Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro
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Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
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Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
785 790 795 800

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
805 810 815

Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
820 825 830

Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
835 840 845

Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
850 855 860

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Cys Arg Asp
865 870 875 880

Glu Leu Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe
885 890 895

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
900 905 910

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
915 920 925

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
930 935 940

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
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Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
965 970

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<213> Chimeric

<400> 3

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Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala
 50 55 60
 Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
 65 70 75 80
 Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85 90 95
 Tyr Cys Thr Thr Pro Trp Glu Trp Ser Trp Tyr Asp Tyr Trp Gly Gln
 100 105 110
 Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 115 120 125
 Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
 130 135 140
 Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 145 150 155 160
 Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 165 170 175
 Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
 180 185 190
 Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
 195 200 205
 Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp
 210 215 220
 Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly
 225 230 235 240
 Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
 245 250 255
 Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
 260 265 270
 Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
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 Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg
 290 295 300

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Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
305 310 315 320

Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu
325 330 335

Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Cys
340 345 350

Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu
355 360 365

Ser Cys Ala Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
370 375 380

Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
385 390 395 400

Leu Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val Asp
405 410 415

Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
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Glu Ala Leu His Asn Arg Phe Thr Gln Lys Ser Leu Ser Leu Ser Pro
435 440 445

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

Gly Ile Ile Trp Gly Asp Gly Ser Thr Asn Tyr His Ser Ala Leu Ile
50 55 60

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

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Lys Leu Asn Ser Leu₈₅ Gln Thr Asp Asp Thr₉₀ Ala Thr Tyr Tyr Cys₉₅ Ala
 Lys Gly Ile Thr₁₀₀ Thr Val Val Asp Asp₁₀₅ Tyr Tyr Ala Met Asp₁₁₀ Tyr Trp
 Gly Gln Gly₁₁₅ Thr Ser Val Thr Val₁₂₀ Ser Ser Gly Gly₁₂₅ Gly Ser Gly
 Gly Gly₁₃₀ Gly Ser Gly Gly₁₃₅ Gly Ser Gly Gly₁₄₀ Gly Ser Asp Ile
 Gln₁₄₅ Met Thr Gln Ser Pro₁₅₀ Ala Ser Leu Ser Ala₁₅₅ Ser Val Gly Glu Thr₁₆₀
 Val Thr Ile Thr Cys₁₆₅ Arg Ala Ser Glu Asn₁₇₀ Ile Asp Ser Tyr Leu₁₇₅ Ala
 Trp Tyr Gln Gln₁₈₀ Lys Gln Gly Lys Ser₁₈₅ Pro Gln Leu Leu Val₁₉₀ Tyr Ala
 Ala Thr Phe₁₉₅ Leu Ala Asp Asp Val₂₀₀ Pro Ser Arg Phe Ser₂₀₅ Gly Ser Gly
 Ser Gly₂₁₀ Thr Gln Tyr Ser Leu₂₁₅ Lys Ile Asn Ser Leu₂₂₀ Gln Ser Glu Asp
 Val₂₂₅ Ala Arg Tyr Tyr Cys₂₃₀ Gln His Tyr Tyr Ser₂₃₅ Thr Pro Tyr Thr Phe₂₄₀
 Gly Cys Gly Thr Lys₂₄₅ Leu Glu Ile Lys Gly₂₅₀ Gly Gly Gly Ser Gly₂₅₅ Gly
 Gly Gly Ser Arg₂₆₀ Gln Ala Arg Val Val₂₆₅ Asn Gly Gly Gly Gly₂₇₀ Gly Ser
 Gly Gly Gly₂₇₅ Gly Ser Gly Gly₂₈₀ Gly Ser Glu Val Gln₂₈₅ Leu Leu Glu
 Ser Gly₂₉₀ Gly Gly Leu Val Gln₂₉₅ Pro Gly Gly Ser Leu₃₀₀ Arg Leu Ser Cys
 Ala Ala Ser Gly Phe Thr₃₁₀ Phe Ser Thr Tyr Ala₃₁₅ Met Asn Trp Val Arg₃₂₀
 Gln Ala Pro Gly Lys₃₂₅ Gly Leu Glu Trp Val₃₃₀ Ser Arg Ile Arg Ser₃₃₅ Lys
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Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn
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 Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Val Arg His Gly
 370 375 380
 Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe Ala Tyr Trp Gly Gln Gly
 385 390 395 400
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 405 410 415
 Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu
 420 425 430
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
 435 440 445
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
 450 455 460
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
 465 470 475 480
 Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro
 485 490 495
 Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Gly
 500 505 510
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser
 515 520 525
 Gly Gly Gly Leu Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala
 530 535 540
 Ala Ser Gly Phe Thr Phe Ser Asn Ala Trp Met Ser Trp Val Arg Gln
 545 550 555 560
 Ala Pro Gly Lys Gly Leu Glu Trp Val Gly Arg Ile Lys Ser Lys Thr
 565 570 575
 Asp Gly Gly Thr Thr Asp Tyr Ala Ala Pro Val Lys Gly Arg Phe Thr
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 Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser
 595 600 605
 Leu Lys Thr Glu Asp Thr Ala Val Tyr Tyr Cys Thr Thr Pro Trp Glu
 610 615 620

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 Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser
 645 650 655
 Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
 660 665 670
 Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr
 675 680 685
 Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr
 690 695 700
 Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln
 705 710 715 720
 Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp
 725 730 735
 Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro
 740 745 750
 Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro
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 Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
 770 775 780
 Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
 785 790 795 800
 Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
 805 810 815
 Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
 820 825 830
 Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
 835 840 845
 Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
 850 855 860
 Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Cys Arg Asp
 865 870 875 880
 Glu Leu Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe
 885 890 895

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Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
900 905 910

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
915 920 925

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
930 935 940

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
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Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
965 970

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<400> 5

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35 40 45

Gly Ile Ile Trp Gly Asp Gly Ser Thr Asn Tyr His Ser Ala Leu Ile
50 55 60

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

Lys Leu Asn Ser Leu Gln Thr Asp Asp Thr Ala Thr Tyr Tyr Cys Ala
85 90 95

Lys Gly Ile Thr Thr Val Val Asp Asp Tyr Tyr Ala Met Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

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

Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Asp Ser Tyr Leu Ala

Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val Tyr Ala
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 Ala Thr Phe Leu Ala Asp Asp Val Pro Ser Arg Phe Ser Gly Ser Gly
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 Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser Glu Asp
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 Val Ala Arg Tyr Tyr Cys Gln His Tyr Tyr Ser Thr Pro Tyr Thr Phe
 225 230 235 240
 Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly
 245 250 255
 Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Ser
 260 265 270
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Leu Glu
 275 280 285
 Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
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 Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr Ala Met Asn Trp Val Arg
 305 310 315 320
 Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Ile Arg Ser Lys
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 Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
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 Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn
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 Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Val Arg His Gly
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 Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe Ala Tyr Trp Gly Gln Gly
 385 390 395 400
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 405 410 415
 Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu
 420 425 430
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp

435

440

445

Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
 450 455 460
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
 465 470 475 480
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 Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Gly
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 Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser
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 Gly Gly Gly Leu Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala
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 Ala Ser Gly Phe Thr Phe Ser Asn Ala Trp Met Ser Trp Val Arg Gln
 545 550 555 560
 Ala Pro Gly Lys Gly Leu Glu Trp Val Gly Arg Ile Lys Ser Lys Thr
 565 570 575
 Asp Gly Gly Thr Thr Asp Tyr Ala Ala Pro Val Lys Gly Arg Phe Thr
 580 585 590
 Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser
 595 600 605
 Leu Lys Thr Glu Asp Thr Ala Val Tyr Tyr Cys Thr Thr Pro Trp Glu
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 Trp Ser Trp Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
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 Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser
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 Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
 660 665 670
 Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr
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 Ser Ile His Trp Val Lys Gln Ala Pro Gly Lys Cys Leu Lys Trp Met
 35 40 45
 Gly Trp Ile Asn Thr Glu Thr Gly Glu Pro Ala Tyr Ala Asp Asp Phe
 50 55 60
 Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
 65 70 75 80
 Leu Gln Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Phe Phe Cys
 85 90 95
 Ala His Pro Tyr Asp Tyr Asp Val Leu Asp Tyr Trp Gly Gln Gly Thr
 100 105 110
 Ser Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 115 120 125
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Thr Val Leu Thr Gln
 130 135 140
 Ser Pro Ala Ser Leu Gly Val Ser Leu Gly Gln Arg Ala Thr Ile Ser
 145 150 155 160
 Cys Arg Ala Ser Lys Ser Val Ser Thr Ser Asn Tyr Ser Tyr Ile His
 165 170 175
 Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Lys Tyr
 180 185 190
 Val Ser Tyr Leu Glu Ser Gly Val Pro Ala Arg Phe Ser Gly Ser Gly
 195 200 205
 Ser Gly Thr Asp Phe Thr Leu Asn Ile His Pro Val Glu Glu Glu Asp
 210 215 220
 Ala Ala Thr Tyr Tyr Cys Gln His Ser Arg Glu Phe Pro Trp Thr Phe
 225 230 235 240
 Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly
 245 250 255

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Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Ser
260 265 270

Gly Gly Gly Gly Ser Gly Gly Gly Ser Glu Val Gln Leu Leu Glu
275 280 285

Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
290 295 300

Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr Ala Met Asn Trp Val Arg
305 310 315 320

Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Ile Arg Ser Lys
325 330 335

Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
340 345 350

Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn
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Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Val Arg His Gly
370 375 380

Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe Ala Tyr Trp Gly Gln Gly
385 390 395 400

Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
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Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu
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Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
435 440 445

Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
450 455 460

Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
465 470 475 480

Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro
485 490 495

Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Gly
500 505 510

Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Val Glu Ser
515 520 525

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Gly Gly Gly Leu Val Lys Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala
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Ala Ser Gly Phe Thr Phe Ser Asn Ala Trp Met Ser Trp Val Arg Gln
545 550 555 560

Ala Pro Gly Lys Gly Leu Glu Trp Val Gly Arg Ile Lys Ser Lys Thr
565 570 575

Asp Gly Gly Thr Thr Asp Tyr Ala Ala Pro Val Lys Gly Arg Phe Thr
580 585 590

Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser
595 600 605

Leu Lys Thr Glu Asp Thr Ala Val Tyr Tyr Cys Thr Thr Pro Trp Glu
610 615 620

Trp Ser Trp Tyr Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
625 630 635 640

Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser
645 650 655

Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
660 665 670

Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr
675 680 685

Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr
690 695 700

Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln
705 710 715 720

Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp
725 730 735

Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro
740 745 750

Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro
755 760 765

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
770 775 780

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
785 790 795 800

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Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
805 810 815

Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
820 825 830

Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
835 840 845

Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
850 855 860

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Cys Arg Asp
865 870 875 880

Glu Leu Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe
885 890 895

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
900 905 910

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
915 920 925

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
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Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
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Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
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<210> 7
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Arg Ser Arg Gly Ser Phe Pro Gly Gly Gly Gly Ser
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<212> PRT

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 20 25 30

Gly Gly Gly Ser Gly Gly Gly Gly Ser
 35 40

<210> 10

<211> 36

<212> PRT

<213> Chimeric

<400> 10

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Arg Gln Ala Arg Val Val
 1 5 10 15

Asn Gly Val Pro Leu Ser Leu Tyr Ser Gly Gly Gly Gly Gly Ser Gly
 20 25 30

Gly Gly Gly Ser
 35

<210> 11

<211> 5

<212> PRT

<213> Chimeric

<400> 11

Thr Tyr Ala Met Asn
 1 5

<210> 12

<211> 19

<212> PRT

<213> Chimeric

<400> 12

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Arg Ile Arg Ser Lys Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp Ser
1 5 10 15

Val Lys Gly

<210> 13
<211> 14
<212> PRT
<213> Chimeric

<400> 13

His Gly Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe Ala Tyr
1 5 10

<210> 14
<211> 5
<212> PRT
<213> Chimeric

<400> 14

Asn Ala Trp Met Ser
1 5

<210> 15
<211> 19
<212> PRT
<213> Chimeric

<400> 15

Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala Pro
1 5 10 15

Val Lys Gly

<210> 16
<211> 9
<212> PRT
<213> Chimeric

<400> 16

Pro Trp Glu Trp Ser Trp Tyr Asp Tyr
1 5

<210> 17
<211> 14
<212> PRT
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<400> 17

Gly Ser Ser Thr Gly Ala Val Thr Thr Ser Asn Tyr Ala Asn
1 5 10

<210> 18

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<211> 7
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<400> 18

Gly Thr Asn Lys Arg Ala Pro
1 5

<210> 19
<211> 9
<212> PRT
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<400> 19

Ala Leu Trp Tyr Ser Asn Leu Trp Val
1 5

<210> 20
<211> 5
<212> PRT
<213> Chimeric

<400> 20

Asp Tyr Ser Ile His
1 5

<210> 21
<211> 17
<212> PRT
<213> Chimeric

<400> 21

Trp Ile Asn Thr Glu Thr Gly Glu Pro Ala Tyr Ala Asp Asp Phe Lys
1 5 10 15

Gly

<210> 22
<211> 9
<212> PRT
<213> Chimeric

<400> 22

Pro Tyr Asp Tyr Asp Val Leu Asp Tyr
1 5

<210> 23
<211> 15
<212> PRT
<213> Chimeric

<400> 23

Arg Ala Ser Lys Ser Val Ser Thr Ser Asn Tyr Ser Tyr Ile His
1 5 10 15

4486539_1

<210> 24
<211> 7
<212> PRT
<213> Chimeric

<400> 24

Tyr Val Ser Tyr Leu Glu Ser
1 5

<210> 25
<211> 9
<212> PRT
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<400> 25

Gln His Ser Arg Glu Phe Pro Trp Thr
1 5

<210> 26
<211> 5
<212> PRT
<213> Chimeric

<400> 26

Ser Tyr Gly Val Ser
1 5

<210> 27
<211> 16
<212> PRT
<213> Chimeric

<400> 27

Ile Ile Trp Gly Asp Gly Ser Thr Asn Tyr His Ser Ala Leu Ile Ser
1 5 10 15

<210> 28
<211> 14
<212> PRT
<213> Chimeric

<400> 28

Gly Ile Thr Thr Val Val Asp Asp Tyr Tyr Ala Met Asp Tyr
1 5 10

<210> 29
<211> 11
<212> PRT
<213> Chimeric

<400> 29

Arg Ala Ser Glu Asn Ile Asp Ser Tyr Leu Ala
1 5 10

<210> 30

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<211> 7
 <212> PRT
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<400> 30

Ala Ala Thr Phe Leu Ala Asp
 1 5

<210> 31
 <211> 9
 <212> PRT
 <213> Chimeric

<400> 31

Gln His Tyr Tyr Ser Thr Pro Tyr Thr
 1 5

<210> 32
 <211> 450
 <212> PRT
 <213> Chimeric

<400> 32

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Thr Phe Thr Asp Tyr
 20 25 30

Lys Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Tyr Phe Asn Pro Asn Ser Gly Tyr Ser Thr Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Leu Ser Pro Gly Gly Tyr Tyr Val Met Asp Ala Trp Gly Gln
 100 105 110

Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 115 120 125

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

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

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Trp Asn Ser Gly Ala₁₆₅ Leu Thr Ser Gly Val₁₇₀ His Thr Phe Pro Ala₁₇₅ Val
 Leu Gln Ser Ser₁₈₀ Gly Leu Tyr Ser Leu₁₈₅ Ser Ser Val Val Thr₁₉₀ Val Pro
 Ser Ser Ser₁₉₅ Leu Gly Thr Gln Thr₂₀₀ Tyr Ile Cys Asn Val₂₀₅ Asn His Lys
 Pro Ser₂₁₀ Asn Thr Lys Val Asp₂₁₅ Lys Lys Val Glu Pro₂₂₀ Lys Ser Cys Asp
 Lys₂₂₅ Thr His Thr Cys Pro₂₃₀ Pro Cys Pro Ala Pro₂₃₅ Glu Leu Leu Gly Gly₂₄₀
 Pro Ser Val Phe Leu₂₄₅ Phe Pro Pro Lys Pro₂₅₀ Lys Asp Thr Leu Met₂₅₅ Ile
 Ser Arg Thr Pro₂₆₀ Glu Val Thr Cys Val₂₆₅ Val Val Asp Val Ser₂₇₀ His Glu
 Asp Pro Glu₂₇₅ Val Lys Phe Asn Trp₂₈₀ Tyr Val Asp Gly Val₂₈₅ Glu Val His
 Asn Ala₂₉₀ Lys Thr Lys Pro Arg₂₉₅ Glu Glu Gln Tyr Asn₃₀₀ Ser Thr Tyr Arg
 Val₃₀₅ Val Ser Val Leu Thr₃₁₀ Val Leu His Gln Asp₃₁₅ Trp Leu Asn Gly Lys₃₂₀
 Glu Tyr Lys Cys Lys₃₂₅ Val Ser Asn Lys Ala₃₃₀ Leu Pro Ala Pro Ile₃₃₅ Glu
 Lys Thr Ile Ser₃₄₀ Lys Ala Lys Gly Gln₃₄₅ Pro Arg Glu Pro Gln₃₅₀ Val Tyr
 Thr Leu Pro₃₅₅ Pro Ser Arg Asp Glu₃₆₀ Leu Thr Lys Asn Gln₃₆₅ Val Ser Leu
 Thr Cys₃₇₀ Leu Val Lys Gly Phe₃₇₅ Tyr Pro Ser Asp Ile₃₈₀ Ala Val Glu Trp
 Glu₃₈₅ Ser Asn Gly Gln Pro₃₉₀ Glu Asn Asn Tyr Lys₃₉₅ Thr Thr Pro Pro Val₄₀₀
 Leu Asp Ser Asp Gly₄₀₅ Ser Phe Phe Leu Tyr₄₁₀ Ser Lys Leu Thr Val₄₁₅ Asp
 Lys Ser Arg Trp₄₂₀ Gln Gln Gly Asn Val₄₂₅ Phe Ser Cys Ser Val₄₃₀ Met His

4486539_1

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
435 440 445

Gly Lys
450

<210> 33
<211> 213
<212> PRT
<213> Chimeric

<400> 33

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

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

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

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Phe Pro Thr
85 90 95

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala Pro
100 105 110

Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr
115 120 125

Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys
130 135 140

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

Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser
165 170 175

Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala
180 185 190

Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe
195 200 205

Asn Arg Gly Glu Cys

210

<210> 34
 <211> 492
 <212> PRT
 <213> Chimeric

<400> 34

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

Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp Tyr
 20 25 30

Tyr Ile Asn Trp Ile Ile Gln Ser His Gly Lys Cys Leu Glu Trp Ile
 35 40 45

Gly Val Ile Asn Pro Asp Ser Gly Gly Thr Asp Tyr Asn Gln Asn Phe
 50 55 60

Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Thr Thr Ala Tyr
 65 70 75 80

Met Glu Leu Thr Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Arg Asp Ser Tyr Gly Phe Asp Tyr Trp Gly Gln Gly Thr Thr
 100 105 110

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

Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Val Leu Thr Gln Thr
 130 135 140

Pro Lys Phe Leu Leu Val Pro Ala Gly Asp Arg Ile Thr Met Thr Cys
 145 150 155 160

Lys Ala Ser Leu Ser Val Thr Asn Asp Val Ala Trp Tyr Gln Gln Lys
 165 170 175

Pro Gly Gln Ser Pro Lys Leu Leu Leu Tyr Tyr Ala Ser Asn Arg Asn
 180 185 190

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

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

Cys Gln Gln Asp Tyr Thr Ser Pro Pro Thr Phe Gly Cys Gly Thr Lys
 225 230 235 240

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Leu Glu Ile Arg Gly₂₄₅ Gly Gly Gly Ser Gly₂₅₀ Gly Gly Gly Ser Gly₂₅₅ Pro

Leu Gly Leu Trp₂₆₀ Ser Gln Gly Gly Gly₂₆₅ Gly Ser Gly Gly Gly₂₇₀ Gly Ser

Gly Gly Gly₂₇₅ Gly Ser Gly Gly Asp₂₈₀ Ile Gln Met Thr Gln₂₈₅ Ser Pro Ser

Ser Leu₂₉₀ Ser Ala Ser Val Gly₂₉₅ Asp Arg Val Thr Ile₃₀₀ Thr Cys Arg Ala

Ser₃₀₅ Gln Gly Ile Asn Asn₃₁₀ Tyr Leu Asn Trp Tyr₃₁₅ Gln Gln Lys Pro Gly₃₂₀

Lys Ala Pro Lys Arg₃₂₅ Leu Ile Tyr Asn Thr₃₃₀ Asn Asn Leu Gln Thr Gly₃₃₅

Val Pro Ser Arg₃₄₀ Phe Ser Gly Ser Gly₃₄₅ Ser Gly Thr Glu Phe₃₅₀ Thr Leu

Thr Ile Ser₃₅₅ Ser Leu Gln Pro Glu₃₆₀ Asp Phe Ala Thr Tyr₃₆₅ Tyr Cys Leu

Gln His₃₇₀ Asn Ser Phe Pro Thr₃₇₅ Phe Gly Gln Gly Thr₃₈₀ Lys Leu Glu Ile

Lys₃₈₅ Arg Thr Val Ala Ala₃₉₀ Pro Ser Val Phe Ile₃₉₅ Phe Pro Pro Ser Asp₄₀₀

Glu Gln Leu Lys Ser₄₀₅ Gly Thr Ala Ser Val₄₁₀ Val Cys Leu Leu Asn₄₁₅ Asn

Phe Tyr Pro Arg₄₂₀ Glu Ala Lys Val Gln₄₂₅ Trp Lys Val Asp Asn₄₃₀ Ala Leu

Gln Ser Gly₄₃₅ Asn Ser Gln Glu Ser₄₄₀ Val Thr Glu Gln Asp₄₄₅ Ser Lys Asp

Ser Thr₄₅₀ Tyr Ser Leu Ser Ser₄₅₅ Thr Leu Thr Leu Ser₄₆₀ Lys Ala Asp Tyr

Glu₄₆₅ Lys His Lys Val Tyr₄₇₀ Ala Cys Glu Val Thr₄₇₅ His Gln Gly Leu Ser₄₈₀

Ser Pro Val Thr Lys₄₈₅ Ser Phe Asn Arg Gly₄₉₀ Glu Cys

<210> 35

<211> 35

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<212> PRT
<213> Chimeric

<400> 35

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Pro Leu Gly Leu Trp
1 5 10 15

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

Ser Gly Gly
35

<210> 36
<211> 8
<212> PRT
<213> Chimeric

<400> 36

Arg Gln Ala Arg Val Val Asn Gly
1 5

<210> 37
<211> 18
<212> PRT
<213> Chimeric

<400> 37

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

Phe Pro

<210> 38
<211> 21
<212> PRT
<213> Chimeric

<220>
<221> X
<222> (9)..(13)
<223> X is an amino acid

<220>
<221> X
<222> (9)..(13)
<223> X or Xaa is an amino acid

<400> 38

Arg Gln Ala Arg Val Val Asn Gly Xaa Xaa Xaa Xaa Xaa Val Pro Leu
1 5 10 15

Ser Leu Tyr Ser Gly
20

4486539_1

<210> 39
 <211> 16
 <212> PRT
 <213> Chimeric

<400> 39

Arg Gln Ala Arg Val Val Asn Gly Val Pro Leu Ser Leu Tyr Ser Gly
 1 5 10 15

<210> 40
 <211> 7
 <212> PRT
 <213> Chimeric

<400> 40

Pro Leu Gly Leu Trp Ser Gln
 1 5

<210> 41
 <211> 249
 <212> PRT
 <213> Chimeric

<400> 41

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

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

Ser Ile His Trp Val Lys Gln Ala Pro Gly Lys Cys Leu Lys Trp Met
 35 40 45

Gly Trp Ile Asn Thr Glu Thr Gly Glu Pro Ala Tyr Ala Asp Asp Phe
 50 55 60

Lys Gly Arg Phe Ala Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr
 65 70 75 80

Leu Gln Ile Asn Asn Leu Lys Asn Glu Asp Thr Ala Thr Phe Phe Cys
 85 90 95

Ala His Pro Tyr Asp Tyr Asp Val Leu Asp Tyr Trp Gly Gln Gly Thr
 100 105 110

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

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

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

4486539_1

Cys Arg Ala Ser Lys₁₆₅ Ser Val Ser Thr Ser₁₇₀ Asn Tyr Ser Tyr Ile₁₇₅ His

Trp Tyr Gln Gln₁₈₀ Lys Pro Gly Gln₁₈₅ Pro Pro Lys Leu Leu Ile₁₉₀ Lys Tyr

Val Ser Tyr₁₉₅ Leu Glu Ser Gly Val₂₀₀ Pro Ala Arg Phe Ser₂₀₅ Gly Ser Gly

Ser Gly₂₁₀ Thr Asp Phe Thr Leu₂₁₅ Asn Ile His Pro Val₂₂₀ Glu Glu Glu Asp

Ala₂₂₅ Ala Thr Tyr Tyr Cys₂₃₀ Gln His Ser Arg Glu₂₃₅ Phe Pro Trp Thr Phe₂₄₀

Gly Cys Gly Thr Lys₂₄₅ Leu Glu Ile Lys

<210> 42
<211> 249
<212> PRT
<213> Chimeric

<400> 42

Gln Val Gln Leu Lys₅ Glu Ser Gly Pro Gly₁₀ Leu Val Ala Pro Ser₁₅ Gln

Ser Leu Ser Ile₂₀ Thr Cys Thr Val Ser₂₅ Gly Phe Ser Leu Thr₃₀ Ser Tyr

Gly Val Ser₃₅ Trp Val Arg Gln₄₀ Pro Pro Gly Lys Cys Leu₄₅ Glu Trp Leu

Gly Ile₅₀ Ile Trp Gly Asp Gly₅₅ Ser Thr Asn Tyr His₆₀ Ser Ala Leu Ile

Ser Arg Leu Ser Ile Ser₇₀ Lys Asp Asn Ser Lys₇₅ Ser Gln Val Phe Leu₈₀

Lys Leu Asn Ser Leu₈₅ Gln Thr Asp Asp Thr₉₀ Ala Thr Tyr Tyr Cys₉₅ Ala

Lys Gly Ile Thr₁₀₀ Thr Val Val Asp Asp₁₀₅ Tyr Tyr Ala Met Asp₁₁₀ Tyr Trp

Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly₁₂₅ Gly Gly Ser Gly

Gly Gly₁₃₀ Gly Ser Gly Gly₁₃₅ Gly Ser Gly Gly₁₄₀ Gly Ser Asp Ile

4486539_1

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

Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Asp Ser Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val Tyr Ala
180 185 190

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

Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser Glu Asp
210 215 220

Val Ala Arg Tyr Tyr Cys Gln His Tyr Tyr Ser Thr Pro Tyr Thr Phe
225 230 235 240

Gly Cys Gly Thr Lys Leu Glu Ile Lys
245

<210> 43
<211> 125
<212> PRT
<213> Chimeric

<400> 43

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

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr
20 25 30

Ala Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ser Arg Ile Arg Ser Lys Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp
50 55 60

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
65 70 75 80

Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr
85 90 95

Tyr Cys Val Arg His Gly Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe
100 105 110

Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120 125

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<210> 44
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<400> 44

Thr Tyr Ala Met Asn
1 5

<210> 45
<211> 19
<212> PRT
<213> Chimeric

<400> 45

Arg Ile Arg Ser Lys Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp Ser
1 5 10 15

Val Lys Gly

<210> 46
<211> 14
<212> PRT
<213> Chimeric

<400> 46

His Gly Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe Ala Tyr
1 5 10

<210> 47
<211> 120
<212> PRT
<213> Chimeric

<400> 47

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

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Ala
20 25 30

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

Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala
50 55 60

Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
65 70 75 80

Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
85 90 95

4486539_1

Tyr Cys Thr Thr Pro Trp Glu Trp Ser Trp Tyr Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 48
<211> 5
<212> PRT
<213> Chimeric

<400> 48

Asp Tyr Tyr Ile Asn
1 5

<210> 49
<211> 17
<212> PRT
<213> Chimeric

<400> 49

Val Ile Asn Pro Asp Ser Gly Gly Thr Asp Tyr Asn Gln Asn Phe Lys
1 5 10 15

Gly

<210> 50
<211> 8
<212> PRT
<213> Chimeric

<400> 50

Arg Asp Ser Tyr Gly Phe Asp Tyr
1 5

<210> 51
<211> 11
<212> PRT
<213> Chimeric

<400> 51

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

<210> 52
<211> 7
<212> PRT
<213> Chimeric

<400> 52

Tyr Ala Ser Asn Arg Asn Ala
1 5

<210> 53

4486539_1

<211> 9
 <212> PRT
 <213> Chimeric

<400> 53

Gln Gln Asp Tyr Thr Ser Pro Pro Thr
 1 5

<210> 54
 <211> 207
 <212> PRT
 <213> Homo sapiens

<400> 54

Met Gln Ser Gly Thr His Trp Arg Val Leu Gly Leu Cys Leu Leu Ser
 1 5 10 15

Val Gly Val Trp Gly Gln Asp Gly Asn Glu Glu Met Gly Gly Ile Thr
 20 25 30

Gln Thr Pro Tyr Lys Val Ser Ile Ser Gly Thr Thr Val Ile Leu Thr
 35 40 45

Cys Pro Gln Tyr Pro Gly Ser Glu Ile Leu Trp Gln His Asn Asp Lys
 50 55 60

Asn Ile Gly Gly Asp Glu Asp Asp Lys Asn Ile Gly Ser Asp Glu Asp
 65 70 75 80

His Leu Ser Leu Lys Glu Phe Ser Glu Leu Glu Gln Ser Gly Tyr Tyr
 85 90 95

Val Cys Tyr Pro Arg Gly Ser Lys Pro Glu Asp Ala Asn Phe Tyr Leu
 100 105 110

Tyr Leu Arg Ala Arg Val Cys Glu Asn Cys Met Glu Met Asp Val Met
 115 120 125

Ser Val Ala Thr Ile Val Ile Val Asp Ile Cys Ile Thr Gly Gly Leu
 130 135 140

Leu Leu Leu Val Tyr Tyr Trp Ser Lys Asn Arg Lys Ala Lys Ala Lys
 145 150 155 160

Pro Val Thr Arg Gly Ala Gly Ala Gly Gly Arg Gln Arg Gly Gln Asn
 165 170 175

Lys Glu Arg Pro Pro Pro Val Pro Asn Pro Asp Tyr Glu Pro Ile Arg
 180 185 190

Lys Gly Gln Arg Asp Leu Tyr Ser Gly Leu Asn Gln Arg Arg Ile
 195 200 205

4486539_1

<210> 55
 <211> 109
 <212> PRT
 <213> Chimeric

<400> 55

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

Thr Val Thr Leu Thr Cys Gly Ser Ser Thr Gly Ala Val Thr Thr Ser
 20 25 30

Asn Tyr Ala Asn Trp Val Gln Glu Lys Pro Gly Gln Ala Phe Arg Gly
 35 40 45

Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Thr Pro Ala Arg Phe
 50 55 60

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

Gln Pro Glu Asp Glu Ala Glu Tyr Tyr Cys Ala Leu Trp Tyr Ser Asn
 85 90 95

Leu Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
 100 105

<210> 56
 <211> 5
 <212> PRT
 <213> Chimeric

<400> 56

Asp Tyr Lys Ile His
 1 5

<210> 57
 <211> 17
 <212> PRT
 <213> Chimeric

<400> 57

Tyr Phe Asn Pro Asn Ser Gly Tyr Ser Thr Tyr Ala Gln Lys Phe Gln
 1 5 10 15

Gly

<210> 58
 <211> 11
 <212> PRT
 <213> Chimeric

<400> 58

4486539_1

Leu Ser Pro Gly Gly Tyr Tyr Val Met Asp Ala
 1 5 10

<210> 59
 <211> 11
 <212> PRT
 <213> Chimeric

<400> 59

Arg Ala Ser Gln Gly Ile Asn Asn Tyr Leu Asn
 1 5 10

<210> 60
 <211> 7
 <212> PRT
 <213> Chimeric

<400> 60

Asn Thr Asn Asn Leu Gln Thr
 1 5

<210> 61
 <211> 8
 <212> PRT
 <213> Chimeric

<400> 61

Leu Gln His Asn Ser Phe Pro Thr
 1 5

<210> 62
 <211> 648
 <212> DNA
 <213> Chimeric

<400> 62
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 acatgtggca gttctacagg cgccgtgacc accagcaact acgccaactg ggtgcaggaa 120
 aagcccggcc aggccttcag aggactgatc ggcggcacca acaagagagc ccctggcacc 180
 cctgccagat tcagcggatc tctgctggga ggaaaggccg ccctgacact gtctggcgcc 240
 cagccagaag atgaggccga gtactactgc gccctgtggt acagcaacct gtgggtgttc 300
 ggcggaggca ccaagctgac agtcctaggt caaccaagg ctgccccag cgtgaccctg 360
 ttcccccca gcagcgagga actgcaggcc aacaaggcca ccctggtctg cctgatcagc 420
 gacttctacc caggcgccgt gaccgtggcc tggaaggccg acagcagccc cgtgaaggcc 480
 ggcgtggaga ccaccacccc cagcaagcag agcaacaaca agtacgccgc cagcagctac 540
 ctgagcctga ccccgagca gtggaagagc cacaggtcct acagctgcca ggtgaccac 600
 gagggcagca ccgtggagaa aaccgtggcc cccaccgagt gcagctga 648

<210> 63

<211> 2916
 <212> DNA
 <213> Chimeric

<400> 63
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 cctggcaagt gcctgaagt gatgggctgg atcaacaccg agacaggcga gcccgcctac 180
 gccgacgatt tcaagggcag attcgccttc agcctggaaa ccagcgccag caccgcctac 240
 ctgcagatca acaacctgaa gaacgaggac accgccacct ttttctgcgc ccaccctac 300
 gactacgacg tgctggatta ttggggccag ggcaccagcg tgaccgtgtc tagcggaggc 360
 ggaggatctg gcggcggagg aagtggcgga gggggatctg ggggaggcgg atctgatacc 420
 gtgctgacac agagccctgc cagcctggga gtgtccctgg gacagagagc caccatcagc 480
 tgtcggggcca gcaagagcgt gtccaccagc aactacagct atatccactg gtatcagcag 540
 aagcccggcc agcccccaa gctgctgata aaatacgtgt cctacctgga aagcggcgtg 600
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gtgctggact	ccgacggctc	cttcttcctc	tacagcaagc	tcaccgtgga	caagagcagg	2820
tggcagcagg	ggaacgtctt	ctcatgctcc	gtgatgcatg	aggctctgca	caaccactac	2880
acgcagaaga	gcctctccct	gtctccgggt	aaatga			2916

<210> 68
 <211> 99
 <212> DNA
 <213> Chimeric

4486539_1

<400> 68
 ggcgggggag gctccggagg cggcggaagt agacaggcca gagtcgtgaa cgggggaggg 60
 gggggaagtg ggggcggagg cagtgggggc ggaggatcc 99

<210> 69
 <211> 1350
 <212> DNA
 <213> Chimeric

<400> 69
 caggtgcagc tgggtccagag cggcgccgag gtgaagaaac ccgggtcctc tgtcaagggtg 60
 tcatgcaagg ctagcggatt cacctttaca gactacaaaa tccactgggt taggcaggca 120
 cctggccaag gactcgaatg gatgggggtat ttcaacccaa attccggcta ctctacctat 180
 gcccagaagt ttcagggaag agtgactatt acagctgata agagtaccag cactgcatac 240
 atggagctgt cctctcttcg ctgagaggac accgccgtct actattgtgc tcggctgagc 300
 cccggtggct actatgtgat ggatgcatgg gggcagggaa caaccgtaac agtgtcctct 360
 gcgtcgacta agggcccttc agtttttcca ctgcggccca gtagcaagtc cacatctggg 420
 ggtaccgctg ccctgggctg ccttgtgaaa gactatttcc ctgaaccagt cactgtgtca 480
 tggaatagcg gagccctgac ctccggtgta cacacattcc ccgctgtgtt gcagtctagt 540
 ggcctgtaca gcctctcctc tgttgtgacc gtcccttcaa gctccctggg gacacagacc 600
 tataatctgta acgtgaatca taagccatct aacactaaag tagataaaaa agtggagccc 660
 aagagttgcg acaaaacaca cacctgtccc ccttgcccag ccccgagct tctgggagggc 720
 cctagcgtct ttctcttccc acccaagcct aaggatactc tgatgatatc caggacccca 780
 gaagttacat gcgtggctcg ggacgtctca caggaggacc ccgaagtga atttaactgg 840
 tacgttgatg gtgtggaagt ccataatgcc aagaccaagc ctagagagga gcaatacaac 900
 agtacatatc gcgtggtaag cgtgttgacc gttctccacc aggactggct caatgggaaa 960
 gaatacaagt gtaaagtgtc caacaaagct ctgccagcac ccatcgagaa gactatttct 1020
 aaggccaaag gccagccccg ggagcctcag gtctatacac ttccaccctc aagggatgaa 1080
 ctgaccaaga accaagtgag cttgacttgc ctggtaaagg ggttctaccc ttccgacatc 1140
 gctgtggagt gggagtctaa tggacaacca gaaaacaatt acaaaaccac accccctgtc 1200
 ctcgacagtg atggcagctt tttcctgtat agcaaactta ccgttgacaa gtccagatgg 1260
 cagcagggaa acgtgttctc atgtagcgtc atgcacgaag ctttgcataa cactacaca 1320
 cagaaaagcc tcagcctgag tccagggaag 1350

<210> 70
 <211> 639
 <212> DNA
 <213> Chimeric

<400> 70
 gacatccaaa tgaccagtc acctagtagc ctctccgcct ctgttggcga cagggtgaca 60

4486539_1

attacatgca gagcttcaca gggatatcaac aattacctga actgggtatca gcagaaacca	120
gggaaggccc ccaagcgctt gatataataac accaataacc tgcaaaactgg cgtccctagc	180
cggttctccg gatctggtag tggcaccgaa tttacactca ccatcagctc cctgcagcca	240
gaggatttcg ccacatacta ttgtcttcag cataattctt tccccacctt tgggcaagga	300
actaaactgg agattaagcg tactgtcgcc gctccctctg tgttcatttt tcctccaagt	360
gatgagcagc tcaaaagcgg taccgcatcc gttgtgtgcc tgcttaacaa cttctatccc	420
cggaagcca aggtccaatg gaagggtggac aatgctctgc agtcaggaaa cagtcaggag	480
agcgtaaccg agcaggattc caaagactct acttactcat tgagctccac cctgacactc	540
tctaaggcag actatgaaaa gcataaagtg tacgcctgtg aggttaccca ccagggcctg	600
agtagccctg tgacaaagtc cttcaatagg ggagagtgc	639

<210> 71
 <211> 1476
 <212> DNA
 <213> Chimeric

<400> 71	
gaggttcagc tggagcagtc aggacctgtg ctggtgaagc ctgggacttc agtgaagatg	60
tcctgtaagg cttctggata cacattcact gactactata taaactggat aatacagagc	120
catggaaagt gtcttgagtg gattggagtt attaatcctg acagcgggtg tactgactac	180
aaccagaact tcaagggcaa ggccacattg actgttgaca agtcctccac cacagcctac	240
atggaactca ctagcctgac atctgaggac tctgcagtct attattgtgc aagaagggat	300
tcttacggct ttgactactg gggccaaggc accactctca cagtctcctc aggcggaggt	360
ggctcagggg gaggcggtag cggcgagggt ggctcagggg gaggcggtag cgacattgtg	420
ctgaccaga ctcccaaatt cctgcttgtg ccagcaggag acaggattac catgacctgc	480
aaggccagtc tgagtgtgac taatgatgta gcttgggtatc aacagaaacc agggcagtct	540
cctaaactgc tgttatacta tgcattcaat cgcaacgctg gagtccctga tcgcttcact	600
ggcagtggat atgggacgga tttcactttc accatcacca ctttgcaggc tgaagacctg	660
gcagtttatt tctgtcagca ggattatacc tctcctccga cgttcggttg tggcaccaag	720
ctagaaatcc gtggtggcgg cggttctggc ggaggggggt ctggccccct ggggctatgg	780
agccagggtg gcggcggttc tggcgagggt ggttctggcg gtggtggctc tggcggtgac	840
atccaaatga cccagtcacc tagtagcctc tccgcctctg ttggcgacag ggtgacaatt	900
acatgcagag cttcacaggg tatcaacaat tacctgaact ggtatcagca gaaaccaggg	960
aaggcccca agcgcttgat atataacacc aataacctgc aaactggcgt ccctagccgg	1020
ttctccggat ctggtagtgg caccgaattt acactcacca tcagctccct gcagccagag	1080
gatttcgcca catactattg tcttcagcat aattctttcc ccacctttgg gcaaggaact	1140
aaactggaga ttaagcgtag tgtcgccgct ccctctgtgt tcatttttcc tccaagtgat	1200
gagcagctca aaagcggtag cgcattccgt gtgtgcctgc ttaacaactt ctatccccgg	1260

4486539_1

gaagccaagg tccaatggaa ggtggacaat gctctgcagt caggaaacag tcaggagagc 1320
 gtaaccgagc aggattccaa agactctact tactcattga gctccaccct gacactctct 1380
 aaggcagact atgaaaagca taaagtgtac gcctgtgagg ttaccaccca gggcctgagt 1440
 agccctgtga caaagtcctt caatagggga gagtgc 1476

<210> 72
 <211> 971
 <212> PRT
 <213> Chimeric

<400> 72

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

Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Ser Tyr
 20 25 30

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

Gly Ile Ile Trp Gly Asp Gly Ser Thr Asn Tyr His Ser Ala Leu Ile
 50 55 60

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

Lys Leu Asn Ser Leu Gln Thr Asp Asp Thr Ala Thr Tyr Tyr Cys Ala
 85 90 95

Lys Gly Ile Thr Thr Val Val Asp Asp Tyr Tyr Ala Met Asp Tyr Trp
 100 105 110

Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
 130 135 140

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

Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Asp Ser Tyr Leu Ala
 165 170 175

Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val Tyr Ala
 180 185 190

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

4486539_1

Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser Glu Asp
 210 215 220
 Val Ala Arg Tyr Tyr Cys Gln His Tyr Tyr Ser Thr Pro Tyr Thr Phe
 225 230 235 240
 Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Val His
 245 250 255
 Met Pro Leu Gly Phe Leu Gly Pro Arg Gln Ala Arg Val Val Asn Gly
 260 265 270
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Leu Glu
 275 280 285
 Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
 290 295 300
 Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr Ala Met Asn Trp Val Arg
 305 310 315 320
 Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Ile Arg Ser Lys
 325 330 335
 Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
 340 345 350
 Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn
 355 360 365
 Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Val Arg His Gly
 370 375 380
 Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe Ala Tyr Trp Gly Gln Gly
 385 390 395 400
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 405 410 415
 Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu
 420 425 430
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
 435 440 445
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
 450 455 460
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
 465 470 475 480

4486539_1

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

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Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe Pro
755 760 765

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
770 775 780

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
785 790 795 800

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
805 810 815

Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
820 825 830

Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
835 840 845

Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
850 855 860

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Cys Arg Asp
865 870 875 880

Glu Leu Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe
885 890 895

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
900 905 910

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
915 920 925

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
930 935 940

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
945 950 955 960

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
965 970

<210> 73
<211> 689
<212> PRT
<213> Chimeric

<400> 73

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

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Ala
 20 25 30
 Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Gly Arg Ile Lys Ser Lys Thr Asp Gly Gly Thr Thr Asp Tyr Ala Ala
 50 55 60
 Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr
 65 70 75 80
 Leu Tyr Leu Gln Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Tyr
 85 90 95
 Tyr Cys Thr Thr Pro Trp Glu Trp Ser Trp Tyr Asp Tyr Trp Gly Gln
 100 105 110
 Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 115 120 125
 Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
 130 135 140
 Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 145 150 155 160
 Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 165 170 175
 Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
 180 185 190
 Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
 195 200 205
 Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp
 210 215 220
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Leu Glu
 225 230 235 240
 Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
 245 250 255
 Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr Ala Met Asn Trp Val Arg
 260 265 270
 Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Ile Arg Ser Lys
 275 280 285

4486539_1

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

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Tyr Lys Cys Lys Val₅₆₅ Ser Asn Lys Ala Leu₅₇₀ Gly Ala Pro Ile Glu₅₇₅ Lys

Thr Ile Ser Lys₅₈₀ Ala Lys Gly Gln Pro₅₈₅ Arg Glu Pro Gln Val₅₉₀ Tyr Thr

Leu Pro Pro₅₉₅ Cys Arg Asp Glu Leu₆₀₀ Thr Lys Asn Gln Val₆₀₅ Ser Leu Trp

Cys Leu₆₁₀ Val Lys Gly Phe Tyr₆₁₅ Pro Ser Asp Ile Ala₆₂₀ Val Glu Trp Glu

Ser₆₂₅ Asn Gly Gln Pro Glu₆₃₀ Asn Asn Tyr Lys Thr₆₃₅ Thr Pro Pro Val Leu₆₄₀

Asp Ser Asp Gly Ser₆₄₅ Phe Phe Leu Tyr Ser₆₅₀ Lys Leu Thr Val Asp₆₅₅ Lys

Ser Arg Trp Gln₆₆₀ Gln Gly Asn Val Phe₆₆₅ Ser Cys Ser Val Met₆₇₀ His Glu

Ala Leu His₆₇₅ Asn His Tyr Thr Gln₆₈₀ Lys Ser Leu Ser Leu₆₈₅ Ser Pro Gly

Lys

<210> 74

<211> 497

<212> PRT

<213> Chimeric

<400> 74

Gln Val Gln Leu Lys₅ Glu Ser Gly Pro Gly₁₀ Leu Val Ala Pro Ser₁₅ Gln

Ser Leu Ser Ile₂₀ Thr Cys Thr Val Ser₂₅ Gly Phe Ser Leu Thr₃₀ Ser Tyr

Gly Val Ser₃₅ Trp Val Arg Gln Pro₄₀ Pro Gly Lys Cys Leu₄₅ Glu Trp Leu

Gly Ile₅₀ Ile Trp Gly Asp Gly₅₅ Ser Thr Asn Tyr His₆₀ Ser Ala Leu Ile

Ser Arg Leu Ser Ile Ser₇₀ Lys Asp Asn Ser Lys₇₅ Ser Gln Val Phe Leu₈₀

Lys Leu Asn Ser Leu₈₅ Gln Thr Asp Asp Thr₉₀ Ala Thr Tyr Tyr Cys₉₅ Ala

Lys Gly Ile Thr Thr Val Val Asp Asp Tyr Tyr Ala Met Asp Tyr Trp

100

105

110

Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
 115 120 125
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
 130 135 140
 Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly Glu Thr
 145 150 155 160
 Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Asp Ser Tyr Leu Ala
 165 170 175
 Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val Tyr Ala
 180 185 190
 Ala Thr Phe Leu Ala Asp Asp Val Pro Ser Arg Phe Ser Gly Ser Gly
 195 200 205
 Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser Glu Asp
 210 215 220
 Val Ala Arg Tyr Tyr Cys Gln His Tyr Tyr Ser Thr Pro Tyr Thr Phe
 225 230 235 240
 Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly
 245 250 255
 Gly Gly Ser Arg Gln Ala Arg Val Val Asn Gly Gly Gly Gly Gly Ser
 260 265 270
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Val Val Thr Gln
 275 280 285
 Glu Pro Ser Leu Thr Val Ser Pro Gly Gly Thr Val Thr Leu Thr Cys
 290 295 300
 Gly Ser Ser Thr Gly Ala Val Thr Thr Ser Asn Tyr Ala Asn Trp Val
 305 310 315 320
 Gln Glu Lys Pro Gly Gln Ala Phe Arg Gly Leu Ile Gly Gly Thr Asn
 325 330 335
 Lys Arg Ala Pro Gly Thr Pro Ala Arg Phe Ser Gly Ser Leu Leu Gly
 340 345 350
 Gly Lys Ala Ala Leu Thr Leu Ser Gly Ala Gln Pro Glu Asp Glu Ala
 355 360 365
 Glu Tyr Tyr Cys Ala Leu Trp Tyr Ser Asn Leu Trp Val Phe Gly Gly

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380

370

375

Gly Thr Lys Leu Thr Val Leu Gly Gln Pro Lys Ala Ala Pro Ser Val
385 390 395 400

Thr Leu Phe Pro Pro Ser Ser Glu Glu Leu Gln Ala Asn Lys Ala Thr
405 410 415

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

Trp Lys Ala Asp Ser Ser Pro Val Lys Ala Gly Val Glu Thr Thr Thr
435 440 445

Pro Ser Lys Gln Ser Asn Asn Lys Tyr Ala Ala Ser Ser Tyr Leu Ser
450 455 460

Leu Thr Pro Glu Gln Trp Lys Ser His Arg Ser Tyr Ser Cys Gln Val
465 470 475 480

Thr His Glu Gly Ser Thr Val Glu Lys Thr Val Ala Pro Thr Glu Cys
485 490 495

Ser

<210> 75
<211> 497
<212> PRT
<213> Chimeric

<400> 75

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

Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Ser Tyr
20 25 30

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

Gly Ile Ile Trp Gly Asp Gly Ser Thr Asn Tyr His Ser Ala Leu Ile
50 55 60

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

Lys Leu Asn Ser Leu Gln Thr Asp Asp Thr Ala Thr Tyr Tyr Cys Ala
85 90 95

Lys Gly Ile Thr Thr Val Val Asp Asp Tyr Tyr Ala Met Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
 115 120 125
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
 130 135 140
 Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly Glu Thr
 145 150 155 160
 Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Asp Ser Tyr Leu Ala
 165 170 175
 Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val Tyr Ala
 180 185 190
 Ala Thr Phe Leu Ala Asp Asp Val Pro Ser Arg Phe Ser Gly Ser Gly
 195 200 205
 Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser Glu Asp
 210 215 220
 Val Ala Arg Tyr Tyr Cys Gln His Tyr Tyr Ser Thr Pro Tyr Thr Phe
 225 230 235 240
 Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly
 245 250 255
 Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser
 260 265 270
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Val Val Thr Gln
 275 280 285
 Glu Pro Ser Leu Thr Val Ser Pro Gly Gly Thr Val Thr Leu Thr Cys
 290 295 300
 Gly Ser Ser Thr Gly Ala Val Thr Thr Ser Asn Tyr Ala Asn Trp Val
 305 310 315 320
 Gln Glu Lys Pro Gly Gln Ala Phe Arg Gly Leu Ile Gly Gly Thr Asn
 325 330 335
 Lys Arg Ala Pro Gly Thr Pro Ala Arg Phe Ser Gly Ser Leu Leu Gly
 340 345 350
 Gly Lys Ala Ala Leu Thr Leu Ser Gly Ala Gln Pro Glu Asp Glu Ala
 355 360 365
 Glu Tyr Tyr Cys Ala Leu Trp Tyr Ser Asn Leu Trp Val Phe Gly Gly
 370 375 380

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Gly Thr Lys Leu Thr Val Leu Gly Gln Pro Lys Ala Ala Pro Ser Val
 385 390 395 400
 Thr Leu Phe Pro Pro Ser Ser Glu Glu Leu Gln Ala Asn Lys Ala Thr
 405 410 415
 Leu Val Cys Leu Ile Ser Asp Phe Tyr Pro Gly Ala Val Thr Val Ala
 420 425 430
 Trp Lys Ala Asp Ser Ser Pro Val Lys Ala Gly Val Glu Thr Thr Thr
 435 440 445
 Pro Ser Lys Gln Ser Asn Asn Lys Tyr Ala Ala Ser Ser Tyr Leu Ser
 450 455 460
 Leu Thr Pro Glu Gln Trp Lys Ser His Arg Ser Tyr Ser Cys Gln Val
 465 470 475 480
 Thr His Glu Gly Ser Thr Val Glu Lys Thr Val Ala Pro Thr Glu Cys
 485 490 495

Ser

<210> 76
 <211> 674
 <212> PRT
 <213> Chimeric

<400> 76

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Tyr
 20 25 30
 Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Leu Ile Thr Pro Tyr Asn Gly Ala Ser Ser Tyr Asn Gln Lys Phe
 50 55 60
 Arg Gly Lys Ala Thr Met Thr Val Asp Thr Ser Thr Ser Thr Val Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Gly Gly Tyr Asp Gly Arg Gly Phe Asp Tyr Trp Gly Gln Gly
 100 105 110

4486539_1

Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
 115 120 125
 Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu
 130 135 140
 Gly Cys Leu Val Glu Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp
 145 150 155 160
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
 165 170 175
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
 180 185 190
 Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro
 195 200 205
 Ser Asn Thr Lys Val Asp Glu Lys Val Glu Pro Lys Ser Cys Asp Gly
 210 215 220
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Val Val Thr Gln Glu
 225 230 235 240
 Pro Ser Leu Thr Val Ser Pro Gly Gly Thr Val Thr Leu Thr Cys Gly
 245 250 255
 Ser Ser Thr Gly Ala Val Thr Thr Ser Asn Tyr Ala Asn Trp Val Gln
 260 265 270
 Glu Lys Pro Gly Gln Ala Phe Arg Gly Leu Ile Gly Gly Thr Asn Lys
 275 280 285
 Arg Ala Pro Gly Thr Pro Ala Arg Phe Ser Gly Ser Leu Leu Gly Gly
 290 295 300
 Lys Ala Ala Leu Thr Leu Ser Gly Ala Gln Pro Glu Asp Glu Ala Glu
 305 310 315 320
 Tyr Tyr Cys Ala Leu Trp Tyr Ser Asn Leu Trp Val Phe Gly Gly Gly
 325 330 335
 Thr Lys Leu Thr Val Leu Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
 340 345 350
 Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
 355 360 365
 Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 370 375 380

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Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 385 390 395 400
 Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
 405 410 415
 Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
 420 425 430
 Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp
 435 440 445
 Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly
 450 455 460
 Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
 465 470 475 480
 Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
 485 490 495
 Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
 500 505 510
 Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg
 515 520 525
 Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
 530 535 540
 Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu
 545 550 555 560
 Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
 565 570 575
 Thr Leu Pro Pro Cys Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu
 580 585 590
 Trp Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
 595 600 605
 Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
 610 615 620
 Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
 625 630 635 640
 Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
 645 650 655

4486539_1

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
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Gly Lys

<210> 77
<211> 449
<212> PRT
<213> Chimeric

<400> 77

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Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Leu Ile Thr Pro Tyr Asn Gly Ala Ser Ser Tyr Asn Gln Lys Phe
50 55 60

Arg Gly Lys Ala Thr Met Thr Val Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Gly Tyr Asp Gly Arg Gly Phe Asp Tyr Trp Gly Gln Gly
100 105 110

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

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

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

Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175

Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
180 185 190

Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro
195 200 205

4486539_1

Ser Asn Thr Lys Val Asp Glu Lys Val Glu Pro Lys Ser Cys Asp Lys
 210 215 220

Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro
 225 230 235 240

Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser
 245 250 255

Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
 260 265 270

Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
 275 280 285

Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val
 290 295 300

Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu
 305 310 315 320

Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys
 325 330 335

Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Cys Thr
 340 345 350

Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Ser
 355 360 365

Cys Ala Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu
 370 375 380

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

Asp Ser Asp Gly Ser Phe Phe Leu Val Ser Lys Leu Thr Val Asp Lys
 405 410 415

Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu
 420 425 430

Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly
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Lys

<210> 78
 <211> 213
 <212> PRT
 <213> Chimeric

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<400> 78

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Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
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His Trp Tyr Gln Gln Lys Ser Gly Lys Ala Pro Lys Leu Leu Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

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

Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Lys His Pro Leu Thr
85 90 95

Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala Pro
100 105 110

Ser Val Phe Ile Phe Pro Pro Ser Asp Arg Lys Leu Lys Ser Gly Thr
115 120 125

Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys
130 135 140

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

Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser
165 170 175

Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala
180 185 190

Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe
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Asn Arg Gly Glu Cys
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<210> 79

<211> 514

<212> PRT

<213> Chimeric

<400> 79

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

Gly Ile Ile Trp Gly Asp Gly Ser Thr Asn Tyr His Ser Ala Leu Ile
50 55 60

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

Lys Leu Asn Ser Leu Gln Thr Asp Asp Thr Ala Thr Tyr Tyr Cys Ala
85 90 95

Lys Gly Ile Thr Thr Val Val Asp Asp Tyr Tyr Ala Met Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

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

Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Asp Ser Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val Tyr Ala
180 185 190

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

Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser Glu Asp
210 215 220

Val Ala Arg Tyr Tyr Cys Gln His Tyr Tyr Ser Thr Pro Tyr Thr Phe
225 230 235 240

Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Val His
245 250 255

Met Pro Leu Gly Phe Leu Gly Pro Arg Gln Ala Arg Val Val Asn Gly
260 265 270

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Leu Glu
275 280 285

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Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
 290 295 300

Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr Ala Met Asn Trp Val Arg
 305 310 315 320

Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Ile Arg Ser Lys
 325 330 335

Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
 340 345 350

Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn
 355 360 365

Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Val Arg His Gly
 370 375 380

Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe Ala Tyr Trp Gly Gln Gly
 385 390 395 400

Thr Leu Val Thr Val Ser Ser Ala Ser Val Ala Ala Pro Ser Val Phe
 405 410 415

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

Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp
 435 440 445

Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr
 450 455 460

Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr
 465 470 475 480

Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val
 485 490 495

Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly
 500 505 510

Glu Cys

<210> 80
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 <212> PRT
 <213> Chimeric

<400> 80

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

Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Ser Tyr
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Gly Val Ser Trp Val Arg Gln Pro Pro Gly Lys Cys Leu Glu Trp Leu
35 40 45

Gly Ile Ile Trp Gly Asp Gly Ser Thr Asn Tyr His Ser Ala Leu Ile
50 55 60

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

Lys Leu Asn Ser Leu Gln Thr Asp Asp Thr Ala Thr Tyr Tyr Cys Ala
85 90 95

Lys Gly Ile Thr Thr Val Val Asp Asp Tyr Tyr Ala Met Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

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

Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Asp Ser Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val Tyr Ala
180 185 190

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

Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser Glu Asp
210 215 220

Val Ala Arg Tyr Tyr Cys Gln His Tyr Tyr Ser Thr Pro Tyr Thr Phe
225 230 235 240

Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly
245 250 255

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser
260 265 270

4486539_1

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln Leu Leu Glu
275 280 285

Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
290 295 300

Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr Ala Met Asn Trp Val Arg
305 310 315 320

Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Arg Ile Arg Ser Lys
325 330 335

Tyr Asn Asn Tyr Ala Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
340 345 350

Thr Ile Ser Arg Asp Asp Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn
355 360 365

Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Val Arg His Gly
370 375 380

Asn Phe Gly Asn Ser Tyr Val Ser Trp Phe Ala Tyr Trp Gly Gln Gly
385 390 395 400

Thr Leu Val Thr Val Ser Ser Ala Ser Val Ala Ala Pro Ser Val Phe
405 410 415

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

Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp
435 440 445

Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr
450 455 460

Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr
465 470 475 480

Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val
485 490 495

Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly
500 505 510

Glu Cys

<210> 81
<211> 232
<212> PRT

<213> Chimeric

<400> 81

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

<210> 82

<211> 956

<212> PRT

<213> Chimeric

<400> 82

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

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

Gly Ile Ile Trp Gly Asp Gly Ser Thr Asn Tyr His Ser Ala Leu Ile
50 55 60

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

Lys Leu Asn Ser Leu Gln Thr Asp Asp Thr Ala Thr Tyr Tyr Cys Ala
85 90 95

Lys Gly Ile Thr Thr Val Val Asp Asp Tyr Tyr Ala Met Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
130 135 140

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

Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Asp Ser Tyr Leu Ala
165 170 175

Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val Tyr Ala
180 185 190

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

Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser Glu Asp
210 215 220

Val Ala Arg Tyr Tyr Cys Gln His Tyr Tyr Ser Thr Pro Tyr Thr Phe
225 230 235 240

Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Val His
245 250 255

Met Pro Leu Gly Phe Leu Gly Pro Arg Gln Ala Arg Val Val Asn Gly
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260

265

270

Gly Gly Gly₂₇₅ Gly Ser Gly Gly Gly₂₈₀ Gly Ser Gln Ala Val₂₈₅ Val Thr Gln
 Glu Pro₂₉₀ Ser Leu Thr Val Ser₂₉₅ Pro Gly Gly Thr Val₃₀₀ Thr Leu Thr Cys
 Gly₃₀₅ Ser Ser Thr Gly Ala₃₁₀ Val Thr Thr Ser Asn₃₁₅ Tyr Ala Asn Trp Val₃₂₀
 Gln Glu Lys Pro Gly₃₂₅ Gln Ala Phe Arg Gly₃₃₀ Leu Ile Gly Gly Thr₃₃₅ Asn
 Lys Arg Ala Pro₃₄₀ Gly Thr Pro Ala Arg₃₄₅ Phe Ser Gly Ser Leu₃₅₀ Leu Gly
 Gly Lys Ala₃₅₅ Ala Leu Thr Leu Ser₃₆₀ Gly Ala Gln Pro Glu₃₆₅ Asp Glu Ala
 Glu Tyr₃₇₀ Tyr Cys Ala Leu Trp₃₇₅ Tyr Ser Asn Leu Trp₃₈₀ Val Phe Gly Gly
 Gly₃₈₅ Thr Lys Leu Thr Val₃₉₀ Leu Ser Ser Ala Ser₃₉₅ Thr Lys Gly Pro Ser₄₀₀
 Val Phe Pro Leu Ala₄₀₅ Pro Ser Ser Lys Ser₄₁₀ Thr Ser Gly Gly Thr₄₁₅ Ala
 Ala Leu Gly Cys₄₂₀ Leu Val Lys Asp Tyr₄₂₅ Phe Pro Glu Pro Val₄₃₀ Thr Val
 Ser Trp Asn₄₃₅ Ser Gly Ala Leu Thr₄₄₀ Ser Gly Val His Thr₄₄₅ Phe Pro Ala
 Val Leu₄₅₀ Gln Ser Ser Gly Leu₄₅₅ Tyr Ser Leu Ser Ser₄₆₀ Val Val Thr Val
 Pro₄₆₅ Ser Ser Ser Leu Gly₄₇₀ Thr Gln Thr Tyr Ile₄₇₅ Cys Asn Val Asn His₄₈₀
 Lys Pro Ser Asn Thr₄₈₅ Lys Val Asp Lys Lys₄₉₀ Val Glu Pro Lys Ser₄₉₅ Cys
 Asp Gly Gly Gly₅₀₀ Gly Ser Gly Gly Gly₅₀₅ Gly Ser Gln Val Gln₅₁₀ Leu Val
 Gln Ser Gly₅₁₅ Ala Glu Val Lys Lys₅₂₀ Pro Gly Ala Ser Val₅₂₅ Lys Val Ser
 Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Tyr Thr Met Asn Trp Val

530

535

Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Leu Ile Thr Pro
545 550 555 560

Tyr Asn Gly Ala Ser Ser Tyr Asn Gln Lys Phe Arg Gly Lys Ala Thr
565 570 575

Met Thr Val Asp Thr Ser Thr Ser Thr Val Tyr Met Glu Leu Ser Ser
580 585 590

Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Gly Tyr
595 600 605

Asp Gly Arg Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
610 615 620

Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser
625 630 635 640

Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Glu
645 650 655

Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu
660 665 670

Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu
675 680 685

Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr
690 695 700

Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val
705 710 715 720

Asp Glu Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro
725 730 735

Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
740 745 750

Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
755 760 765

Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
770 775 780

Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
785 790 795 800

Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr

805

810

815

Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
 820 825 830

Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
 835 840 845

Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Cys Arg
 850 855 860

Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly
 865 870 875 880

Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
 885 890 895

Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
 900 905 910

Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
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Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
 930 935 940

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 945 950 955

<210> 83
 <211> 956
 <212> PRT
 <213> Chimeric

<400> 83

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

Gly Ile Ile Trp Gly Asp Gly Ser Thr Asn Tyr His Ser Ala Leu Ile
 50 55 60

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

Lys Leu Asn Ser Leu Gln Thr Asp Asp Thr Ala Thr Tyr Tyr Cys Ala
 85 90 95

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Lys Gly Ile Thr Thr Val Val Asp Asp Tyr Tyr Ala Met Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
 115 120 125
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
 130 135 140
 Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly Glu Thr
 145 150 155 160
 Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Asp Ser Tyr Leu Ala
 165 170 175
 Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val Tyr Ala
 180 185 190
 Ala Thr Phe Leu Ala Asp Asp Val Pro Ser Arg Phe Ser Gly Ser Gly
 195 200 205
 Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser Glu Asp
 210 215 220
 Val Ala Arg Tyr Tyr Cys Gln His Tyr Tyr Ser Thr Pro Tyr Thr Phe
 225 230 235 240
 Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly
 245 250 255
 Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Ser
 260 265 270
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Val Val Thr Gln
 275 280 285
 Glu Pro Ser Leu Thr Val Ser Pro Gly Gly Thr Val Thr Leu Thr Cys
 290 295 300
 Gly Ser Ser Thr Gly Ala Val Thr Thr Ser Asn Tyr Ala Asn Trp Val
 305 310 315 320
 Gln Glu Lys Pro Gly Gln Ala Phe Arg Gly Leu Ile Gly Gly Thr Asn
 325 330 335
 Lys Arg Ala Pro Gly Thr Pro Ala Arg Phe Ser Gly Ser Leu Leu Gly
 340 345 350
 Gly Lys Ala Ala Leu Thr Leu Ser Gly Ala Gln Pro Glu Asp Glu Ala
 355 360 365

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Glu Tyr Tyr Cys Ala Leu Trp Tyr Ser Asn Leu Trp Val Phe Gly Gly
 370 375 380
 Gly Thr Lys Leu Thr Val Leu Ser Ser Ala Ser Thr Lys Gly Pro Ser
 385 390 395 400
 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala
 405 410 415
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 420 425 430
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 435 440 445
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 450 455 460
 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 465 470 475 480
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 485 490 495
 Asp Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Val
 500 505 510
 Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser
 515 520 525
 Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Tyr Thr Met Asn Trp Val
 530 535 540
 Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Leu Ile Thr Pro
 545 550 555 560
 Tyr Asn Gly Ala Ser Ser Tyr Asn Gln Lys Phe Arg Gly Lys Ala Thr
 565 570 575
 Met Thr Val Asp Thr Ser Thr Ser Thr Val Tyr Met Glu Leu Ser Ser
 580 585 590
 Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Gly Gly Tyr
 595 600 605
 Asp Gly Arg Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
 610 615 620
 Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser
 625 630 635 640

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Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Glu
 645 650 655
 Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu
 660 665 670
 Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu
 675 680 685
 Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr
 690 695 700
 Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val
 705 710 715 720
 Asp Glu Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro
 725 730 735
 Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
 740 745 750
 Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
 755 760 765
 Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
 770 775 780
 Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
 785 790 795 800
 Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
 805 810 815
 Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
 820 825 830
 Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
 835 840 845
 Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Cys Arg
 850 855 860
 Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly
 865 870 875 880
 Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
 885 890 895
 Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
 900 905 910

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Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
915 920 925

Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
930 935 940

Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
945 950 955

<210> 84
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<213> Chimeric

<400> 84

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

Asn Tyr Ala Asn Trp Val Gln Glu Lys Pro Gly Gln Ala Phe Arg Gly
35 40 45

Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Thr Pro Ala Arg Phe
50 55 60

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

Gln Pro Glu Asp Glu Ala Glu Tyr Tyr Cys Ala Leu Trp Tyr Ser Asn
85 90 95

Leu Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Ser Ser Ala
100 105 110

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

Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe
130 135 140

Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly
145 150 155 160

Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu
165 170 175

Ser Ser Val Val Thr Val Pro Ser Ser Leu Gly Thr Gln Thr Tyr
180 185 190

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

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Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
465 470 475 480

Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
485 490 495

Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
500 505 510

Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg
515 520 525

Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
530 535 540

Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu
545 550 555 560

Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
565 570 575

Thr Leu Pro Pro Cys Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu
580 585 590

Trp Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
595 600 605

Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
610 615 620

Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
625 630 635 640

Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
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Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
660 665 670

Gly Lys

<210> 85
<211> 971
<212> PRT
<213> Chimeric

<400> 85

Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Ala Pro Ser Gln
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4486539_1

Ser Leu Ser Ile Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Ser Tyr
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 Gly Val Ser Trp Val Arg Gln Pro Pro Gly Lys Cys Leu Glu Trp Leu
 35 40 45
 Gly Ile Ile Trp Gly Asp Gly Ser Thr Asn Tyr His Ser Ala Leu Ile
 50 55 60
 Ser Arg Leu Ser Ile Ser Lys Asp Asn Ser Lys Ser Gln Val Phe Leu
 65 70 75 80
 Lys Leu Asn Ser Leu Gln Thr Asp Asp Thr Ala Thr Tyr Tyr Cys Ala
 85 90 95
 Lys Gly Ile Thr Thr Val Val Asp Asp Tyr Tyr Ala Met Asp Tyr Trp
 100 105 110
 Gly Gln Gly Thr Ser Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
 115 120 125
 Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile
 130 135 140
 Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly Glu Thr
 145 150 155 160
 Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Asp Ser Tyr Leu Ala
 165 170 175
 Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val Tyr Ala
 180 185 190
 Ala Thr Phe Leu Ala Asp Asp Val Pro Ser Arg Phe Ser Gly Ser Gly
 195 200 205
 Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser Glu Asp
 210 215 220
 Val Ala Arg Tyr Tyr Cys Gln His Tyr Tyr Ser Thr Pro Tyr Thr Phe
 225 230 235 240
 Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly
 245 250 255
 Gly Gly Ser Gly Gly Gly Gly Ser Phe Val Gly Gly Thr Gly Gly Gly
 260 265 270
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Ser Glu Val Gln Leu Leu Glu
 275 280 285

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

Ala Pro Gly Lys Gly₅₆₅ Leu Glu Trp Val Gly₅₇₀ Arg Ile Lys Ser Lys₅₇₅ Thr
 Asp Gly Gly Thr₅₈₀ Thr Asp Tyr Ala Ala₅₈₅ Pro Val Lys Gly Arg₅₉₀ Phe Thr
 Ile Ser Arg₅₉₅ Asp Asp Ser Lys Asn₆₀₀ Thr Leu Tyr Leu Gln₆₀₅ Met Asn Ser
 Leu Lys₆₁₀ Thr Glu Asp Thr Ala₆₁₅ Val Tyr Tyr Cys Thr₆₂₀ Thr Pro Trp Glu
 Trp₆₂₅ Ser Trp Tyr Asp Tyr₆₃₀ Trp Gly Gln Gly Thr₆₃₅ Leu Val Thr Val Ser₆₄₀
 Ser Ala Ser Thr Lys₆₄₅ Gly Pro Ser Val Phe₆₅₀ Pro Leu Ala Pro Ser₆₅₅ Ser
 Lys Ser Thr Ser₆₆₀ Gly Gly Thr Ala Ala₆₆₅ Leu Gly Cys Leu Val₆₇₀ Lys Asp
 Tyr Phe Pro₆₇₅ Glu Pro Val Thr Val₆₈₀ Ser Trp Asn Ser Gly₆₈₅ Ala Leu Thr
 Ser Gly₆₉₀ Val His Thr Phe Pro₆₉₅ Ala Val Leu Gln Ser₇₀₀ Ser Gly Leu Tyr
 Ser₇₀₅ Leu Ser Ser Val₇₁₀ Val Thr Val Pro Ser Ser₇₁₅ Ser Leu Gly Thr Gln₇₂₀
 Thr Tyr Ile Cys Asn₇₂₅ Val Asn His Lys Pro₇₃₀ Ser Asn Thr Lys Val₇₃₅ Asp
 Lys Lys Val Glu₇₄₀ Pro Lys Ser Cys Asp₇₄₅ Lys Thr His Thr Cys₇₅₀ Pro Pro
 Cys Pro Ala₇₅₅ Pro Glu Ala Ala Gly₇₆₀ Gly Pro Ser Val Phe₇₆₅ Leu Phe Pro
 Pro Lys₇₇₀ Pro Lys Asp Thr Leu₇₇₅ Met Ile Ser Arg Thr₇₈₀ Pro Glu Val Thr
 Cys₇₈₅ Val Val Val Asp Val₇₉₀ Ser His Glu Asp Pro₇₉₅ Glu Val Lys Phe Asn₈₀₀
 Trp Tyr Val Asp Gly₈₀₅ Val Glu Val His Asn₈₁₀ Ala Lys Thr Lys Pro₈₁₅ Arg
 Glu Glu Gln Tyr₈₂₀ Asn Ser Thr Tyr Arg₈₂₅ Val Val Ser Val Leu₈₃₀ Thr Val

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Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
835 840 845

Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
850 855 860

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Cys Arg Asp
865 870 875 880

Glu Leu Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly Phe
885 890 895

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
900 905 910

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
915 920 925

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
930 935 940

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
945 950 955 960

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
965 970

<210> 86
<211> 33
<212> PRT
<213> Chimeric

<400> 86

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

Gln Ala Arg Val Val Asn Gly Gly Gly Gly Ser Gly Gly Gly Gly
20 25 30

Ser

<210> 87
<211> 35
<212> PRT
<213> Chimeric

<400> 87

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

Gln Ala Arg Val Val Asn Gly Gly Gly Gly Ser Gly Gly Gly Gly
20 25 30

Ser Gly Gly
35

<210> 88
<211> 33
<212> PRT
<213> Chimeric

<400> 88

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

Val Gly Gly Thr Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
20 25 30

Ser

<210> 89
<211> 33
<212> PRT
<213> Chimeric

<400> 89

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Lys Lys Ala Ala Pro Val
1 5 10 15

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

Ser

<210> 90
<211> 33
<212> PRT
<213> Chimeric

<400> 90

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Pro Met Ala Lys Lys Val
1 5 10 15

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

Ser

<210> 91
<211> 33
<212> PRT
<213> Chimeric

4486539_1

<400> 91

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Arg Ala Lys Val
1 5 10 15

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

Ser

<210> 92

<211> 33

<212> PRT

<213> Chimeric

<400> 92

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

Phe Leu Gly Pro Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
20 25 30

Ser

<210> 93

<211> 33

<212> PRT

<213> Chimeric

<400> 93

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Arg Ala Lys Gly
1 5 10 15

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

Ser

<210> 94

<211> 33

<212> PRT

<213> Chimeric

<400> 94

Gly Gly Gly Gly Ser Val His Met Pro Leu Gly Phe Leu Gly Pro Pro
1 5 10 15

Met Ala Lys Lys Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
20 25 30

Ser

4486539_1

<210> 95
 <211> 33
 <212> PRT
 <213> Chimeric

<400> 95

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Lys Lys Ala Ala Pro Gly
 1 5 10 15

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

Ser

<210> 96
 <211> 33
 <212> PRT
 <213> Chimeric

<400> 96

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Pro Met Ala Lys Lys Gly
 1 5 10 15

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

Ser

<210> 97
 <211> 18
 <212> PRT
 <213> Chimeric

<400> 97

Val His Met Pro Leu Gly Phe Leu Gly Pro Arg Gln Ala Arg Val Val
 1 5 10 15

Asn Gly

<210> 98
 <211> 6
 <212> PRT
 <213> Chimeric

<400> 98

Phe Val Gly Gly Thr Gly
 1 5

<210> 99

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<211> 8
<212> PRT
<213> Chimeric

<400> 99

Lys Lys Ala Ala Pro Val Asn Gly
1 5

<210> 100
<211> 8
<212> PRT
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<400> 100

Pro Met Ala Lys Lys Val Asn Gly
1 5

<210> 101
<211> 8
<212> PRT
<213> Chimeric

<400> 101

Gln Ala Arg Ala Lys Val Asn Gly
1 5

<210> 102
<211> 10
<212> PRT
<213> Chimeric

<400> 102

Val His Met Pro Leu Gly Phe Leu Gly Pro
1 5 10

<210> 103
<211> 5
<212> PRT
<213> Chimeric

<400> 103

Gln Ala Arg Ala Lys
1 5

<210> 104
<211> 15
<212> PRT
<213> Chimeric

<400> 104

Val His Met Pro Leu Gly Phe Leu Gly Pro Pro Met Ala Lys Lys
1 5 10 15

<210> 105
<211> 5
<212> PRT

<213> Chimeric

<400> 105

Lys Lys Ala Ala Pro
1 5

<210> 106

<211> 5

<212> PRT

<213> Chimeric

<400> 106

Pro Met Ala Lys Lys
1 5

<210> 107

<211> 5

<212> PRT

<213> Chimeric

<400> 107

Gly Tyr Thr Met Asn
1 5

<210> 108

<211> 17

<212> PRT

<213> Chimeric

<400> 108

Leu Ile Thr Pro Tyr Asn Gly Ala Ser Ser Tyr Asn Gln Lys Phe Arg
1 5 10 15

Gly

<210> 109

<211> 10

<212> PRT

<213> Chimeric

<400> 109

Gly Gly Tyr Asp Gly Arg Gly Phe Asp Tyr
1 5 10

<210> 110

<211> 10

<212> PRT

<213> Chimeric

<400> 110

Ser Ala Ser Ser Ser Val Ser Tyr Met His
1 5 10

<210> 111

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<211> 7
<212> PRT
<213> Chimeric

<400> 111

Asp Thr Ser Lys Leu Ala Ser
1 5

<210> 112
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<212> PRT
<213> Chimeric

<400> 112

Gln Gln Trp Ser Lys His Pro Leu Thr
1 5

<210> 113
<211> 119
<212> PRT
<213> Chimeric

<400> 113

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

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ser Phe Thr Gly Tyr
20 25 30

Thr Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Leu Ile Thr Pro Tyr Asn Gly Ala Ser Ser Tyr Asn Gln Lys Phe
50 55 60

Arg Gly Lys Ala Thr Met Thr Val Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Gly Gly Tyr Asp Gly Arg Gly Phe Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Leu Val Thr Val Ser Ser
115

<210> 114
<211> 106
<212> PRT
<213> Chimeric

<400> 114

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

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1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
 20 25 30
 His Trp Tyr Gln Gln Lys Ser Gly Lys Ala Pro Lys Leu Leu Ile Tyr
 35 40 45
 Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
 50 55 60
 Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
 65 70 75 80
 Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Lys His Pro Leu Thr
 85 90 95
 Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
 100 105
 <210> 115
 <211> 120
 <212> PRT
 <213> Chimeric
 <400> 115
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Phe Thr Phe Thr Asp Tyr
 20 25 30
 Lys Ile His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45
 Gly Tyr Phe Asn Pro Asn Ser Gly Tyr Ser Thr Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Leu Ser Pro Gly Gly Tyr Tyr Val Met Asp Ala Trp Gly Gln
 100 105 110
 Gly Thr Thr Val Thr Val Ser Ser
 115 120

<210> 116
 <211> 106

4486539_1

<212> PRT
<213> Chimeric

<400> 116

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

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

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

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

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Phe Pro Thr
85 90 95

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

<210> 117
<211> 648
<212> DNA
<213> Chimeric

<400> 117

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aagcccggcc aggccttcag aggactgatc ggcggcacca acaagagagc ccctggcacc	180
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cagccagaag atgaggccga gtactactgc gccctgtggt acagcaacct gtgggtgttc	300
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ggcgtggaga ccaccacccc cagcaagcag agcaacaaca agtacgccgc cagcagctac	540
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<210> 118
<211> 2916
<212> DNA
<213> Chimeric

<400> 118

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<210> 119
 <211> 2070
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 <213> Chimeric

<400> 119	
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gcctggcgga	tctctgagac
tgagctgtgc	cgccagcggc
780	
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cccctggcaa	aggcctggaa
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Lys Gly Arg Phe Thr Leu Ser Val Asp Arg Ser Lys Asn Thr Leu Tyr
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Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe
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Gln Ser Ser Gly Leu Tyr Ser Leu Ser Val Val Thr Val Pro Ser
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Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro
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Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
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Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His Tyr Thr Thr Pro Pro
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Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala
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Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Arg Lys Leu Lys Ser Gly
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Gln Pro Glu Asp 85 Glu Ala Glu Tyr Tyr 90 Cys Ala Leu Trp Tyr 95 Ser Asn

Leu Trp Val 100 Phe Gly Gly Gly Thr 105 Lys Leu Thr Val 110 Leu Ser Ser Ala

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 Glu Gly Phe Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
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Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
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Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly
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Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu
165 170 175

Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser
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Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro
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Ser Asn Thr Lys Val Asp Glu Lys Val Glu Pro Lys Ser Cys Asp Lys
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Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn
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Cys Ala Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu
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 Ala Thr Phe Leu Ala Asp Asp Val Pro Ser Arg Phe Ser Gly Ser Gly
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 Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser Glu Asp
 210 215 220
 Val Ala Arg Tyr Tyr Cys Gln His Tyr Tyr Ser Thr Pro Tyr Thr Phe
 225 230 235 240
 Gly Cys Gly Thr Lys Leu Glu Ile Lys Gly Gly Gly Gly Ser Gly Gly
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 Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Gly Gly Ser
 260 265 270
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ala Val Val Thr Gln
 275 280 285
 Glu Pro Ser Leu Thr Val Ser Pro Gly Gly Thr Val Thr Leu Thr Cys
 290 295 300
 Gly Ser Ser Thr Gly Ala Val Thr Thr Ser Asn Tyr Ala Asn Trp Val
 305 310 315 320
 Gln Glu Lys Pro Gly Gln Ala Phe Arg Gly Leu Ile Gly Gly Thr Asn
 325 330 335
 Lys Arg Ala Pro Gly Thr Pro Ala Arg Phe Ser Gly Ser Leu Leu Gly
 340 345 350
 Gly Lys Ala Ala Leu Thr Leu Ser Gly Ala Gln Pro Glu Asp Glu Ala
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 Glu Tyr Tyr Cys Ala Leu Trp Tyr Ser Asn Leu Trp Val Phe Gly Gly
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 Gly Thr Lys Leu Thr Val Leu Ser Ser Ala Ser Thr Lys Gly Pro Ser
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 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val
 420 425 430
 Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala
 435 440 445
 Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val
 450 455 460
 Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His
 465 470 475 480
 Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys
 485 490 495
 Asp Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val Gln Leu Val
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 Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val Ser
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 Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr Tyr Met His Trp Val
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 Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Ile Ile Asn Pro
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 Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Glu
 645 650 655
 Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu
 660 665 670

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 Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr
 690 695 700
 Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val
 705 710 715 720
 Asp Glu Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro
 725 730 735
 Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly Pro Ser Val Phe Leu Phe
 740 745 750
 Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val
 755 760 765
 Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe
 770 775 780
 Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro
 785 790 795 800
 Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr
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 Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val
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 Ser Asn Lys Ala Leu Gly Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala
 835 840 845
 Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Cys Arg
 850 855 860
 Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Trp Cys Leu Val Lys Gly
 865 870 875 880
 Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro
 885 890 895
 Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser
 900 905 910
 Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln
 915 920 925
 Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
 930 935 940

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Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
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<212> PRT
<213> Chimeric

<400> 141

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Leu Ile Gly Gly Thr Asn Lys Arg Ala Pro Gly Thr Pro Ala Arg Phe
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Ser Gly Ser Leu Leu Gly Gly Lys Ala Ala Leu Thr Leu Ser Gly Ala
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Gln Pro Glu Asp Glu Ala Glu Tyr Tyr Cys Ala Leu Trp Tyr Ser Asn
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Leu Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Ser Ser Ala
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Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser
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Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe
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Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly
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Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu
165 170 175

Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr
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Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys
195 200 205

Val Glu Pro Lys Ser Cys Asp Gly Gly Gly Gly Ser Gly Gly Gly Gly
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 Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser
 245 250 255
 Tyr Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp
 260 265 270
 Met Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys
 275 280 285
 Phe Gln Gly Arg Val Thr Met Thr His Asp Thr Ser Thr Ser Thr Val
 290 295 300
 Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr
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 Cys Ala Arg Ser Phe Phe Thr Gly Phe His Leu Asp Tyr Trp Gly Gln
 325 330 335
 Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
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 Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
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 Leu Gly Cys Leu Val Glu Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
 370 375 380
 Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
 385 390 395 400
 Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
 405 410 415
 Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
 420 425 430
 Pro Ser Asn Thr Lys Val Asp Glu Lys Val Glu Pro Lys Ser Cys Asp
 435 440 445
 Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Ala Gly Gly
 450 455 460
 Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile
 465 470 475 480
 Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu
 485 490 495

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 Asp Pro Glu Val₅₀₀ Lys Phe Asn Trp Tyr₅₀₅ Val Asp Gly Val Glu₅₁₀ Val His

Asn Ala Lys₅₁₅ Thr Lys Pro Arg Glu₅₂₀ Glu Gln Tyr Asn Ser₅₂₅ Thr Tyr Arg

Val₅₃₀ Val Ser Val Leu Thr Val₅₃₅ Leu His Gln Asp Trp₅₄₀ Leu Asn Gly Lys

Glu₅₄₅ Tyr Lys Cys Lys Val₅₅₀ Ser Asn Lys Ala Leu₅₅₅ Gly Ala Pro Ile Glu₅₆₀

Lys Thr Ile Ser Lys₅₆₅ Ala Lys Gly Gln Pro₅₇₀ Arg Glu Pro Gln Val₅₇₅ Tyr

Thr Leu Pro Pro₅₈₀ Cys Arg Asp Glu Leu₅₈₅ Thr Lys Asn Gln Val₅₉₀ Ser Leu

Trp Cys Leu₅₉₅ Val Lys Gly Phe Tyr₆₀₀ Pro Ser Asp Ile Ala₆₀₅ Val Glu Trp

Glu Ser₆₁₀ Asn Gly Gln Pro Glu₆₁₅ Asn Asn Tyr Lys Thr₆₂₀ Thr Pro Pro Val

Leu₆₂₅ Asp Ser Asp Gly Ser₆₃₀ Phe Phe Leu Tyr Ser₆₃₅ Lys Leu Thr Val Asp₆₄₀

Lys Ser Arg Trp Gln₆₄₅ Gln Gly Asn Val Phe₆₅₀ Ser Cys Ser Val Met₆₅₅ His

Glu Ala Leu His₆₆₀ Asn His Tyr Thr Gln₆₆₅ Lys Ser Leu Ser Leu₆₇₀ Ser Pro

Gly Lys

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Gly

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Thr Ser Asn Tyr Ala Asn Trp
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Gly Thr Asn Lys Arg Ala Pro Gly Thr Pro Ala Arg Phe Ser Gly Ser
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Leu Leu Gly Gly
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Thr Lys Leu Thr Val
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Ser Ala Ser Phe Arg Tyr Thr
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Ser Tyr Tyr Met His
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<400> 152

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Gly

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Gly Ala Ser Ser Arg Ala Thr
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Gln Gln Tyr Thr Asn Glu His Tyr Tyr Thr
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Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Asn Pro Ser Gly Gly Ser Thr Ser Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr His Asp Thr Ser Thr Ser Thr Val Tyr
65 70 75 80

Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
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Ala Arg Ser Phe Phe Thr Gly Phe His Leu Asp Tyr Trp Gly Gln Gly
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Thr Leu Val Thr Val Ser Ser
115

<210> 158
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<213> Chimeric

<400> 158

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
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[illegible]

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$\langle 211 \rangle$	120

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 <213> Chimeric

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 35 40 45
 Ala Arg Ile Tyr Pro Thr Asn Gly Tyr Thr Arg Tyr Ala Asp Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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 Gly Thr Leu Val Thr Val Ser Ser
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<400> 161

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 35 40 45
 Tyr Ser Ala Ser Phe Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
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gctgggcatc	atctggggcg
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actgcgcca	gggcatcacc
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