SEQUENCE LISTING

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<120> SUBSTITUTED HETEROARYL COMPOUNDS USEFUL AS T CELL ACTIVATORS

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<150> IN 201911053558
<151> 2019-12-23

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<170> PatentIn version 3.5

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<212> PRT
<213> Homo sapiens

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        35                  40                  45

Gln Phe Leu Lys Ile Tyr Leu Glu Val Asp Asn Val Pro Arg His Leu
    50                  55                  60

Ser Leu Ala Leu Phe Gln Ser Phe Glu Thr Gly His Cys Leu Asn Glu
65                  70                  75                  80

Thr Asn Val Thr Lys Asp Val Val Cys Leu Asn Asp Val Ser Cys Tyr
                85                  90                  95

Phe Ser Leu Leu Glu Gly Gly Arg Pro Glu Asp Lys Leu Glu Phe Thr
            100                 105                 110

Phe Lys Leu Tyr Asp Thr Asp Arg Asn Gly Ile Leu Asp Ser Ser Glu
        115                 120                 125

Val Asp Lys Ile Ile Leu Gln Met Met Arg Val Ala Glu Tyr Leu Asp
    130                 135                 140

Trp Asp Val Ser Glu Leu Arg Pro Ile Leu Gln Glu Met Met Lys Glu
145                 150                 155                 160

Ile Asp Tyr Asp Gly Ser Gly Ser Val Ser Gln Ala Glu Trp Val Arg
                165                 170                 175

Ala Gly Ala Thr Thr Val Pro Leu Leu Val Leu Leu Gly Leu Glu Met
            180                 185                 190

Thr Leu Lys Asp Asp Gly Gln His Met Trp Arg Pro Lys Arg Phe Pro
        195                 200                 205

Arg Pro Val Tyr Cys Asn Leu Cys Glu Ser Ser Ile Gly Leu Gly Lys
    210                 215                 220

Gln Gly Leu Ser Cys Asn Leu Cys Lys Tyr Thr Val His Asp Gln Cys
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225 230 235 240

Ala Met Lys Ala Leu Pro Cys Glu Val Ser Thr Tyr Ala Lys Ser Arg
245 250 255

Lys Asp Ile Gly Val Gln Ser His Val Trp Val Arg Gly Gly Cys Glu
260 265 270

Ser Gly Arg Cys Asp Arg Cys Gln Lys Lys Ile Arg Ile Tyr His Ser
275 280 285

Leu Thr Gly Leu His Cys Val Trp Cys His Leu Glu Ile His Asp Asp
290 295 300

Cys Leu Gln Ala Val Gly His Glu Cys Asp Cys Gly Leu Leu Arg Asp
305 310 315 320

His Ile Leu Pro Pro Ser Ser Ile Tyr Pro Ser Val Leu Ala Ser Gly
325 330 335

Pro Asp Arg Lys Asn Ser Lys Thr Ser Gln Lys Thr Met Asp Asp Leu
340 345 350

Asn Leu Ser Thr Ser Glu Ala Leu Arg Ile Asp Pro Val Pro Asn Thr
355 360 365

His Pro Leu Leu Val Phe Val Asn Pro Lys Ser Gly Gly Lys Gln Gly
370 375 380

Gln Arg Val Leu Trp Lys Phe Gln Tyr Ile Leu Asn Pro Arg Gln Val
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Phe Asn Leu Leu Lys Asp Gly Pro Glu Ile Gly Leu Arg Leu Phe Lys
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Asp Val Pro Asp Ser Arg Ile Leu Val Cys Gly Gly Asp Gly Thr Val
420 425 430

Gly Trp Ile Leu Glu Thr Ile Asp Lys Ala Asn Leu Pro Val Leu Pro
435 440 445

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Pro Val Ala Val Leu Pro Leu Gly Thr Gly Asn Asp Leu Ala Arg Cys
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Leu Arg Trp Gly Gly Gly Tyr Glu Gly Gln Asn Leu Ala Lys Ile Leu
465                 470                 475                 480

Lys Asp Leu Glu Met Ser Lys Val Val His Met Asp Arg Trp Ser Val
                485                 490                 495

Glu Val Ile Pro Gln Gln Thr Glu Glu Lys Ser Asp Pro Val Pro Phe
            500                 505                 510

Gln Ile Ile Asn Asn Tyr Phe Ser Ile Gly Val Asp Ala Ser Ile Ala
        515                 520                 525

His Arg Phe His Ile Met Arg Glu Lys Tyr Pro Glu Lys Phe Asn Ser
    530                 535                 540

Arg Met Lys Asn Lys Leu Trp Tyr Phe Glu Phe Ala Thr Ser Glu Ser
545                 550                 555                 560

Ile Phe Ser Thr Cys Lys Lys Leu Glu Glu Ser Leu Thr Val Glu Ile
                565                 570                 575

Cys Gly Lys Pro Leu Asp Leu Ser Asn Leu Ser Leu Glu Gly Ile Ala
            580                 585                 590

Val Leu Asn Ile Pro Ser Met His Gly Gly Ser Asn Leu Trp Gly Asp
        595                 600                 605

Thr Arg Arg Pro His Gly Asp Ile Tyr Gly Ile Asn Gln Ala Leu Gly
    610                 615                 620

Ala Thr Ala Lys Val Ile Thr Asp Pro Asp Ile Leu Lys Thr Cys Val
625                 630                 635                 640

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

Ile Glu Met Gly Gln Ile Tyr Thr Lys Leu Lys Asn Ala Gly Arg Arg
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660 665 670

Leu Ala Lys Cys Ser Glu Ile Thr Phe His Thr Thr Lys Thr Leu Pro
675 680 685

Met Gln Ile Asp Gly Glu Pro Trp Met Gln Thr Pro Cys Thr Ile Lys
690 695 700

Ile Thr His Lys Asn Gln Met Pro Met Leu Met Gly Pro Pro Pro Arg
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Ser Gly Ser Ser Glu Thr Val Arg Phe Gln Gly His His His His His
725 730 735

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Gly Ala Gly Cys Ala Gly Cys Gly Ala Cys Thr Cys Cys Gly Ala Gly
35 40 45

Thr Cys Gly Gly Cys Thr Thr Cys Cys Gly Cys Cys Thr Cys Gly Thr
50 55 60

Cys Cys Ala Gly Cys Gly Gly Cys Thr Cys Cys Gly Ala Gly Cys Gly
65 70 75 80

Cys Gly Ala Cys Gly Cys Cys Gly Gly Thr Cys Cys Cys Gly Ala Gly
85 90 95

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Cys Cys Gly Gly Ala Cys Ala Ala Gly Gly Cys Gly Cys Cys Gly Cys
            100                 105                 110

Gly Gly Cys Gly Ala Cys Thr Cys Ala Ala Cys Ala Ala Gly Cys Gly
        115                 120                 125

Gly Cys Gly Cys Thr Thr Cys Cys Cys Gly Gly Gly Gly Cys Thr Gly
    130                 135                 140

Cys Gly Gly Cys Thr Cys Thr Thr Cys Gly Gly Gly Cys Ala Cys Ala
145                 150                 155                 160

Gly Gly Ala Ala Ala Gly Cys Cys Ala Thr Cys Ala Cys Gly Ala Ala
                165                 170                 175

Gly Thr Cys Gly Gly Gly Cys Cys Thr Cys Cys Ala Gly Cys Ala Cys
            180                 185                 190

Cys Thr Gly Gly Cys Cys Cys Cys Cys Cys Cys Thr Cys Cys Gly Cys
        195                 200                 205

Cys Cys Ala Cys Cys Cys Cys Thr Gly Gly Gly Gly Cys Cys Cys Cys
    210                 215                 220

Gly Thr Gly Cys Ala Gly Cys Gly Ala Gly Thr Cys Ala Gly Ala Gly
225                 230                 235                 240

Cys Gly Gly Cys Ala Gly Ala Thr Cys Cys Gly Gly Ala Gly Thr Ala
                245                 250                 255

Cys Ala Gly Thr Gly Gly Ala Cys Thr Gly Gly Ala Gly Cys Gly Ala
            260                 265                 270

Gly Thr Cys Ala Gly Cys Gly Ala Cys Ala Thr Ala Thr Gly Gly Gly
        275                 280                 285

Gly Ala Gly Cys Ala Cys Ala Thr Cys Thr Gly Gly Thr Thr Cys Gly
    290                 295                 300

Ala Gly Ala Cys Cys Ala Ala Cys Gly Thr Gly Thr Cys Cys Gly Gly
305                 310                 315                 320
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Gly Gly Ala Cys Thr Thr Cys Thr Gly Cys Thr Ala Cys Gly Thr Thr
                325                 330                 335

Gly Gly Gly Gly Ala Gly Cys Ala Gly Thr Ala Cys Thr Gly Thr Gly
            340                 345                 350

Thr Ala Gly Cys Cys Ala Gly Gly Ala Thr Gly Cys Thr Gly Cys Ala
        355                 360                 365

Gly Ala Ala Gly Thr Cys Ala Gly Thr Gly Thr Cys Thr Cys Gly Ala
    370                 375                 380

Ala Gly Ala Ala Ala Gly Thr Gly Cys Gly Cys Ala Gly Cys Cys Thr
385                 390                 395                 400

Gly Cys Ala Ala Gly Ala Thr Thr Gly Thr Gly Gly Thr Gly Cys Ala
                405                 410                 415

Cys Ala Cys Gly Cys Cys Cys Thr Gly Cys Ala Thr Cys Gly Ala Gly
            420                 425                 430

Cys Ala Gly Cys Thr Gly Gly Ala Gly Ala Ala Gly Ala Thr Ala Ala
        435                 440                 445

Ala Thr Thr Thr Cys Cys Gly Cys Thr Gly Thr Ala Ala Gly Cys Cys
    450                 455                 460

Gly Thr Cys Cys Thr Thr Cys Cys Gly Thr Gly Ala Ala Thr Cys Ala
465                 470                 475                 480

Gly Gly Cys Thr Cys Cys Ala Gly Gly Ala Ala Thr Gly Thr Cys Cys
                485                 490                 495

Gly Cys Gly Ala Gly Cys Cys Ala Ala Cys Cys Thr Thr Thr Gly Thr
            500                 505                 510

Ala Cys Gly Gly Cys Ala Cys Cys Ala Cys Thr Gly Gly Gly Thr Ala
        515                 520                 525
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Cys Ala Cys Ala Gly Ala Cys Gly Ala Cys Gly Cys Cys Ala Gly Gly
    530                 535                 540

Ala Cys Gly Gly Cys Ala Ala Gly Thr Gly Thr Cys Gly Gly Cys Ala
545                 550                 555                 560

Cys Thr Gly Thr Gly Gly Gly Ala Ala Gly Gly Gly Ala Thr Thr Cys
                565                 570                 575

Cys Ala Gly Cys Ala Gly Ala Ala Gly Thr Thr Cys Ala Cys Cys Thr
            580                 585                 590

Thr Cys Cys Ala Cys Ala Gly Cys Ala Ala Gly Gly Ala Gly Ala Thr
        595                 600                 605

Thr Gly Thr Gly Gly Cys Cys Ala Thr Cys Ala Gly Cys Thr Gly Cys
    610                 615                 620

Thr Cys Gly Thr Gly Gly Thr Gly Cys Ala Ala Gly Cys Ala Gly Gly
625                 630                 635                 640

Cys Ala Thr Ala Cys Cys Ala Cys Ala Gly Cys Ala Ala Gly Gly Thr
                645                 650                 655

Gly Thr Cys Cys Thr Gly Cys Thr Thr Cys Ala Thr Gly Cys Thr Gly
            660                 665                 670

Cys Ala Gly Cys Ala Gly Ala Thr Cys Gly Ala Gly Gly Ala Gly Cys
        675                 680                 685

Cys Gly Thr Gly Cys Thr Cys Gly Cys Thr Gly Gly Gly Gly Gly Thr
    690                 695                 700

Cys Cys Ala Cys Gly Cys Ala Gly Cys Cys Gly Thr Gly Gly Thr Cys
705                 710                 715                 720

Ala Thr Cys Cys Cys Gly Cys Cys Cys Ala Cys Cys Thr Gly Gly Ala
                725                 730                 735

Thr Cys Cys Thr Cys Cys Gly Cys Gly Cys Cys Cys Gly Gly Ala Gly
            740                 745                 750
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Gly Cys Cys Cys Cys Ala Gly Ala Ala Thr Ala Cys Thr Cys Thr Gly
        755                 760                 765

Ala Ala Ala Gly Cys Ala Ala Gly Cys Ala Ala Gly Ala Ala Gly Ala
    770                 775                 780

Ala Gly Ala Ala Gly Ala Gly Gly Gly Cys Ala Thr Cys Cys Thr Thr
785                 790                 795                 800

Cys Ala Ala Gly Ala Gly Gly Ala Ala Gly Thr Cys Cys Ala Gly Cys
                805                 810                 815

Ala Ala Gly Ala Ala Ala Gly Gly Gly Cys Cys Thr Gly Ala Gly Gly
            820                 825                 830

Ala Gly Gly Gly Cys Cys Gly Cys Thr Gly Gly Ala Gly Ala Cys Cys
        835                 840                 845

Cys Thr Thr Cys Ala Thr Cys Ala Thr Cys Ala Gly Gly Cys Cys Cys
    850                 855                 860

Ala Cys Cys Cys Cys Cys Thr Cys Cys Cys Cys Gly Cys Thr Cys Ala
865                 870                 875                 880

Thr Gly Ala Ala Gly Cys Cys Cys Cys Thr Gly Cys Thr Gly Gly Thr
                885                 890                 895

Gly Thr Thr Thr Gly Thr Gly Ala Ala Cys Cys Cys Cys Ala Ala Gly
            900                 905                 910

Ala Gly Thr Gly Gly Gly Gly Gly Cys Ala Ala Cys Cys Ala Gly Gly
        915                 920                 925

Gly Thr Gly Cys Ala Ala Ala Gly Ala Thr Cys Ala Thr Cys Cys Ala
    930                 935                 940

Gly Thr Cys Thr Thr Thr Cys Cys Thr Cys Thr Gly Gly Thr Ala Thr
945                 950                 955                 960
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Cys Thr Cys Ala Ala Thr Cys Cys Cys Cys Gly Ala Cys Ala Ala Gly
               965                 970                 975


Thr Cys Thr Thr Cys Gly Ala Cys Cys Thr Gly Ala Gly Cys Cys Ala
           980                 985                 990


Gly Gly Gly Ala Gly Gly Gly Cys  Cys Cys Ala Ala Gly  Gly Ala Gly
        995                1000                1005


Gly Cys  Gly Cys Thr Gly Gly  Ala Gly Ala Thr Gly  Thr Ala Cys
    1010                1015                1020


Cys Gly  Cys Ala Ala Ala Gly  Thr Gly Cys Ala Cys  Ala Ala Cys
    1025                1030                1035


Cys Thr  Gly Cys Gly Gly Ala  Thr Cys Cys Thr Gly  Gly Cys Gly
    1040                1045                1050


Thr Gly  Cys Gly Gly Gly Gly  Gly Cys Gly Ala Cys  Gly Gly Cys
    1055                1060                1065


Ala Cys  Gly Gly Thr Gly Gly  Gly Cys Thr Gly Gly  Ala Thr Cys
    1070                1075                1080


Cys Thr  Cys Thr Cys Cys Ala  Cys Cys Cys Thr Gly  Gly Ala Cys
    1085                1090                1095


Cys Ala  Gly Cys Thr Ala Cys  Gly Cys Cys Thr Gly  Ala Ala Gly
    1100                1105                1110


Cys Cys  Gly Cys Cys Ala Cys  Cys Cys Cys Cys Thr  Gly Thr Thr
    1115                1120                1125


Gly Cys  Cys Ala Thr Cys Cys  Thr Gly Cys Cys Cys  Cys Thr Gly
    1130                1135                1140


Gly Gly  Thr Ala Cys Thr Gly  Gly Cys Ala Ala Cys  Gly Ala Cys
    1145                1150                1155


Thr Thr  Gly Gly Cys Cys Cys  Gly Ala Ala Cys Cys  Cys Thr Cys
    1160                1165                1170
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Ala Ala  Cys Thr Gly Gly Gly  Gly Thr Gly Gly Gly  Gly Gly Cys
    1175                 1180                 1185


Thr Ala  Cys Ala Cys Ala Gly  Ala Thr Gly Ala Gly  Cys Cys Thr
    1190                 1195                 1200


Gly Thr  Gly Thr Cys Cys Ala  Ala Gly Ala Thr Cys  Cys Thr Cys
    1205                 1210                 1215


Thr Cys  Cys Cys Ala Cys Gly  Thr Gly Gly Ala Gly  Gly Ala Gly
    1220                 1225                 1230


Gly Gly  Gly Ala Ala Cys Gly  Thr Gly Gly Thr Ala  Cys Ala Gly
    1235                 1240                 1245


Cys Thr  Gly Gly Ala Cys Cys  Gly Cys Thr Gly Gly  Gly Ala Cys
    1250                 1255                 1260


Cys Thr  Cys Cys Ala Cys Gly  Cys Thr Gly Ala Gly  Cys Cys Cys
    1265                 1270                 1275


Ala Ala  Cys Cys Cys Cys Gly  Ala Gly Gly Cys Ala  Gly Gly Gly
    1280                 1285                 1290


Cys Cys  Thr Gly Ala Gly Gly  Ala Cys Cys Gly Ala  Gly Ala Thr
    1295                 1300                 1305


Gly Ala  Ala Gly Gly Cys Gly  Cys Cys Ala Cys Cys  Gly Ala Cys
    1310                 1315                 1320


Cys Gly  Gly Thr Thr Gly Cys  Cys Cys Cys Thr Gly  Gly Ala Thr
    1325                 1330                 1335


Gly Thr  Cys Thr Thr Cys Ala  Ala Cys Ala Ala Cys  Thr Ala Cys
    1340                 1345                 1350


Thr Thr  Cys Ala Gly Cys Cys  Thr Gly Gly Gly Cys  Thr Thr Thr
    1355                 1360                 1365
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Gly Ala  Cys Gly Cys Cys Cys  Ala Cys Gly Thr Cys  Ala Cys Cys
    1370                1375                1380

Cys Thr  Gly Gly Ala Gly Thr  Thr Cys Cys Ala Cys  Gly Ala Gly
    1385                1390                1395

Thr Cys  Thr Cys Gly Ala Gly  Ala Gly Gly Cys Cys  Ala Ala Cys
    1400                1405                1410

Cys Cys  Ala Gly Ala Gly Ala  Ala Ala Thr Thr Cys  Ala Ala Cys
    1415                1420                1425

Ala Gly  Cys Cys Gly Cys Thr  Thr Thr Cys Gly Gly  Ala Ala Thr
    1430                1435                1440

Ala Ala  Gly Ala Thr Gly Thr  Thr Cys Thr Ala Cys  Gly Cys Cys
    1445                1450                1455

Gly Gly  Gly Ala Cys Ala Gly  Cys Thr Thr Thr Cys  Thr Cys Thr
    1460                1465                1470

Gly Ala  Cys Thr Thr Cys Cys  Thr Gly Ala Thr Gly  Gly Gly Cys
    1475                1480                1485

Ala Gly  Cys Thr Cys Cys Ala  Ala Gly Gly Ala Cys  Cys Thr Gly
    1490                1495                1500

Gly Cys  Cys Ala Ala Gly Cys  Ala Cys Ala Thr Cys  Cys Gly Ala
    1505                1510                1515

Gly Thr  Gly Gly Thr Gly Thr  Gly Thr Gly Ala Thr  Gly Gly Ala
    1520                1525                1530

Ala Thr  Gly Gly Ala Cys Thr  Thr Gly Ala Cys Thr  Cys Cys Cys
    1535                1540                1545

Ala Ala  Gly Ala Thr Cys Cys  Ala Gly Gly Ala Cys  Cys Thr Gly
    1550                1555                1560

Ala Ala  Ala Cys Cys Cys Cys  Ala Gly Thr Gly Thr  Gly Thr Thr
    1565                1570                1575
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Gly Thr  Thr Thr Thr Cys Cys  Thr Gly Ala Ala Cys  Ala Thr Cys
    1580                 1585                 1590

Cys Cys  Cys Ala Gly Gly Thr  Ala Cys Thr Gly Thr  Gly Cys Gly
    1595                 1600                 1605

Gly Gly  Cys Ala Cys Cys Ala  Thr Gly Cys Cys Cys  Thr Gly Gly
    1610                 1615                 1620

Gly Gly  Cys Cys Ala Cys Cys  Cys Thr Gly Gly Gly  Gly Ala Gly
    1625                 1630                 1635

Cys Ala  Cys Cys Ala Cys Gly  Ala Cys Thr Thr Thr  Gly Ala Gly
    1640                 1645                 1650

Cys Cys  Cys Cys Ala Gly Cys  Gly Gly Cys Ala Thr  Gly Ala Cys
    1655                 1660                 1665

Gly Ala  Cys Gly Gly Cys Thr  Ala Cys Cys Thr Cys  Gly Ala Gly
    1670                 1675                 1680

Gly Thr  Cys Ala Thr Thr Gly  Gly Cys Thr Thr Cys  Ala Cys Cys
    1685                 1690                 1695

Ala Thr  Gly Ala Cys Gly Thr  Cys Gly Thr Thr Gly  Gly Cys Cys
    1700                 1705                 1710

Gly Cys  Gly Cys Thr Gly Cys  Ala Gly Gly Thr Gly  Gly Gly Cys
    1715                 1720                 1725

Gly Gly  Ala Cys Ala Cys Gly  Gly Cys Gly Ala Gly  Cys Gly Gly
    1730                 1735                 1740

Cys Thr  Gly Ala Cys Gly Cys  Ala Gly Thr Gly Thr  Cys Gly Cys
    1745                 1750                 1755

Gly Ala  Gly Gly Thr Gly Gly  Thr Gly Cys Thr Cys  Ala Cys Cys
    1760                 1765                 1770
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Ala Cys  Ala Thr Cys Cys Ala  Ala Gly Gly Cys Cys  Ala Thr Cys
    1775                1780                1785

Cys Cys  Gly Gly Thr Gly Cys  Ala Gly Gly Thr Gly  Gly Ala Thr
    1790                1795                1800

Gly Gly  Cys Gly Ala Gly Cys  Cys Cys Thr Gly Cys  Ala Ala Gly
    1805                1810                1815

Cys Thr  Thr Gly Cys Ala Gly  Cys Cys Thr Cys Ala  Cys Gly Cys
    1820                1825                1830

Ala Thr  Cys Cys Gly Cys Ala  Thr Cys Gly Cys Cys  Cys Thr Gly
    1835                1840                1845

Cys Gly  Cys Ala Ala Cys Cys  Ala Gly Gly Cys Cys  Ala Cys Cys
    1850                1855                1860

Ala Thr  Gly Gly Thr Gly Cys  Ala Gly Ala Ala Gly  Gly Cys Cys
    1865                1870                1875

Ala Ala  Gly Cys Gly Gly Cys  Gly Gly Ala Gly Cys  Gly Cys Cys
    1880                1885                1890

Gly Cys  Cys Cys Cys Cys Cys  Thr Gly Cys Ala Cys  Ala Gly Cys
    1895                1900                1905

Gly Ala  Cys Cys Ala Gly Cys  Ala Gly Cys Cys Gly  Gly Thr Gly
    1910                1915                1920

Cys Cys  Ala Gly Ala Gly Cys  Ala Gly Thr Thr Gly  Cys Gly Cys
    1925                1930                1935

Ala Thr  Cys Cys Ala Gly Gly  Thr Gly Ala Gly Thr  Cys Gly Cys
    1940                1945                1950

Gly Thr  Cys Ala Gly Cys Ala  Thr Gly Cys Ala Cys  Gly Ala Cys
    1955                1960                1965

Thr Ala  Thr Gly Ala Gly Gly  Cys Cys Cys Thr Gly  Cys Ala Cys
    1970                1975                1980
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Thr Ala  Cys Gly Ala Cys Ala  Ala Gly Gly Ala Gly  Cys Ala Gly
    1985                1990                1995

Cys Thr  Cys Ala Ala Gly Gly  Ala Gly Gly Cys Cys  Thr Cys Thr
    2000                2005                2010

Gly Thr  Gly Cys Cys Gly Cys  Thr Gly Gly Gly Cys  Ala Cys Thr
    2015                2020                2025

Gly Thr  Gly Gly Thr Gly Gly  Thr Cys Cys Cys Ala  Gly Gly Ala
    2030                2035                2040

Gly Ala  Cys Ala Gly Thr Gly  Ala Cys Cys Thr Ala  Gly Ala Gly
    2045                2050                2055

Cys Thr  Cys Thr Gly Cys Cys  Gly Thr Gly Cys Cys  Cys Ala Cys
    2060                2065                2070

Ala Thr  Thr Gly Ala Gly Ala  Gly Ala Cys Thr Cys  Cys Ala Gly
    2075                2080                2085

Cys Ala  Gly Gly Ala Gly Cys  Cys Cys Gly Ala Thr  Gly Gly Thr
    2090                2095                2100

Gly Cys  Thr Gly Gly Ala Gly  Cys Cys Ala Ala Gly  Thr Cys Cys
    2105                2110                2115

Cys Cys  Gly Ala Cys Ala Thr  Gly Cys Cys Ala Gly  Ala Ala Ala
    2120                2125                2130

Cys Thr  Gly Thr Cys Cys Cys  Cys Cys Ala Ala Gly  Thr Gly Gly
    2135                2140                2145

Thr Gly  Cys Thr Thr Cys Cys  Thr Gly Gly Ala Cys  Gly Cys Cys
    2150                2155                2160

Ala Cys  Cys Ala Cys Thr Gly  Cys Cys Ala Gly Cys  Cys Gly Cys
    2165                2170                2175
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Thr Thr  Cys Thr Ala Cys Ala  Gly Gly Ala Thr Cys  Gly Ala Cys
    2180                2185                2190

Cys Gly  Ala Gly Cys Cys Cys  Ala Gly Gly Ala Gly  Cys Ala Cys
    2195                2200                2205

Cys Thr  Cys Ala Ala Cys Thr  Ala Thr Gly Thr Gly  Ala Cys Thr
    2210                2215                2220

Gly Ala  Gly Ala Thr Cys Gly  Cys Ala Cys Ala Gly  Gly Ala Thr
    2225                2230                2235

Gly Ala  Gly Ala Thr Thr Thr  Ala Thr Ala Thr Cys  Cys Thr Gly
    2240                2245                2250

Gly Ala  Cys Cys Cys Thr Gly  Ala Gly Cys Thr Gly  Cys Thr Gly
    2255                2260                2265

Gly Gly  Gly Gly Cys Ala Thr  Cys Gly Gly Cys Cys  Cys Gly Gly
    2270                2275                2280

Cys Cys  Thr Gly Ala Cys Cys  Thr Cys Cys Cys Ala  Ala Cys Cys
    2285                2290                2295

Cys Cys  Cys Ala Cys Thr Thr  Cys Cys Cys Cys Thr  Cys Thr Cys
    2300                2305                2310

Cys Cys  Cys Ala Cys Cys Thr  Cys Ala Cys Cys Cys  Thr Gly Cys
    2315                2320                2325

Thr Cys  Ala Cys Cys Cys Ala  Cys Gly Cys Cys Cys  Cys Gly Gly
    2330                2335                2340

Thr Cys  Ala Cys Thr Gly Cys  Ala Ala Gly Gly Gly  Gly Ala Thr
    2345                2350                2355

Gly Cys  Thr Gly Cys Ala Cys  Cys Cys Cys Cys Thr  Cys Ala Ala
    2360                2365                2370

Gly Gly  Thr Gly Ala Ala Gly  Ala Gly Cys Thr Gly  Ala Thr Thr
    2375                2380                2385
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Gly Ala  Gly Gly Cys Thr Gly  Cys Cys Ala Ala Gly  Ala Gly Gly
    2390                2395                2400

Ala Ala  Cys Gly Ala Cys Thr  Thr Cys Thr Gly Thr  Ala Ala Gly
    2405                2410                2415

Cys Thr  Cys Cys Ala Gly Gly  Ala Gly Cys Thr Gly  Cys Ala Cys
    2420                2425                2430

Cys Gly  Ala Gly Cys Thr Gly  Gly Gly Gly Gly Cys  Gly Ala Cys
    2435                2440                2445

Cys Thr  Cys Ala Thr Gly Cys  Ala Cys Cys Gly Ala  Gly Ala Cys
    2450                2455                2460

Gly Ala  Gly Cys Ala Gly Ala  Gly Thr Cys Gly Cys  Ala Cys Gly
    2465                2470                2475

Cys Thr  Cys Cys Thr Gly Cys  Ala Cys Cys Ala Cys  Gly Cys Ala
    2480                2485                2490

Gly Thr  Cys Ala Gly Cys Ala  Cys Thr Gly Gly Cys  Ala Gly Cys
    2495                2500                2505

Ala Ala  Gly Gly Ala Thr Gly  Thr Gly Gly Thr Cys  Cys Gly Cys
    2510                2515                2520

Thr Ala  Cys Cys Thr Gly Cys  Thr Gly Gly Ala Cys  Cys Ala Cys
    2525                2530                2535

Gly Cys  Cys Cys Cys Cys Cys  Cys Ala Gly Ala Gly  Ala Thr Cys
    2540                2545                2550

Cys Thr  Thr Gly Ala Thr Gly  Cys Gly Gly Thr Gly  Gly Ala Gly
    2555                2560                2565

Gly Ala  Ala Ala Ala Cys Gly  Gly Gly Gly Ala Gly  Ala Cys Cys
    2570                2575                2580
```

```
Thr Gly  Thr Thr Thr Gly Cys  Ala Cys Cys Ala Ala  Gly Cys Ala
    2585                2590                2595

Gly Cys  Gly Gly Cys Cys Cys  Thr Gly Gly Gly Cys  Cys Ala Gly
    2600                2605                2610

Cys Gly  Cys Ala Cys Cys Ala  Thr Cys Thr Gly Cys  Cys Ala Cys
    2615                2620                2625

Thr Ala  Cys Ala Thr Cys Gly  Thr Gly Gly Ala Gly  Gly Cys Cys
    2630                2635                2640

Gly Gly  Gly Gly Cys Cys Thr  Cys Gly Cys Thr Cys  Ala Thr Gly
    2645                2650                2655

Ala Ala  Gly Ala Cys Ala Gly  Ala Cys Cys Ala Gly  Cys Ala Gly
    2660                2665                2670

Gly Gly  Cys Gly Ala Cys Ala  Cys Thr Cys Cys Cys  Cys Gly Gly
    2675                2680                2685

Cys Ala  Gly Cys Gly Gly Gly  Cys Thr Gly Ala Gly  Ala Ala Gly
    2690                2695                2700

Gly Cys  Thr Cys Ala Gly Gly  Ala Cys Ala Cys Cys  Gly Ala Gly
    2705                2710                2715

Cys Thr  Gly Gly Cys Cys Gly  Cys Cys Thr Ala Cys  Cys Thr Gly
    2720                2725                2730

Gly Ala  Gly Ala Ala Cys Cys  Gly Gly Cys Ala Gly  Cys Ala Cys
    2735                2740                2745

Thr Ala  Cys Cys Ala Gly Ala  Thr Gly Ala Thr Cys  Cys Ala Gly
    2750                2755                2760

Cys Gly  Gly Gly Ala Gly Gly  Ala Cys Cys Ala Gly  Gly Ala Gly
    2765                2770                2775

Ala Cys  Gly Gly Cys Thr Gly  Thr Gly Gly Gly Ala  Thr Cys Cys
    2780                2785                2790
```

```
Thr Cys  Gly Gly Ala Gly Ala  Cys Ala Gly Thr Gly  Cys Gly Gly
    2795                 2800                 2805


Thr Thr  Thr Cys Ala Gly Gly  Gly Ala Cys Ala Cys  Cys Ala Cys
    2810                 2815                 2820


Cys Ala  Cys Cys Ala Thr Cys  Ala Cys Cys Ala Cys  Thr Gly Ala
    2825                 2830                 2835


<210>  4
<211>  945
<212>  PRT
<213>  Homo sapiens

<400>  4

Met Glu Pro Arg Asp Gly Ser Pro Glu Ala Arg Ser Ser Asp Ser Glu
1               5                   10                  15


Ser Ala Ser Ala Ser Ser Ser Gly Ser Glu Arg Asp Ala Gly Pro Glu
            20                  25                  30


Pro Asp Lys Ala Pro Arg Arg Leu Asn Lys Arg Arg Phe Pro Gly Leu
        35                  40                  45


Arg Leu Phe Gly His Arg Lys Ala Ile Thr Lys Ser Gly Leu Gln His
    50                  55                  60


Leu Ala Pro Pro Pro Pro Thr Pro Gly Ala Pro Cys Ser Glu Ser Glu
65                  70                  75                  80


Arg Gln Ile Arg Ser Thr Val Asp Trp Ser Glu Ser Ala Thr Tyr Gly
                85                  90                  95


Glu His Ile Trp Phe Glu Thr Asn Val Ser Gly Asp Phe Cys Tyr Val
            100                 105                 110


Gly Glu Gln Tyr Cys Val Ala Arg Met Leu Gln Lys Ser Val Ser Arg
        115                 120                 125


Arg Lys Cys Ala Ala Cys Lys Ile Val Val His Thr Pro Cys Ile Glu
```

130 135 140

Gln Leu Glu Lys Ile Asn Phe Arg Cys Lys Pro Ser Phe Arg Glu Ser
145 150 155 160

Gly Ser Arg Asn Val Arg Glu Pro Thr Phe Val Arg His His Trp Val
165 170 175

His Arg Arg Arg Gln Asp Gly Lys Cys Arg His Cys Gly Lys Gly Phe
180 185 190

Gln Gln Lys Phe Thr Phe His Ser Lys Glu Ile Val Ala Ile Ser Cys
195 200 205

Ser Trp Cys Lys Gln Ala Tyr His Ser Lys Val Ser Cys Phe Met Leu
210 215 220

Gln Gln Ile Glu Glu Pro Cys Ser Leu Gly Val His Ala Ala Val Val
225 230 235 240

Ile Pro Pro Thr Trp Ile Leu Arg Ala Arg Arg Pro Gln Asn Thr Leu
245 250 255

Lys Ala Ser Lys Lys Lys Lys Arg Ala Ser Phe Lys Arg Lys Ser Ser
260 265 270

Lys Lys Gly Pro Glu Glu Gly Arg Trp Arg Pro Phe Ile Ile Arg Pro
275 280 285

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

Ser Gly Gly Asn Gln Gly Ala Lys Ile Ile Gln Ser Phe Leu Trp Tyr
305 310 315 320

Leu Asn Pro Arg Gln Val Phe Asp Leu Ser Gln Gly Gly Pro Lys Glu
325 330 335

Ala Leu Glu Met Tyr Arg Lys Val His Asn Leu Arg Ile Leu Ala Cys
340 345 350

```
Gly Gly Asp Gly Thr Val Gly Trp Ile Leu Ser Thr Leu Asp Gln Leu
        355                 360                 365

Arg Leu Lys Pro Pro Pro Pro Val Ala Ile Leu Pro Leu Gly Thr Gly
    370                 375                 380

Asn Asp Leu Ala Arg Thr Leu Asn Trp Gly Gly Gly Tyr Thr Asp Glu
385                 390                 395                 400

Pro Val Ser Lys Ile Leu Ser His Val Glu Glu Gly Asn Val Val Gln
                405                 410                 415

Leu Asp Arg Trp Asp Leu His Ala Glu Pro Asn Pro Glu Ala Gly Pro
            420                 425                 430

Glu Asp Arg Asp Glu Gly Ala Thr Asp Arg Leu Pro Leu Asp Val Phe
        435                 440                 445

Asn Asn Tyr Phe Ser Leu Gly Phe Asp Ala His Val Thr Leu Glu Phe
    450                 455                 460

His Glu Ser Arg Glu Ala Asn Pro Glu Lys Phe Asn Ser Arg Phe Arg
465                 470                 475                 480

Asn Lys Met Phe Tyr Ala Gly Thr Ala Phe Ser Asp Phe Leu Met Gly
                485                 490                 495

Ser Ser Lys Asp Leu Ala Lys His Ile Arg Val Val Cys Asp Gly Met
            500                 505                 510

Asp Leu Thr Pro Lys Ile Gln Asp Leu Lys Pro Gln Cys Val Val Phe
        515                 520                 525

Leu Asn Ile Pro Arg Tyr Cys Ala Gly Thr Met Pro Trp Gly His Pro
    530                 535                 540

Gly Glu His His Asp Phe Glu Pro Gln Arg His Asp Asp Gly Tyr Leu
545                 550                 555                 560

Glu Val Ile Gly Phe Thr Met Thr Ser Leu Ala Ala Leu Gln Val Gly
```

565 570 575

Gly His Gly Glu Arg Leu Thr Gln Cys Arg Glu Val Val Leu Thr Thr
580 585 590

Ser Lys Ala Ile Pro Val Gln Val Asp Gly Glu Pro Cys Lys Leu Ala
595 600 605

Ala Ser Arg Ile Arg Ile Ala Leu Arg Asn Gln Ala Thr Met Val Gln
610 615 620

Lys Ala Lys Arg Arg Ser Ala Ala Pro Leu His Ser Asp Gln Gln Pro
625 630 635 640

Val Pro Glu Gln Leu Arg Ile Gln Val Ser Arg Val Ser Met His Asp
645 650 655

Tyr Glu Ala Leu His Tyr Asp Lys Glu Gln Leu Lys Glu Ala Ser Val
660 665 670

Pro Leu Gly Thr Val Val Val Pro Gly Asp Ser Asp Leu Glu Leu Cys
675 680 685

Arg Ala His Ile Glu Arg Leu Gln Gln Glu Pro Asp Gly Ala Gly Ala
690 695 700

Lys Ser Pro Thr Cys Gln Lys Leu Ser Pro Lys Trp Cys Phe Leu Asp
705 710 715 720

Ala Thr Thr Ala Ser Arg Phe Tyr Arg Ile Asp Arg Ala Gln Glu His
725 730 735

Leu Asn Tyr Val Thr Glu Ile Ala Gln Asp Glu Ile Tyr Ile Leu Asp
740 745 750

Pro Glu Leu Leu Gly Ala Ser Ala Arg Pro Asp Leu Pro Thr Pro Thr
755 760 765

Ser Pro Leu Pro Thr Ser Pro Cys Ser Pro Thr Pro Arg Ser Leu Gln
770 775 780

```
Gly Asp Ala Ala Pro Pro Gln Gly Glu Glu Leu Ile Glu Ala Ala Lys
785                 790                 795                 800


Arg Asn Asp Phe Cys Lys Leu Gln Glu Leu His Arg Ala Gly Gly Asp
                805                 810                 815


Leu Met His Arg Asp Glu Gln Ser Arg Thr Leu Leu His His Ala Val
            820                 825                 830


Ser Thr Gly Ser Lys Asp Val Val Arg Tyr Leu Leu Asp His Ala Pro
        835                 840                 845


Pro Glu Ile Leu Asp Ala Val Glu Glu Asn Gly Glu Thr Cys Leu His
    850                 855                 860


Gln Ala Ala Ala Leu Gly Gln Arg Thr Ile Cys His Tyr Ile Val Glu
865                 870                 875                 880


Ala Gly Ala Ser Leu Met Lys Thr Asp Gln Gln Gly Asp Thr Pro Arg
                885                 890                 895


Gln Arg Ala Glu Lys Ala Gln Asp Thr Glu Leu Ala Ala Tyr Leu Glu
            900                 905                 910


Asn Arg Gln His Tyr Gln Met Ile Gln Arg Glu Asp Gln Glu Thr Ala
        915                 920                 925


Val Gly Ser Ser Glu Thr Val Arg Phe Gln Gly His His His His His
    930                 935                 940


His
945
```

<210> 5
<211> 2214
<212> PRT
<213> Homo sapiens

<400> 5

```
Ala Thr Gly Gly Cys Thr Thr Cys Cys Cys Cys Ala Ala Gly Cys Gly
1               5                   10                  15
```

```
Ala Cys Thr Thr Cys Gly Cys Cys Cys Ala Gly Cys Thr Gly Cys Ala
            20                  25                  30

Gly Ala Ala Gly Thr Ala Cys Ala Thr Gly Gly Ala Ala Thr Ala Cys
        35                  40                  45

Ala Gly Cys Ala Cys Cys Ala Ala Gly Ala Ala Gly Gly Thr Gly Thr
    50                  55                  60

Cys Thr Gly Ala Cys Gly Thr Cys Cys Thr Gly Ala Ala Gly Cys Thr
65                  70                  75                  80

Gly Thr Thr Cys Gly Ala Gly Gly Ala Cys Gly Gly Thr Gly Ala Ala
                85                  90                  95

Ala Thr Gly Gly Cys Thr Ala Ala Gly Thr Ala Cys Gly Thr Cys Cys
            100                 105                 110

Ala Gly Gly Gly Cys Gly Ala Cys Gly Cys Thr Ala Thr Cys Gly Gly
        115                 120                 125

Ala Thr Ala Cys Gly Ala Gly Gly Gly Ala Thr Thr Cys Cys Ala Gly
    130                 135                 140

Cys Ala Gly Thr Thr Cys Cys Thr Gly Ala Ala Gly Ala Thr Cys Thr
145                 150                 155                 160

Ala Cys Cys Thr Gly Gly Ala Ala Gly Thr Gly Gly Ala Cys Ala Ala
                165                 170                 175

Cys Gly Thr Cys Cys Cys Cys Ala Gly Gly Cys Ala Cys Cys Thr Gly
            180                 185                 190

Thr Cys Ala Cys Thr Gly Gly Cys Thr Cys Thr Gly Thr Thr Cys Cys
        195                 200                 205

Ala Gly Thr Cys Cys Thr Thr Cys Gly Ala Gly Ala Cys Thr Gly Gly
    210                 215                 220
```

```
Cys Cys Ala Cys Thr Gly Cys Cys Thr Gly Ala Ala Cys Gly Ala Ala
225                 230                 235                 240


Ala Cys Cys Ala Ala Cys Gly Thr Cys Ala Cys Thr Ala Ala Gly Gly
                245                 250                 255


Ala Cys Gly Thr Gly Gly Thr Cys Thr Gly Cys Cys Thr Gly Ala Ala
            260                 265                 270


Cys Gly Ala Cys Gly Thr Gly Ala Gly Cys Thr Gly Cys Thr Ala Cys
        275                 280                 285


Thr Thr Cys Thr Cys Thr Cys Thr Gly Cys Thr Gly Gly Ala Gly Gly
    290                 295                 300


Gly Thr Gly Gly Cys Ala Gly Ala Cys Cys Ala Gly Ala Gly Gly Ala
305                 310                 315                 320


Cys Ala Ala Gly Cys Thr Gly Gly Ala Ala Thr Thr Cys Ala Cys Cys
                325                 330                 335


Thr Thr Cys Ala Ala Gly Cys Thr Gly Thr Ala Cys Gly Ala Cys Ala
            340                 345                 350


Cys Thr Gly Ala Cys Cys Gly Cys Ala Ala Cys Gly Gly Ala Ala Thr
        355                 360                 365


Cys Cys Thr Gly Gly Ala Cys Thr Cys Cys Ala Gly Cys Gly Ala Ala
    370                 375                 380


Gly Thr Gly Gly Ala Cys Ala Ala Gly Ala Thr Cys Ala Thr Cys Cys
385                 390                 395                 400


Thr Gly Cys Ala Gly Ala Thr Gly Ala Thr Gly Cys Gly Thr Gly Thr
                405                 410                 415


Cys Gly Cys Thr Gly Ala Gly Thr Ala Cys Cys Thr Gly Gly Ala Cys
            420                 425                 430


Thr Gly Gly Gly Ala Cys Gly Thr Gly Ala Gly Cys Gly Ala Ala Cys
        435                 440                 445
```

```
Thr Gly Ala Gly Gly Cys Cys Thr Ala Thr Cys Cys Thr Gly Cys Ala
    450                 455                 460

Gly Gly Ala Gly Ala Thr Gly Ala Thr Gly Ala Ala Gly Gly Ala Ala
465                 470                 475                 480

Ala Thr Cys Gly Ala Cys Thr Ala Cys Gly Ala Cys Gly Gly Cys Thr
                485                 490                 495

Cys Thr Gly Gly Ala Thr Cys Ala Gly Thr Gly Thr Cys Cys Cys Ala
            500                 505                 510

Gly Gly Cys Thr Gly Ala Gly Thr Gly Gly Gly Thr Cys Cys Gly Cys
        515                 520                 525

Gly Cys Thr Gly Gly Thr Gly Cys Thr Ala Cys Cys Ala Cys Thr Gly
    530                 535                 540

Thr Gly Cys Cys Ala Cys Thr Gly Cys Thr Gly Gly Thr Cys Cys Thr
545                 550                 555                 560

Gly Cys Thr Gly Gly Gly Ala Cys Thr Gly Gly Ala Ala Ala Thr Gly
                565                 570                 575

Ala Cys Cys Cys Thr Gly Ala Ala Gly Gly Ala Cys Gly Ala Cys Gly
            580                 585                 590

Gly Thr Cys Ala Gly Cys Ala Cys Ala Thr Gly Thr Gly Gly Cys Gly
        595                 600                 605

Cys Cys Cys Ala Ala Ala Gly Cys Gly Thr Thr Thr Cys Cys Cys Cys
    610                 615                 620

Ala Gly Gly Cys Cys Ala Gly Thr Cys Thr Ala Cys Thr Gly Cys Ala
625                 630                 635                 640

Ala Cys Cys Thr Gly Thr Gly Cys Gly Ala Gly Thr Cys Thr Thr Cys
                645                 650                 655
```

```
Ala Ala Thr Cys Gly Gly Thr Cys Thr Gly Gly Gly Cys Ala Ala Gly
            660                 665                 670

Cys Ala Gly Gly Gly Cys Cys Thr Gly Thr Cys Ala Thr Gly Cys Ala
        675                 680                 685

Ala Cys Cys Thr Gly Thr Gly Cys Ala Ala Gly Thr Ala Cys Ala Cys
    690                 695                 700

Cys Gly Thr Gly Cys Ala Cys Gly Ala Cys Cys Ala Gly Thr Gly Cys
705                 710                 715                 720

Gly Cys Thr Ala Thr Gly Ala Ala Gly Gly Cys Cys Cys Thr Gly Cys
                725                 730                 735

Cys Cys Thr Gly Cys Gly Ala Gly Gly Thr Cys Thr Cys Ala Ala Cys
            740                 745                 750

Thr Thr Ala Cys Gly Cys Thr Ala Ala Gly Thr Cys Cys Cys Gly Thr
        755                 760                 765

Ala Ala Gly Gly Ala Cys Ala Thr Cys Gly Gly Ala Gly Thr Gly Cys
    770                 775                 780

Ala Gly Thr Cys Ala Cys Ala Cys Gly Thr Gly Thr Gly Gly Gly Thr
785                 790                 795                 800

Cys Ala Gly Gly Gly Gly Ala Gly Gly Thr Thr Gly Cys Gly Ala Ala
                805                 810                 815

Thr Cys Cys Gly Gly Thr Ala Gly Ala Thr Gly Cys Gly Ala Cys Cys
            820                 825                 830

Gly Cys Thr Gly Cys Cys Ala Gly Ala Ala Gly Ala Ala Gly Ala Thr
        835                 840                 845

Cys Cys Gly Thr Ala Thr Cys Thr Ala Cys Cys Ala Cys Thr Cys Cys
    850                 855                 860

Cys Thr Gly Ala Cys Cys Gly Gly Ala Cys Thr Gly Cys Ala Cys Thr
865                 870                 875                 880
```

```
Gly Cys Gly Thr Cys Thr Gly Gly Thr Gly Cys Cys Ala Cys Cys Thr
                885                 890                 895

Gly Gly Ala Gly Ala Thr Cys Cys Ala Cys Gly Ala Cys Gly Ala Cys
            900                 905                 910

Thr Gly Cys Cys Thr Gly Cys Ala Gly Gly Cys Cys Gly Thr Gly Gly
        915                 920                 925

Gly Ala Cys Ala Cys Gly Ala Ala Thr Gly Cys Gly Ala Cys Thr Gly
    930                 935                 940

Cys Gly Gly Thr Cys Thr Gly Cys Thr Gly Cys Gly Thr Gly Ala Cys
945                 950                 955                 960

Cys Ala Cys Ala Thr Cys Cys Thr Gly Cys Cys Thr Cys Cys Cys Thr
                965                 970                 975

Cys Cys Ala Gly Cys Ala Thr Cys Thr Ala Cys Cys Cys Thr Thr Cys
            980                 985                 990

Ala Gly Thr Cys Cys Thr Gly Gly  Cys Thr Thr Cys Cys  Gly Gly Thr
        995                 1000                1005

Cys Cys  Cys Gly Ala Cys Ala  Gly Gly Ala Ala Gly  Ala Ala Cys
    1010                1015                1020

Ala Gly  Cys Ala Ala Gly Ala  Cys Cys Thr Cys Thr  Cys Ala Gly
    1025                1030                1035

Ala Ala  Gly Ala Cys Thr Ala  Thr Gly Gly Ala Cys  Gly Ala Cys
    1040                1045                1050

Cys Thr  Gly Ala Ala Cys Cys  Thr Gly Ala Gly Cys  Ala Cys Cys
    1055                1060                1065

Thr Cys  Thr Gly Ala Gly Gly  Cys Cys Cys Thr Gly  Cys Gly Cys
    1070                1075                1080
```

```
Ala Thr  Cys Gly Ala Cys Cys  Cys Thr Gly Thr Gly  Cys Cys Cys
    1085                1090                1095

Ala Ala  Cys Ala Cys Thr Cys  Ala Cys Cys Cys Ala  Cys Thr Gly
    1100                1105                1110

Cys Thr  Gly Gly Thr Gly Thr  Thr Cys Gly Thr Cys  Ala Ala Cys
    1115                1120                1125

Cys Cys  Thr Ala Ala Gly Ala  Gly Cys Gly Gly Cys  Gly Gly Ala
    1130                1135                1140

Ala Ala  Gly Cys Ala Gly Gly  Gly Thr Cys Ala Gly  Ala Gly Ala
    1145                1150                1155

Gly Thr  Cys Cys Thr Gly Thr  Gly Gly Ala Ala Gly  Thr Thr Cys
    1160                1165                1170

Cys Ala  Gly Thr Ala Cys Ala  Thr Cys Cys Thr Gly  Ala Ala Cys
    1175                1180                1185

Cys Cys  Ala Cys Gly Cys Cys  Ala Gly Gly Thr Gly  Thr Thr Cys
    1190                1195                1200

Ala Ala  Cys Cys Thr Gly Cys  Thr Gly Ala Ala Gly  Gly Ala Cys
    1205                1210                1215

Gly Gly  Cys Cys Cys Thr Gly  Ala Gly Ala Thr Cys  Gly Gly Ala
    1220                1225                1230

Cys Thr  Gly Ala Gly Ala Cys  Thr Gly Thr Thr Cys  Ala Ala Gly
    1235                1240                1245

Gly Ala  Cys Gly Thr Gly Cys  Cys Cys Gly Ala Cys  Thr Cys Thr
    1250                1255                1260

Cys Gly  Cys Ala Thr Cys Cys  Thr Cys Gly Thr Cys  Thr Gly Cys
    1265                1270                1275

Gly Gly  Thr Gly Gly Cys Gly  Ala Cys Gly Gly Thr  Ala Cys Thr
    1280                1285                1290
```

```
Gly Thr  Gly Gly Gly Ala Thr  Gly Gly Ala Thr Cys  Cys Thr Gly
    1295                 1300                 1305

Gly Ala  Ala Ala Cys Thr Ala  Thr Cys Gly Ala Cys  Ala Ala Gly
    1310                 1315                 1320

Gly Cys  Thr Ala Ala Cys Cys  Thr Gly Cys Cys Ala  Gly Thr Gly
    1325                 1330                 1335

Cys Thr  Gly Cys Cys Ala Cys  Cys Thr Gly Thr Gly  Gly Cys Thr
    1340                 1345                 1350

Gly Thr  Cys Cys Thr Gly Cys  Cys Ala Cys Thr Gly  Gly Gly Ala
    1355                 1360                 1365

Ala Cys  Cys Gly Gly Thr Ala  Ala Cys Gly Ala Cys  Cys Thr Gly
    1370                 1375                 1380

Gly Cys  Thr Cys Gly Thr Thr  Gly Cys Cys Thr Gly  Cys Gly Thr
    1385                 1390                 1395

Thr Gly  Gly Gly Gly Ala Gly  Gly Thr Gly Gly Cys  Thr Ala Cys
    1400                 1405                 1410

Gly Ala  Gly Gly Gly Ala Cys  Ala Gly Ala Ala Cys  Cys Thr Gly
    1415                 1420                 1425

Gly Cys  Cys Ala Ala Gly Ala  Thr Cys Cys Thr Gly  Ala Ala Gly
    1430                 1435                 1440

Gly Ala  Cys Cys Thr Gly Gly  Ala Ala Ala Thr Gly  Ala Gly Cys
    1445                 1450                 1455

Ala Ala  Gly Gly Thr Gly Gly  Thr Cys Cys Ala Cys  Ala Thr Gly
    1460                 1465                 1470

Gly Ala  Cys Ala Gly Ala Thr  Gly Gly Thr Cys Thr  Gly Thr Gly
    1475                 1480                 1485
```

```
Gly Ala  Gly Gly Thr Cys Ala  Thr Cys Cys Cys Ala  Cys Ala Gly
    1490                 1495                 1500

Cys Ala  Gly Ala Cys Thr Gly  Ala Gly Gly Ala Ala  Ala Ala Gly
    1505                 1510                 1515

Thr Cys  Ala Gly Ala Cys Cys  Cys Ala Gly Thr Cys  Cys Cys Thr
    1520                 1525                 1530

Thr Thr  Cys Cys Ala Gly Ala  Thr Cys Ala Thr Cys  Ala Ala Cys
    1535                 1540                 1545

Ala Ala  Cys Thr Ala Cys Thr  Thr Cys Ala Gly Cys  Ala Thr Cys
    1550                 1555                 1560

Gly Gly  Thr Gly Thr Gly Gly  Ala Cys Gly Cys Thr  Thr Cys Thr
    1565                 1570                 1575

Ala Thr  Cys Gly Cys Cys Cys  Ala Cys Ala Gly Ala  Thr Thr Cys
    1580                 1585                 1590

Cys Ala  Cys Ala Thr Cys Ala  Thr Gly Cys Gly Cys  Gly Ala Gly
    1595                 1600                 1605

Ala Ala  Gly Thr Ala Cys Cys  Cys Thr Gly Ala Ala  Ala Ala Gly
    1610                 1615                 1620

Thr Thr  Cys Ala Ala Cys Thr  Cys Cys Cys Gly Cys  Ala Thr Gly
    1625                 1630                 1635

Ala Ala  Gly Ala Ala Cys Ala  Ala Gly Cys Thr Gly  Thr Gly Gly
    1640                 1645                 1650

Thr Ala  Cys Thr Thr Cys Gly  Ala Gly Thr Thr Cys  Gly Cys Thr
    1655                 1660                 1665

Ala Cys  Cys Thr Cys Ala Gly  Ala Ala Thr Cys Cys  Ala Thr Cys
    1670                 1675                 1680

Thr Thr  Cys Thr Cys Ala Ala  Cys Thr Thr Gly Cys  Ala Ala Gly
    1685                 1690                 1695
```

```
Ala Ala  Gly Cys Thr Gly Gly  Ala Gly Gly Ala Ala  Thr Cys Cys
    1700                1705                1710

Cys Thr  Gly Ala Cys Cys Gly  Thr Cys Gly Ala Gly  Ala Thr Cys
    1715                1720                1725

Thr Gly  Cys Gly Gly Cys Ala  Ala Gly Cys Cys Thr  Cys Thr Gly
    1730                1735                1740

Gly Ala  Cys Cys Thr Gly Thr  Cys Ala Ala Ala Cys  Cys Thr Gly
    1745                1750                1755

Thr Cys  Cys Cys Thr Gly Gly  Ala Ala Gly Gly Cys  Ala Thr Cys
    1760                1765                1770

Gly Cys  Thr Gly Thr Gly Cys  Thr Gly Ala Ala Cys  Ala Thr Cys
    1775                1780                1785

Cys Cys  Ala Ala Gly Cys Ala  Thr Gly Cys Ala Cys  Gly Gly Ala
    1790                1795                1800

Gly Gly  Thr Thr Cys Thr Ala  Ala Cys Cys Thr Cys  Thr Gly Gly
    1805                1810                1815

Gly Gly  Cys Gly Ala Cys Ala  Cys Thr Ala Gly Gly  Ala Gly Gly
    1820                1825                1830

Cys Cys  Thr Cys Ala Cys Gly  Gly Thr Gly Ala Cys  Ala Thr Cys
    1835                1840                1845

Thr Ala  Cys Gly Gly Cys Ala  Thr Cys Ala Ala Cys  Cys Ala Gly
    1850                1855                1860

Gly Cys  Cys Cys Thr Gly Gly  Gly Ala Gly Cys Thr  Ala Cys Cys
    1865                1870                1875

Gly Cys  Cys Ala Ala Gly Gly  Thr Cys Ala Thr Cys  Ala Cys Thr
    1880                1885                1890
```

```
Gly Ala  Cys Cys Cys Cys Gly  Ala Cys Ala Thr Cys  Cys Thr Gly
    1895                1900                1905

Ala Ala  Gly Ala Cys Cys Thr  Gly Cys Gly Thr Gly  Cys Cys Ala
    1910                1915                1920

Gly Ala  Cys Cys Thr Gly Ala  Gly Cys Gly Ala Cys  Ala Ala Gly
    1925                1930                1935

Cys Gly  Thr Cys Thr Gly Gly  Ala Gly Gly Thr Gly  Gly Thr Cys
    1940                1945                1950

Gly Gly  Ala Cys Thr Gly Gly  Ala Gly Gly Gly Thr  Gly Cys Cys
    1955                1960                1965

Ala Thr  Cys Gly Ala Ala Ala  Thr Gly Gly Gly Cys  Cys Ala Gly
    1970                1975                1980

Ala Thr  Cys Thr Ala Cys Ala  Cys Thr Ala Ala Gly  Cys Thr Gly
    1985                1990                1995

Ala Ala  Gly Ala Ala Cys Gly  Cys Thr Gly Gly Ala  Ala Gly Gly
    2000                2005                2010

Ala Gly  Ala Cys Thr Gly Gly  Cys Cys Ala Ala Gly  Thr Gly Cys
    2015                2020                2025

Thr Cys  Thr Gly Ala Gly Ala  Thr Cys Ala Cys Cys  Thr Thr Cys
    2030                2035                2040

Cys Ala  Cys Ala Cys Cys Ala  Cys Thr Ala Ala Gly  Ala Cys Thr
    2045                2050                2055

Cys Thr  Gly Cys Cys Thr Ala  Thr Gly Cys Ala Gly  Ala Thr Cys
    2060                2065                2070

Gly Ala  Cys Gly Gly Thr Gly  Ala Ala Cys Cys Cys  Thr Gly Gly
    2075                2080                2085

Ala Thr  Gly Cys Ala Gly Ala  Cys Cys Cys Cys Ala  Thr Gly Cys
    2090                2095                2100
```

```
Ala Cys  Thr Ala Thr Cys Ala  Ala Gly Ala Thr Cys  Ala Cys Cys
    2105                 2110                 2115


Cys Ala  Cys Ala Ala Gly Ala  Ala Cys Cys Ala Gly  Ala Thr Gly
    2120                 2125                 2130


Cys Cys  Cys Ala Thr Gly Cys  Thr Gly Ala Thr Gly  Gly Gly Thr
    2135                 2140                 2145


Cys Cys  Thr Cys Cys Thr Cys  Cys Thr Cys Gly Cys  Thr Cys Thr
    2150                 2155                 2160


Gly Gly  Ala Thr Cys Thr Thr  Cys Ala Gly Ala Ala  Ala Cys Thr
    2165                 2170                 2175


Gly Thr  Gly Ala Gly Gly Thr  Thr Cys Cys Ala Gly  Gly Gly Cys
    2180                 2185                 2190


Cys Ala  Cys Cys Ala Cys Cys  Ala Cys Cys Ala Cys  Cys Ala Cys
    2195                 2200                 2205


Cys Ala  Cys Thr Gly Ala
    2210


<210>  6
<211>  737
<212>  PRT
<213>  Homo sapiens

<400>  6

Met Ala Ser Pro Ser Asp Phe Ala Gln Leu Gln Lys Tyr Met Glu Tyr
1               5                  10                  15


Ser Thr Lys Lys Val Ser Asp Val Leu Lys Leu Phe Glu Asp Gly Glu
            20                  25                  30


Met Ala Lys Tyr Val Gln Gly Asp Ala Ile Gly Tyr Glu Gly Phe Gln
        35                  40                  45


Gln Phe Leu Lys Ile Tyr Leu Glu Val Asp Asn Val Pro Arg His Leu
```

50 55 60

Ser Leu Ala Leu Phe Gln Ser Phe Glu Thr Gly His Cys Leu Asn Glu
65 70 75 80

Thr Asn Val Thr Lys Asp Val Val Cys Leu Asn Asp Val Ser Cys Tyr
85 90 95

Phe Ser Leu Leu Glu Gly Gly Arg Pro Glu Asp Lys Leu Glu Phe Thr
100 105 110

Phe Lys Leu Tyr Asp Thr Asp Arg Asn Gly Ile Leu Asp Ser Ser Glu
115 120 125

Val Asp Lys Ile Ile Leu Gln Met Met Arg Val Ala Glu Tyr Leu Asp
130 135 140

Trp Asp Val Ser Glu Leu Arg Pro Ile Leu Gln Glu Met Met Lys Glu
145 150 155 160

Ile Asp Tyr Asp Gly Ser Gly Ser Val Ser Gln Ala Glu Trp Val Arg
165 170 175

Ala Gly Ala Thr Thr Val Pro Leu Leu Val Leu Leu Gly Leu Glu Met
180 185 190

Thr Leu Lys Asp Asp Gly Gln His Met Trp Arg Pro Lys Arg Phe Pro
195 200 205

Arg Pro Val Tyr Cys Asn Leu Cys Glu Ser Ser Ile Gly Leu Gly Lys
210 215 220

Gln Gly Leu Ser Cys Asn Leu Cys Lys Tyr Thr Val His Asp Gln Cys
225 230 235 240

Ala Met Lys Ala Leu Pro Cys Glu Val Ser Thr Tyr Ala Lys Ser Arg
245 250 255

Lys Asp Ile Gly Val Gln Ser His Val Trp Val Arg Gly Gly Cys Glu
260 265 270

```
Ser Gly Arg Cys Asp Arg Cys Gln Lys Lys Ile Arg Ile Tyr His Ser
        275                 280                 285

Leu Thr Gly Leu His Cys Val Trp Cys His Leu Glu Ile His Asp Asp
    290                 295                 300

Cys Leu Gln Ala Val Gly His Glu Cys Asp Cys Gly Leu Leu Arg Asp
305                 310                 315                 320

His Ile Leu Pro Pro Ser Ser Ile Tyr Pro Ser Val Leu Ala Ser Gly
                325                 330                 335

Pro Asp Arg Lys Asn Ser Lys Thr Ser Gln Lys Thr Met Asp Asp Leu
            340                 345                 350

Asn Leu Ser Thr Ser Glu Ala Leu Arg Ile Asp Pro Val Pro Asn Thr
        355                 360                 365

His Pro Leu Leu Val Phe Val Asn Pro Lys Ser Gly Gly Lys Gln Gly
    370                 375                 380

Gln Arg Val Leu Trp Lys Phe Gln Tyr Ile Leu Asn Pro Arg Gln Val
385                 390                 395                 400

Phe Asn Leu Leu Lys Asp Gly Pro Glu Ile Gly Leu Arg Leu Phe Lys
                405                 410                 415

Asp Val Pro Asp Ser Arg Ile Leu Val Cys Gly Gly Asp Gly Thr Val
            420                 425                 430

Gly Trp Ile Leu Glu Thr Ile Asp Lys Ala Asn Leu Pro Val Leu Pro
        435                 440                 445

Pro Val Ala Val Leu Pro Leu Gly Thr Gly Asn Asp Leu Ala Arg Cys
    450                 455                 460

Leu Arg Trp Gly Gly Gly Tyr Glu Gly Gln Asn Leu Ala Lys Ile Leu
465                 470                 475                 480

Lys Asp Leu Glu Met Ser Lys Val Val His Met Asp Arg Trp Ser Val
```

485 490 495

Glu Val Ile Pro Gln Gln Thr Glu Glu Lys Ser Asp Pro Val Pro Phe
500 505 510

Gln Ile Ile Asn Asn Tyr Phe Ser Ile Gly Val Asp Ala Ser Ile Ala
515 520 525

His Arg Phe His Ile Met Arg Glu Lys Tyr Pro Glu Lys Phe Asn Ser
530 535 540

Arg Met Lys Asn Lys Leu Trp Tyr Phe Glu Phe Ala Thr Ser Glu Ser
545 550 555 560

Ile Phe Ser Thr Cys Lys Lys Leu Glu Glu Ser Leu Thr Val Glu Ile
565 570 575

Cys Gly Lys Pro Leu Asp Leu Ser Asn Leu Ser Leu Glu Gly Ile Ala
580 585 590

Val Leu Asn Ile Pro Ser Met His Gly Gly Ser Asn Leu Trp Gly Asp
595 600 605

Thr Arg Arg Pro His Gly Asp Ile Tyr Gly Ile Asn Gln Ala Leu Gly
610 615 620

Ala Thr Ala Lys Val Ile Thr Asp Pro Asp Ile Leu Lys Thr Cys Val
625 630 635 640

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

Ile Glu Met Gly Gln Ile Tyr Thr Lys Leu Lys Asn Ala Gly Arg Arg
660 665 670

Leu Ala Lys Cys Ser Glu Ile Thr Phe His Thr Thr Lys Thr Leu Pro
675 680 685

Met Gln Ile Asp Gly Glu Pro Trp Met Gln Thr Pro Cys Thr Ile Lys
690 695 700

```
Ile Thr His Lys Asn Gln Met Pro Met Leu Met Gly Pro Pro Pro Arg
705                 710                 715                 720


Ser Gly Ser Ser Glu Thr Val Arg Phe Gln Gly His His His His His
                725                 730                 735


His
```