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<120> NOVEL MODULATORS AND METHODS OF USE

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Pro Gly Ile Glu Glu Thr Asp Gly Glu Leu Thr Ala Ala Pro Thr Pro
        35                  40                  45

Glu Gln Pro Glu Arg Gly Val His Phe Val Thr Thr Ala Pro Thr Leu
    50                  55                  60

Lys Leu Leu Asn His His Pro Leu Leu Glu Glu Phe Leu Gln Glu Gly
65                  70                  75                  80

Leu Glu Lys Gly Asp Glu Glu Leu Arg Pro Ala Leu Pro Phe Gln Pro
                85                  90                  95

Asp Pro Pro Ala Pro Phe Thr Pro Ser Pro Leu Pro Arg Leu Ala Asn
            100                 105                 110

Gln Asp Ser Arg Pro Val Phe Thr Ser Pro Thr Pro Ala Met Ala Ala
        115                 120                 125

Val Pro Thr Gln Pro Gln Ser Lys Glu Gly Pro Trp Ser Pro Glu Ser
    130                 135                 140

Glu Ser Pro Met Leu Arg Ile Thr Ala Pro Leu Pro Pro Gly Pro Ser
145                 150                 155                 160

Met Ala Val Pro Thr Leu Gly Pro Gly Glu Ile Ala Ser Thr Thr Pro
                165                 170                 175

Pro Ser Arg Ala Trp Thr Pro Thr Gln Glu Gly Pro Gly Asp Met Gly
            180                 185                 190

Arg Pro Trp Val Ala Glu Val Val Ser Gln Gly Ala Gly Ile Gly Ile
        195                 200                 205

Gln Gly Thr Ile Thr Ser Ser Thr Ala Ser Gly Asp Asp Glu Glu Thr
    210                 215                 220

Thr Thr Thr Thr Thr Ile Ile Thr Thr Thr Ile Thr Thr Val Gln Thr
225                 230                 235                 240

Pro Gly Pro Cys Ser Trp Asn Phe Ser Gly Pro Glu Gly Ser Leu Asp
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Phe Tyr Ile Ser Val Tyr Pro Gly Tyr Gly Val Glu Ile Lys Val Gln
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Asn Ile Ser Leu Arg Glu Gly Glu Thr Val Thr Val Glu Gly Leu Gly
    290                 295                 300

Gly Pro Asp Pro Leu Pro Leu Ala Asn Gln Ser Phe Leu Leu Arg Gly
305                 310                 315                 320

Gln Val Ile Arg Ser Pro Thr His Gln Ala Ala Leu Arg Phe Gln Ser
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Leu Pro Pro Pro Ala Gly Pro Gly Thr Phe His Phe His Tyr Gln Ala
            340                 345                 350

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

Thr Val Thr Ser Leu His Pro Gly Gly Ser Ala Arg Phe His Cys Ala
    370                 375                 380

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

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Ala Pro Glu Gly Gln Arg Leu His Leu His Phe Glu Lys Val Ser Leu
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Ala Glu Asp Asp Asp Arg Leu Ile Ile Arg Asn Gly Asp Asn Val Glu
465                 470                 475                 480

Ala Pro Pro Val Tyr Asp Ser Tyr Glu Val Glu Tyr Leu Pro Ile Glu
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Gly Leu Leu Ser Ser Gly Lys His Phe Phe Val Glu Leu Ser Thr Asp
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Ser Thr Pro Thr Tyr Pro Val Gly Thr Thr Val Glu Phe Ser Cys Asp
545                 550                 555                 560

Pro Gly Tyr Thr Leu Glu Gln Gly Ser Ile Ile Ile Glu Cys Val Asp
                565                 570                 575

Pro His Asp Pro Gln Trp Asn Glu Thr Glu Pro Ala Cys Arg Ala Val
            580                 585                 590

Cys Ser Gly Glu Ile Thr Asp Ser Ala Gly Val Val Leu Ser Pro Asn
        595                 600                 605

Trp Pro Glu Pro Tyr Gly Arg Gly Gln Asp Cys Ile Trp Gly Val His
    610                 615                 620

Val Glu Glu Asp Lys Arg Ile Met Leu Asp Ile Arg Val Leu Arg Ile
625                 630                 635                 640

Gly Pro Gly Asp Val Leu Thr Phe Tyr Asp Gly Asp Asp Leu Thr Ala
                645                 650                 655

Arg Val Leu Gly Gln Tyr Ser Gly Pro Arg Ser His Phe Lys Leu Phe
            660                 665                 670

Thr Ser Met Ala Asp Val Thr Ile Gln Phe Gln Ser Asp Pro Gly Thr
        675                 680                 685

Ser Val Leu Gly Tyr Gln Gln Gly Phe Val Ile His Phe Phe Glu Val
    690                 695                 700

Pro Arg Asn Asp Thr Cys Pro Glu Leu Pro Glu Ile Pro Asn Gly Trp
705                 710                 715                 720

Lys Ser Pro Ser Gln Pro Glu Leu Val His Gly Thr Val Val Thr Tyr
                725                 730                 735

Gln Cys Tyr Pro Gly Tyr Gln Val Val Gly Ser Ser Val Leu Met Cys
            740                 745                 750

Gln Trp Asp Leu Thr Trp Ser Glu Asp Leu Pro Ser Cys Gln Arg Val
        755                 760                 765
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Thr Ser Cys His Asp Pro Gly Asp Val Glu His Ser Arg Arg Leu Ile
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Ser Ser Pro Lys Phe Pro Val Gly Ala Thr Val Gln Tyr Ile Cys Asp
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Gln Gly Phe Val Leu Met Gly Ser Ser Ile Leu Thr Cys His Asp Arg
                805                 810                 815

Gln Ala Gly Ser Pro Lys Trp Ser Asp Arg Ala Pro Lys Cys Leu Leu
            820                 825                 830

Glu Gln Leu Lys Pro Cys His Gly Leu Ser Ala Pro Glu Asn Gly Ala
        835                 840                 845

Arg Ser Pro Glu Lys Gln Leu His Pro Ala Gly Ala Thr Ile His Phe
    850                 855                 860

Ser Cys Ala Pro Gly Tyr Val Leu Lys Gly Gln Ala Ser Ile Lys Cys
865                 870                 875                 880

Val Pro Gly His Pro Ser His Trp Ser Asp Pro Pro Pro Ile Cys Arg
                885                 890                 895

Ala Ala Ser Leu Asp Gly Phe Tyr Asn Ser Arg Ser Leu Asp Val Ala
            900                 905                 910

Lys Ala Pro Ala Ala Ser Ser Thr Leu Asp Ala Ala His Ile Ala Ala
        915                 920                 925

Ala Ile Phe Leu Pro Leu Val Ala Met Val Leu Leu Val Gly Gly Val
    930                 935                 940

Tyr Phe Tyr Phe Ser Arg Leu Gln Gly Lys Ser Ser Leu Gln Leu Pro
945                 950                 955                 960

Arg Pro Arg Pro Arg Pro Tyr Asn Arg Ile Thr Ile Glu Ser Ala Phe
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Glu Gln Pro Glu Arg Gly Val His Phe Val Thr Thr Ala Pro Thr Leu
    50                  55                  60

Lys Leu Leu Asn His His Pro Leu Leu Glu Glu Phe Leu Gln Glu Gly
65                  70                  75                  80

Leu Glu Lys Gly Asp Glu Glu Leu Arg Pro Ala Leu Pro Phe Gln Pro
                85                  90                  95

Asp Pro Pro Ala Pro Phe Thr Pro Ser Pro Leu Pro Arg Leu Ala Asn
            100                 105                 110

Gln Asp Ser Arg Pro Val Phe Thr Ser Pro Thr Pro Ala Met Ala Ala
        115                 120                 125

Val Pro Thr Gln Pro Gln Ser Lys Glu Gly Pro Trp Ser Pro Glu Ser
    130                 135                 140

Glu Ser Pro Met Leu Arg Ile Thr Ala Pro Leu Pro Pro Gly Pro Ser
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Met Ala Val Pro Thr Leu Gly Pro Gly Glu Ile Ala Ser Thr Thr Pro
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Pro Ser Arg Ala Trp Thr Pro Thr Gln Glu Gly Pro Gly Asp Met Gly
            180                 185                 190

Arg Pro Trp Val Ala Glu Val Val Ser Gln Gly Ala Gly Ile Gly Ile
        195                 200                 205

Gln Gly Thr Ile Thr Ser Ser Thr Ala Ser Gly Asp Asp Glu Glu Thr
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Thr Thr Thr Thr Thr Ile Ile Thr Thr Thr Ile Thr Thr Val Gln Thr
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Pro Gly Pro Cys Ser Trp Asn Phe Ser Gly Pro Glu Gly Ser Leu Asp
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            260                 265                 270

Phe Tyr Ile Ser Val Tyr Pro Gly Tyr Gly Val Glu Ile Lys Val Gln
        275                 280                 285

Asn Ile Ser Leu Arg Glu Gly Glu Thr Val Thr Val Glu Gly Leu Gly
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Leu Pro Pro Pro Ala Gly Pro Gly Thr Phe His Phe His Tyr Gln Ala
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Tyr Leu Leu Ser Cys His Phe Pro Arg Arg Pro Ala Tyr Gly Asp Val
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Thr Val Thr Ser Leu His Pro Gly Gly Ser Ala Arg Phe His Cys Ala
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Thr Gln Pro Phe Trp Asp Ser Lys Glu Pro Val Cys Ile Ala Ala Cys
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Gly Gly Val Ile Arg Asn Ala Thr Thr Gly Arg Ile Val Ser Pro Gly
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Phe Pro Gly Asn Tyr Ser Asn Asn Leu Thr Cys His Trp Leu Leu Glu
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Ala Pro Glu Gly Gln Arg Leu His Leu His Phe Glu Lys Val Ser Leu
    450                 455                 460

Ala Glu Asp Asp Asp Arg Leu Ile Ile Arg Asn Gly Asp Asn Val Glu
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Ala Pro Pro Val Tyr Asp Ser Tyr Glu Val Glu Tyr Leu Pro Ile Glu
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Gln Gly His Cys Tyr Glu Pro Phe Val Lys Tyr Gly Asn Phe Ser Ser
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Ser Thr Pro Thr Tyr Pro Val Gly Thr Thr Val Glu Phe Ser Cys Asp
545                 550                 555                 560

Pro Gly Tyr Thr Leu Glu Gln Gly Ser Ile Ile Ile Glu Cys Val Asp
                565                 570                 575

Pro His Asp Pro Gln Trp Asn Glu Thr Glu Pro Ala Cys Arg Ala Val
            580                 585                 590

Cys Ser Gly Glu Ile Thr Asp Ser Ala Gly Val Val Leu Ser Pro Asn
        595                 600                 605

Trp Pro Glu Pro Tyr Gly Arg Gly Gln Asp Cys Ile Trp Gly Val His
    610                 615                 620

Val Glu Glu Asp Lys Arg Ile Met Leu Asp Ile Arg Val Leu Arg Ile
625                 630                 635                 640

Gly Pro Gly Asp Val Leu Thr Phe Tyr Asp Gly Asp Asp Leu Thr Ala
                645                 650                 655

Arg Val Leu Gly Gln Tyr Ser Gly Pro Arg Ser His Phe Lys Leu Phe
            660                 665                 670

Thr Ser Met Ala Asp Val Thr Ile Gln Phe Gln Ser Asp Pro Gly Thr
        675                 680                 685

Ser Val Leu Gly Tyr Gln Gln Gly Phe Val Ile His Phe Phe Glu Val
    690                 695                 700

Pro Arg Asn Asp Thr Cys Pro Glu Leu Pro Glu Ile Pro Asn Gly Trp
705                 710                 715                 720

Lys Ser Pro Ser Gln Pro Glu Leu Val His Gly Thr Val Val Thr Tyr
                725                 730                 735

Gln Cys Tyr Pro Gly Tyr Gln Val Val Gly Ser Ser Val Leu Met Cys
            740                 745                 750
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Gln Trp Asp Leu Thr Trp Ser Glu Asp Leu Pro Ser Cys Gln Arg Val
        755                 760                 765

Thr Ser Cys His Asp Pro Gly Asp Val Glu His Ser Arg Arg Leu Ile
    770                 775                 780

Ser Ser Pro Lys Phe Pro Val Gly Ala Thr Val Gln Tyr Ile Cys Asp
785                 790                 795                 800

Gln Gly Phe Val Leu Met Gly Ser Ser Ile Leu Thr Cys His Asp Arg
                805                 810                 815

Gln Ala Gly Ser Pro Lys Trp Ser Asp Arg Ala Pro Lys Cys Leu Leu
            820                 825                 830

Glu Gln Leu Lys Pro Cys His Gly Leu Ser Ala Pro Glu Asn Gly Ala
        835                 840                 845

Arg Ser Pro Glu Lys Gln Leu His Pro Ala Gly Ala Thr Ile His Phe
    850                 855                 860

Ser Cys Ala Pro Gly Tyr Val Leu Lys Gly Gln Ala Ser Ile Lys Cys
865                 870                 875                 880

Val Pro Gly His Pro Ser His Trp Ser Asp Pro Pro Pro Ile Cys Arg
                885                 890                 895

Ala Ala Ser Leu Asp Gly Phe Tyr Asn Ser Arg Ser Leu Asp Val Ala
            900                 905                 910

Lys Ala Pro Ala Ala Ser Ser Thr Leu Asp Ala Ala His Ile Ala Ala
        915                 920                 925

Ala Ile Phe Leu Pro Leu Val Ala Met Val Leu Leu Val Gly Gly Val
    930                 935                 940

Tyr Phe Tyr Phe Ser Arg Leu Gln Gly Lys Ser Ser Leu Gln Leu Pro
945                 950                 955                 960

Arg Pro Arg Pro Arg Pro Tyr Asn Arg Ile Thr Ile Glu Ser Ala Phe
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Asp Asn Pro Thr Tyr Glu Thr Gly Glu Thr Arg Glu Tyr Glu Val Ser
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Ile
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<212> PRT
<213> Homo sapiens

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Glu Arg Gly Val His Phe Val Thr Thr Ala Pro Thr Leu Lys Leu Leu
35 40 45

Asn His His Pro Leu Leu Glu Glu Phe Leu Gln Glu Gly Leu Glu Lys
50 55 60

Gly Asp Glu Glu Leu Arg Pro Ala Leu Pro Phe Gln Pro Asp Pro Pro

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65                  70                  75                  80

Ala Pro Phe Thr Pro Ser Pro Leu Pro Arg Leu Ala Asn Gln Asp Ser
                85                  90                  95

Arg Pro Val Phe Thr Ser Pro Thr Pro Ala Met Ala Ala Val Pro Thr
            100                 105                 110

Gln Pro Gln Ser Lys Glu Gly Pro Trp Ser Pro Glu Ser Glu Ser Pro
        115                 120                 125

Met Leu Arg Ile Thr Ala Pro Leu Pro Pro Gly Pro Ser Met Ala Val
    130                 135                 140

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

Ala Trp Thr Pro Thr Gln Glu Gly Pro Gly Asp Met Gly Arg Pro Trp
                165                 170                 175

Val Ala Glu Val Val Ser Gln Gly Ala Gly Ile Gly Ile Gln Gly Thr
            180                 185                 190

Ile Thr Ser Ser Thr Ala Ser Gly Asp Asp Glu Glu Thr Thr Thr Thr
        195                 200                 205

Thr Thr Ile Ile Thr Thr Thr Ile Thr Thr Val Gln Thr Pro Gly Pro
    210                 215                 220

Cys Ser Trp Asn Phe Ser Gly Pro Glu Gly Ser Leu Asp Ser Pro Thr
225                 230                 235                 240

Asp Leu Ser Ser Pro Thr Asp Val Gly Leu Asp Cys Phe Phe Tyr Ile
                245                 250                 255

Ser Val Tyr Pro Gly Tyr Gly Val Glu Ile Lys Val Gln Asn Ile Ser
            260                 265                 270

Leu Arg Glu Gly Glu Thr Val Thr Val Glu Gly Leu Gly Gly Pro Asp
        275                 280                 285

Pro Leu Pro Leu Ala Asn Gln Ser Phe Leu Leu Arg Gly Gln Val Ile
    290                 295                 300

Arg Ser Pro Thr His Gln Ala Ala Leu Arg Phe Gln Ser Leu Pro Pro
305                 310                 315                 320

Pro Ala Gly Pro Gly Thr Phe His Phe His Tyr Gln Ala Tyr Leu Leu
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                325                 330                 335

Ser Cys His Phe Pro Arg Arg Pro Ala Tyr Gly Asp Val Thr Val Thr
            340                 345                 350

Ser Leu His Pro Gly Gly Ser Ala Arg Phe His Cys Ala Thr Gly Tyr
        355                 360                 365

Gln Leu Lys Gly Ala Arg His Leu Thr Cys Leu Asn Ala Thr Gln Pro
    370                 375                 380

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

Ile Arg Asn Ala Thr Thr Gly Arg Ile Val Ser Pro Gly Phe Pro Gly
                405                 410                 415

Asn Tyr Ser Asn Asn Leu Thr Cys His Trp Leu Leu Glu Ala Pro Glu
            420                 425                 430

Gly Gln Arg Leu His Leu His Phe Glu Lys Val Ser Leu Ala Glu Asp
        435                 440                 445

Asp Asp Arg Leu Ile Ile Arg Asn Gly Asp Asn Val Glu Ala Pro Pro
    450                 455                 460

Val Tyr Asp Ser Tyr Glu Val Glu Tyr Leu Pro Ile Glu Gly Leu Leu
465                 470                 475                 480

Ser Ser Gly Lys His Phe Phe Val Glu Leu Ser Thr Asp Ser Ser Gly
                485                 490                 495

Ala Ala Ala Gly Met Ala Leu Arg Tyr Glu Ala Phe Gln Gln Gly His
            500                 505                 510

Cys Tyr Glu Pro Phe Val Lys Tyr Gly Asn Phe Ser Ser Ser Thr Pro
        515                 520                 525

Thr Tyr Pro Val Gly Thr Thr Val Glu Phe Ser Cys Asp Pro Gly Tyr
    530                 535                 540

Thr Leu Glu Gln Gly Ser Ile Ile Ile Glu Cys Val Asp Pro His Asp
545                 550                 555                 560

Pro Gln Trp Asn Glu Thr Glu Pro Ala Cys Arg Ala Val Cys Ser Gly
                565                 570                 575

Glu Ile Thr Asp Ser Ala Gly Val Val Leu Ser Pro Asn Trp Pro Glu
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            580                 585                 590

Pro Tyr Gly Arg Gly Gln Asp Cys Ile Trp Gly Val His Val Glu Glu
        595                 600                 605

Asp Lys Arg Ile Met Leu Asp Ile Arg Val Leu Arg Ile Gly Pro Gly
    610                 615                 620

Asp Val Leu Thr Phe Tyr Asp Gly Asp Asp Leu Thr Ala Arg Val Leu
625                 630                 635                 640

Gly Gln Tyr Ser Gly Pro Arg Ser His Phe Lys Leu Phe Thr Ser Met
                645                 650                 655

Ala Asp Val Thr Ile Gln Phe Gln Ser Asp Pro Gly Thr Ser Val Leu
            660                 665                 670

Gly Tyr Gln Gln Gly Phe Val Ile His Phe Phe Glu Val Pro Arg Asn
        675                 680                 685

Asp Thr Cys Pro Glu Leu Pro Glu Ile Pro Asn Gly Trp Lys Ser Pro
    690                 695                 700

Ser Gln Pro Glu Leu Val His Gly Thr Val Val Thr Tyr Gln Cys Tyr
705                 710                 715                 720

Pro Gly Tyr Gln Val Val Gly Ser Ser Val Leu Met Cys Gln Trp Asp
                725                 730                 735

Leu Thr Trp Ser Glu Asp Leu Pro Ser Cys Gln Arg Val Thr Ser Cys
            740                 745                 750

His Asp Pro Gly Asp Val Glu His Ser Arg Arg Leu Ile Ser Ser Pro
        755                 760                 765

Lys Phe Pro Val Gly Ala Thr Val Gln Tyr Ile Cys Asp Gln Gly Phe
    770                 775                 780

Val Leu Met Gly Ser Ser Ile Leu Thr Cys His Asp Arg Gln Ala Gly
785                 790                 795                 800

Ser Pro Lys Trp Ser Asp Arg Ala Pro Lys Cys Leu Leu Glu Gln Leu
                805                 810                 815

Lys Pro Cys His Gly Leu Ser Ala Pro Glu Asn Gly Ala Arg Ser Pro
            820                 825                 830

Glu Lys Gln Leu His Pro Ala Gly Ala Thr Ile His Phe Ser Cys Ala
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        835                 840                 845

Pro Gly Tyr Val Leu Lys Gly Gln Ala Ser Ile Lys Cys Val Pro Gly
    850                 855                 860

His Pro Ser His Trp Ser Asp Pro Pro Pro Ile Cys Arg Ala Ala Ser
865                 870                 875                 880

Leu Asp Gly Phe Tyr Asn Ser Arg Ser Leu Asp Val Ala Lys Ala Pro
                885                 890                 895

Ala Ala Ser Ser Thr Leu Asp Ala Ala His Ile Ala Ala Ala Ile Phe
            900                 905                 910

Leu Pro Leu Val Ala Met Val Leu Leu Val Gly Gly Val Tyr Phe Tyr
        915                 920                 925

Phe Ser Arg Leu Gln Gly Lys Ser Ser Leu Gln Leu Pro Arg Pro Arg
    930                 935                 940

Pro Arg Pro Tyr Asn Arg Ile Thr Ile Glu Ser Ala Phe Asp Asn Pro
945                 950                 955                 960

Thr Tyr Glu Thr Gly Ser Leu Ser Phe Ala Gly Asp Glu Arg Ile
                965                 970                 975


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            20                  25                  30

Pro Gly Ile Glu Glu Thr Asp Gly Glu Leu Thr Ala Ala Pro Thr Pro
        35                  40                  45

Glu Gln Pro Glu Arg Gly Val His Phe Val Thr Thr Ala Pro Thr Leu
    50                  55                  60

Lys Leu Leu Asn His His Pro Leu Leu Glu Glu Phe Leu Gln Glu Gly
65                  70                  75                  80
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Leu Glu Lys Gly Asp Glu Glu Leu Arg Pro Ala Leu Pro Phe Gln Pro
                85                  90                  95

Asp Pro Pro Ala Pro Phe Thr Pro Ser Pro Leu Pro Arg Leu Ala Asn
            100                 105                 110

Gln Asp Ser Arg Pro Val Phe Thr Ser Pro Thr Pro Ala Met Ala Ala
        115                 120                 125

Val Pro Thr Gln Pro Gln Ser Lys Glu Gly Pro Trp Ser Pro Glu Ser
    130                 135                 140

Glu Ser Pro Met Leu Arg Ile Thr Ala Pro Leu Pro Pro Gly Pro Ser
145                 150                 155                 160

Met Ala Val Pro Thr Leu Gly Pro Gly Glu Ile Ala Ser Thr Thr Pro
                165                 170                 175

Pro Ser Arg Ala Trp Thr Pro Thr Gln Glu Gly Pro Gly Asp Met Gly
            180                 185                 190

Arg Pro Trp Val Ala Glu Val Val Ser Gln Gly Ala Gly Ile Gly Ile
        195                 200                 205

Gln Gly Thr Ile Thr Ser Ser Thr Ala Ser Gly Asp Asp Glu Glu Thr
    210                 215                 220

Thr Thr Thr Thr Thr Ile Ile Thr Thr Thr Ile Thr Thr Val Gln Thr
225                 230                 235                 240

Pro Gly Pro Cys Ser Trp Asn Phe Ser Gly Pro Glu Gly Ser Leu Asp
                245                 250                 255

Ser Pro Thr Asp Leu Ser Ser Pro Thr Asp Val Gly Leu Asp Cys Phe
            260                 265                 270

Phe Tyr Ile Ser Val Tyr Pro Gly Tyr Gly Val Glu Ile Lys Val Gln
        275                 280                 285

Asn Ile Ser Leu Arg Glu Gly Glu Thr Val Thr Val Glu Gly Leu Gly
    290                 295                 300

Gly Pro Asp Pro Leu Pro Leu Ala Asn Gln Ser Phe Leu Leu Arg Gly
305                 310                 315                 320

Gln Val Ile Arg Ser Pro Thr His Gln Ala Ala Leu Arg Phe Gln Ser
                325                 330                 335
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Leu Pro Pro Pro Ala Gly Pro Gly Thr Phe His Phe His Tyr Gln Ala
            340                 345                 350

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

Thr Val Thr Ser Leu His Pro Gly Gly Ser Ala Arg Phe His Cys Ala
    370                 375                 380

Thr Gly Tyr Gln Leu Lys Gly Ala Arg His Leu Thr Cys Leu Asn Ala
385                 390                 395                 400

Thr Gln Pro Phe Trp Asp Ser Lys Glu Pro Val Cys Ile Gly Glu Cys
                405                 410                 415

Pro Gly Val Ile Arg Asn Ala Thr Thr Gly Arg Ile Val Ser Pro Gly
            420                 425                 430

Phe Pro Gly Asn Tyr Ser Asn Asn Leu Thr Cys His Trp Leu Leu Glu
        435                 440                 445

Ala Pro Glu Gly Gln Arg Leu His Leu His Phe Glu Lys Val Ser Leu
    450                 455                 460

Ala Glu Asp Asp Asp Arg Leu Ile Ile Arg Asn Gly Asp Asn Val Glu
465                 470                 475                 480

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

Gly Leu Leu Ser Ser Gly Lys His Phe Phe Val Glu Leu Ser Thr Asp
            500                 505                 510

Ser Ser Gly Ala Ala Ala Gly Met Ala Leu Arg Tyr Glu Ala Phe Gln
        515                 520                 525

Gln Gly His Cys Tyr Glu Pro Phe Val Lys Tyr Gly Asn Phe Ser Ser
    530                 535                 540

Ser Thr Pro Thr Tyr Pro Val Gly Thr Thr Val Glu Phe Ser Cys Asp
545                 550                 555                 560

Pro Gly Tyr Thr Leu Glu Gln Gly Ser Ile Ile Ile Glu Cys Val Asp
                565                 570                 575

Pro His Asp Pro Gln Trp Asn Glu Thr Glu Pro Ala Cys Arg Ala Val
            580                 585                 590
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Cys Ser Gly Glu Ile Thr Asp Ser Ala Gly Val Val Leu Ser Pro Asn
        595                 600                 605

Trp Pro Glu Pro Tyr Gly Arg Gly Gln Asp Cys Ile Trp Gly Val His
    610                 615                 620

Val Glu Glu Asp Lys Arg Ile Met Leu Asp Ile Arg Val Leu Arg Ile
625                 630                 635                 640

Gly Pro Gly Asp Val Leu Thr Phe Tyr Asp Gly Asp Asp Leu Thr Ala
                645                 650                 655

Arg Val Leu Gly Gln Tyr Ser Gly Pro Arg Ser His Phe Lys Leu Phe
            660                 665                 670

Thr Ser Met Ala Asp Val Thr Ile Gln Phe Gln Ser Asp Pro Gly Thr
        675                 680                 685

Ser Val Leu Gly Tyr Gln Gln Gly Phe Val Ile His Phe Phe Glu Val
    690                 695                 700

Pro Arg Asn Asp Thr Cys Pro Glu Leu Pro Glu Ile Pro Asn Gly Trp
705                 710                 715                 720

Lys Ser Pro Ser Gln Pro Glu Leu Val His Gly Thr Val Val Thr Tyr
                725                 730                 735

Gln Cys Tyr Pro Gly Tyr Gln Val Val Gly Ser Ser Val Leu Met Cys
            740                 745                 750

Gln Trp Asp Leu Thr Trp Ser Glu Asp Leu Pro Ser Cys Gln Arg Val
        755                 760                 765

Thr Ser Cys His Asp Pro Gly Asp Val Glu His Ser Arg Arg Leu Ile
    770                 775                 780

Ser Ser Pro Lys Phe Pro Val Gly Ala Thr Val Gln Tyr Ile Cys Asp
785                 790                 795                 800

Gln Gly Phe Val Leu Met Gly Ser Ser Ile Leu Thr Cys His Asp Arg
                805                 810                 815

Gln Ala Gly Ser Pro Lys Trp Ser Asp Arg Ala Pro Lys Cys Leu Leu
            820                 825                 830

Glu Gln Leu Lys Pro Cys His Gly Leu Ser Ala Pro Glu Asn Gly Ala
        835                 840                 845
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Arg Ser Pro Glu Lys Gln Leu His Pro Ala Gly Ala Thr Ile His Phe
    850                 855                 860

Ser Cys Ala Pro Gly Tyr Val Leu Lys Gly Gln Ala Ser Ile Lys Cys
865                 870                 875                 880

Val Pro Gly His Pro Ser His Trp Ser Asp Pro Pro Pro Ile Cys Arg
                885                 890                 895

Ala Ala Ser Leu Asp Gly Phe Tyr Asn Ser Arg Ser Leu Asp Val Ala
            900                 905                 910

Lys Ala Pro Ala Ala Ser Ser Thr Leu Asp Ala Ala His Ile Ala Ala
        915                 920                 925

Ala Ile Phe Leu Pro Leu Val Ala Met Val Leu Leu Val Gly Gly Val
    930                 935                 940

Tyr Phe Tyr Phe Ser Arg Leu Gln Gly Lys Ser Ser Leu Gln Leu Pro
945                 950                 955                 960

Arg Pro Arg Pro Arg Pro Tyr Asn Arg Ile Thr Ile Glu Ser Ala Phe
                965                 970                 975

Asp Asn Pro Thr Tyr Glu Thr Gly Ser Leu Ser Phe Ala Gly Asp Glu
            980                 985                 990

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

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ccgtgggttg cagaggttgt gtcccagggc gcggggatcg ggatccaggg gaccatcacc 660

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

Thr Val Gly Lys Gly Gln Ala Pro Gly Ile Glu Glu Thr Asp Gly Glu

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        35                  40                  45

Leu Thr Ala Ala Pro Thr Pro Glu Gln Pro Glu Arg Gly Val His Phe
    50                  55                  60

Val Thr Thr Ala Pro Thr Leu Lys Leu Leu Asn His His Pro Leu Leu
65                  70                  75                  80

Glu Glu Phe Leu Gln Glu Gly Leu Glu Lys Gly Asp Glu Glu Leu Arg
                85                  90                  95

Pro Ala Leu Pro Phe Gln Pro Asp Pro Pro Ala Pro Phe Thr Pro Ser
            100                 105                 110

Pro Leu Pro Arg Leu Ala Asn Gln Asp Ser Arg Pro Val Phe Thr Ser
        115                 120                 125

Pro Thr Pro Ala Met Ala Ala Val Pro Thr Gln Pro Gln Ser Lys Glu
    130                 135                 140

Gly Pro Trp Ser Pro Glu Ser Glu Ser Pro Met Leu Arg Ile Thr Ala
145                 150                 155                 160

Pro Leu Pro Pro Gly Pro Ser Met Ala Val Pro Thr Leu Gly Pro Gly
                165                 170                 175

Glu Ile Ala Ser Thr Thr Pro Pro Ser Arg Ala Trp Thr Pro Thr Gln
            180                 185                 190

Glu Gly Pro Gly Asp Met Gly Arg Pro Trp Val Ala Glu Val Val Ser
        195                 200                 205

Gln Gly Ala Gly Ile Gly Ile Gln Gly Thr Ile Thr Ser Ser Thr Ala
    210                 215                 220

Ser Gly Asp Asp Glu Glu Thr Thr Thr Thr Thr Thr Ile Ile Thr Thr
225                 230                 235                 240

Thr Ile Thr Thr Val Gln Thr Pro Gly Pro Cys Ser Trp Asn Phe Ser
                245                 250                 255

Gly Pro Glu Gly Ser Leu Asp Ser Pro Thr Asp Leu Ser Ser Pro Thr
            260                 265                 270

Asp Val Gly Leu Asp Cys Phe Phe Tyr Ile Ser Val Tyr Pro Gly Tyr
        275                 280                 285

Gly Val Glu Ile Lys Val Gln Asn Ile Ser Leu Arg Glu Gly Glu Thr
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    290                 295                 300

Val Thr Val Glu Gly Leu Gly Gly Pro Asp Pro Leu Pro Leu Ala Asn
305                 310                 315                 320

Gln Ser Phe Leu Leu Arg Gly Gln Val Ile Arg Ser Pro Thr His Gln
                325                 330                 335

Ala Ala Leu Arg Phe Gln Ser Leu Pro Pro Pro Ala Gly Pro Gly Thr
            340                 345                 350

Phe His Phe His Tyr Gln Ala Tyr Leu Leu Ser Cys His Phe Pro Arg
        355                 360                 365

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

Ser Ala Arg Phe His Cys Ala Thr Gly Tyr Gln Leu Lys Gly Ala Arg
385                 390                 395                 400

His Leu Thr Cys Leu Asn Ala Thr Gln Pro Phe Trp Asp Ser Lys Glu
                405                 410                 415

Pro Val Cys Ile Ala Ala Cys Gly Gly Val Ile Arg Asn Ala Thr Thr
            420                 425                 430

Gly Arg Ile Val Ser Pro Gly Phe Pro Gly Asn Tyr Ser Asn Asn Leu
        435                 440                 445

Thr Cys His Trp Leu Leu Glu Ala Pro Glu Gly Gln Arg Leu His Leu
    450                 455                 460

His Phe Glu Lys Val Ser Leu Ala Glu Asp Asp Asp Arg Leu Ile Ile
465                 470                 475                 480

Arg Asn Gly Asp Asn Val Glu Ala Pro Pro Val Tyr Asp Ser Tyr Glu
                485                 490                 495

Val Glu Tyr Leu Pro Ile Glu Gly Leu Leu Ser Ser Gly Lys His Phe
            500                 505                 510

Phe Val Glu Leu Ser Thr Asp Ser Ser Gly Ala Ala Ala Gly Met Ala
        515                 520                 525

Leu Arg Tyr Glu Ala Phe Gln Gln Gly His Cys Tyr Glu Pro Phe Val
    530                 535                 540

Lys Tyr Gly Asn Phe Ser Ser Ser Thr Pro Thr Tyr Pro Val Gly Thr
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545                 550                 555                 560

Thr Val Glu Phe Ser Cys Asp Pro Gly Tyr Thr Leu Glu Gln Gly Ser
                565                 570                 575

Ile Ile Ile Glu Cys Val Asp Pro His Asp Pro Gln Trp Asn Glu Thr
            580                 585                 590

Glu Pro Ala Cys Arg Ala Val Cys Ser Gly Glu Ile Thr Asp Ser Ala
        595                 600                 605

Gly Val Val Leu Ser Pro Asn Trp Pro Glu Pro Tyr Gly Arg Gly Gln
    610                 615                 620

Asp Cys Ile Trp Gly Val His Val Glu Glu Asp Lys Arg Ile Met Leu
625                 630                 635                 640

Asp Ile Arg Val Leu Arg Ile Gly Pro Gly Asp Val Leu Thr Phe Tyr
                645                 650                 655

Asp Gly Asp Asp Leu Thr Ala Arg Val Leu Gly Gln Tyr Ser Gly Pro
            660                 665                 670

Arg Ser His Phe Lys Leu Phe Thr Ser Met Ala Asp Val Thr Ile Gln
        675                 680                 685

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

Val Ile His Phe Phe Glu Val Pro Arg Asn Asp Thr Cys Pro Glu Leu
705                 710                 715                 720

Pro Glu Ile Pro Asn Gly Trp Lys Ser Pro Ser Gln Pro Glu Leu Val
                725                 730                 735

His Gly Thr Val Val Thr Tyr Gln Cys Tyr Pro Gly Tyr Gln Val Val
            740                 745                 750

Gly Ser Ser Val Leu Met Cys Gln Trp Asp Leu Thr Trp Ser Glu Asp
        755                 760                 765

Leu Pro Ser Cys Gln Arg Val Thr Ser Cys His Asp Pro Gly Asp Val
    770                 775                 780

Glu His Ser Arg Arg Leu Ile Ser Ser Pro Lys Phe Pro Val Gly Ala
785                 790                 795                 800

Thr Val Gln Tyr Ile Cys Asp Gln Gly Phe Val Leu Met Gly Ser Ser
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                805                 810                 815

Ile Leu Thr Cys His Asp Arg Gln Ala Gly Ser Pro Lys Trp Ser Asp
            820                 825                 830

Arg Ala Pro Lys Cys Leu Leu Glu Gln Leu Lys Pro Cys His Gly Leu
        835                 840                 845

Ser Ala Pro Glu Asn Gly Ala Arg Ser Pro Glu Lys Gln Leu His Pro
    850                 855                 860

Ala Gly Ala Thr Ile His Phe Ser Cys Ala Pro Gly Tyr Val Leu Lys
865                 870                 875                 880

Gly Gln Ala Ser Ile Lys Cys Val Pro Gly His Pro Ser His Trp Ser
                885                 890                 895

Asp Pro Pro Pro Ile Cys Arg Ala Ala Ser Leu Asp Gly Phe Tyr Asn
            900                 905                 910

Ser Arg Ser Leu Asp Val Ala Lys Ala Pro Ala Ala Ser Ser Thr Leu
        915                 920                 925

Asp Ala Ala His Leu Ala Gly His Arg Ser Val Glu Cys Pro Pro Cys
    930                 935                 940

Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
945                 950                 955                 960

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
                965                 970                 975

Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
            980                 985                 990

Val Asp Gly Val Glu Val His Asn  Ala Lys Thr Lys Pro  Arg Glu Glu
        995                 1000                1005

Gln Phe  Asn Ser Thr Phe Arg  Val Val Ser Val Leu  Thr Val Val
    1010                1015                1020

His Gln  Asp Trp Leu Asn Gly  Lys Glu Tyr Lys Cys  Lys Val Ser
    1025                1030                1035

Asn Lys  Gly Leu Pro Ala Pro  Ile Glu Lys Thr Ile  Ser Lys Thr
    1040                1045                1050

Lys Gly  Gln Pro Arg Glu Pro  Gln Val Tyr Thr Leu  Pro Pro Ser
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Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
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Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn
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Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp
1100 1105 1110

Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys
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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
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Pro Gly
1160

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<400> 11

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

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

Asn His His Pro Leu Leu Glu Glu Phe Leu Gln Glu Gly Leu Glu Arg
    50                  55                  60

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

His Phe Thr Pro Ser Pro Leu Pro Arg Leu Thr Asn Gln Asp Asn Arg
                85                  90                  95

Pro Val Phe Thr Ser Pro Thr Pro Ala Val Ala Ala Ala Pro Thr Gln
            100                 105                 110

Pro His Ser Arg Glu Lys Pro Trp Asn Leu Glu Ser Lys Pro Pro Glu
        115                 120                 125

Leu Ser Ile Thr Ser Ser Leu Pro Pro Gly Pro Ser Met Ala Val Pro
    130                 135                 140

Thr Leu Leu Pro Glu Asp Arg Pro Ser Thr Thr Pro Pro Ser Gln Ala
145                 150                 155                 160

Trp Thr Pro Thr Gln Glu Gly Pro Gly Asp Met Asp Arg Pro Trp Val
                165                 170                 175

Pro Glu Val Met Ser Lys Thr Thr Gly Leu Gly Val Glu Gly Thr Ile
            180                 185                 190

Ala Thr Ser Thr Ala Ser Gly Asp Asp Glu Glu Thr Thr Thr Thr Ile
        195                 200                 205
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Ile Thr Thr Thr Val Thr Thr Val Gln Pro Pro Gly Pro Cys Ser Trp
    210                 215                 220

Asn Phe Ser Gly Pro Glu Gly Ser Leu Asp Ser Pro Thr Ala Pro Ser
225                 230                 235                 240

Ser Pro Ser Asp Val Gly Leu Asp Cys Phe Tyr Tyr Ile Ser Val Tyr
                245                 250                 255

Pro Gly Tyr Gly Val Glu Ile Lys Val Glu Asn Ile Ser Leu Gln Glu
            260                 265                 270

Gly Glu Thr Ile Thr Val Glu Gly Leu Gly Gly Pro Asp Pro Leu Pro
        275                 280                 285

Leu Ala Asn Gln Ser Phe Leu Leu Arg Gly Gln Val Ile Arg Ser Pro
    290                 295                 300

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

Pro Gly Thr Phe His Phe Arg Tyr Gln Ala Tyr Leu Leu Ser Cys His
                325                 330                 335

Phe Pro Arg Arg Pro Ala Tyr Gly Asp Val Thr Val Thr Ser Leu His
            340                 345                 350

Pro Gly Gly Ser Ala His Phe His Cys Ala Thr Gly Tyr Gln Leu Lys
        355                 360                 365

Gly Ala Arg Phe Leu Thr Cys Leu Asn Ala Thr Gln Pro Phe Trp Asp
    370                 375                 380

Ser Gln Glu Pro Val Cys Ile Ala Ala Cys Gly Gly Val Ile Arg Asn
385                 390                 395                 400

Ala Thr Thr Gly Arg Ile Val Ser Pro Gly Phe Pro Gly Asn Tyr Ser
                405                 410                 415

Asn Asn Leu Thr Cys His Trp Leu Leu Glu Ala Pro Glu Ser Gln Arg
            420                 425                 430

Leu His Leu His Phe Glu Lys Val Ser Leu Ala Glu Asp Asp Asp Arg
        435                 440                 445

Leu Ile Ile Arg Asn Gly Asn Asn Val Glu Ala Pro Pro Val Tyr Asp
    450                 455                 460
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Ser Tyr Glu Val Glu Tyr Leu Pro Ile Glu Gly Leu Leu Ser Ser Gly
465                 470                 475                 480

Arg His Phe Phe Val Glu Phe Ser Thr Asp Ser Ser Gly Ala Ala Ala
                485                 490                 495

Gly Met Ala Leu Arg Tyr Glu Ala Phe Gln Gln Gly His Cys Tyr Glu
            500                 505                 510

Pro Phe Val Lys Tyr Gly Asn Phe Ser Ser Ser Ala Pro Ser Tyr Pro
        515                 520                 525

Val Gly Thr Thr Val Glu Phe Ser Cys Asp Pro Gly Tyr Thr Leu Glu
    530                 535                 540

Gln Gly Ser Ile Ile Ile Glu Cys Val Asp Leu His Asp Pro Gln Trp
545                 550                 555                 560

Asn Glu Thr Glu Pro Ala Cys Arg Ala Val Cys Ser Gly Glu Ile Thr
                565                 570                 575

Asp Ser Ala Gly Val Val Leu Ser Pro Asn Trp Pro Glu Pro Tyr Gly
            580                 585                 590

Arg Gly Gln Asp Cys Ile Trp Gly Val His Val Glu Glu Asp Lys Arg
        595                 600                 605

Ile Met Leu Asp Ile Arg Val Leu Arg Ile Gly Ser Gly Asp Val Leu
    610                 615                 620

Thr Phe Tyr Asp Gly Asp Asp Leu Thr Ala Arg Val Leu Gly Gln Tyr
625                 630                 635                 640

Ser Gly Pro Arg Gly His Phe Lys Leu Phe Thr Ser Met Ala Asp Val
                645                 650                 655

Thr Ile Gln Phe Gln Ser Asp Pro Gly Thr Ser Ala Leu Gly Tyr Gln
            660                 665                 670

Gln Gly Phe Val Ile His Phe Phe Glu Val Pro Arg Asn Asp Thr Cys
        675                 680                 685

Pro Glu Leu Pro Glu Ile Pro Asn Gly Trp Lys Asn Pro Ser Gln Pro
    690                 695                 700

Glu Leu Val His Gly Thr Val Val Thr Tyr Gln Cys Tyr Pro Gly Tyr
705                 710                 715                 720
```

```
Gln Val Val Gly Ser Ser Ile Leu Met Cys Gln Trp Asp Leu Ser Trp
                725                 730                 735

Ser Glu Asp Leu Pro Ser Cys Gln Arg Val Thr Ser Cys His Asp Pro
            740                 745                 750

Gly Asp Val Glu His Ser Arg Arg Leu Ile Ser Ser Pro Lys Phe Pro
        755                 760                 765

Val Gly Ala Thr Val Gln Tyr Val Cys Asp Gln Gly Phe Val Leu Thr
    770                 775                 780

Gly Ser Ala Ile Leu Thr Cys His Asp Arg Gln Ala Gly Ser Pro Lys
785                 790                 795                 800

Trp Ser Asp Arg Ala Pro Lys Cys Leu Leu Glu Gln Phe Lys Pro Cys
                805                 810                 815

His Gly Leu Ser Ala Pro Glu Asn Gly Ala Arg Ser Pro Glu Lys Arg
            820                 825                 830

Leu His Pro Ala Gly Ala Thr Ile His Phe Ser Cys Ala Pro Gly Tyr
        835                 840                 845

Val Leu Lys Gly Gln Ala Ser Ile Lys Cys Val Pro Gly His Pro Ser
    850                 855                 860

His Trp Ser Asp Pro Pro Pro Ile Cys Arg Ala Ala Ser Leu Asp Gly
865                 870                 875                 880

Phe Tyr Asn Gly Arg Ser Leu Asp Val Ala Lys Ala Pro Ala Ala Ser
                885                 890                 895

Ser Ala Leu Asp Ala Ala His Leu Ala Ala Ala Ile Phe Leu Pro Leu
            900                 905                 910

Val Ala Met Val Leu Leu Val Gly Gly Val Tyr Leu Tyr Phe Ser Arg
        915                 920                 925

Phe Gln Gly Lys Ser Pro Leu Gln Leu Pro Arg Thr His Pro Arg Pro
    930                 935                 940

Tyr Asn Arg Ile Thr Val Glu Ser Ala Phe Asp Asn Pro Thr Tyr Glu
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Thr Gly Ser Leu Ser Phe Ala Gly Asp Glu Arg Ile
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ggaggagtgt acctctattt ctccagactc cagggaaaaa gtcctctgca gcttcccgga 2820

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<212> PRT
<213> Rattus sp.

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

Asn His His Pro Leu Leu Glu Glu Phe Leu Gln Glu Gly Leu Glu Gly
50 55 60

```
Arg Glu Glu Ala Pro Arg Pro Ala Leu Pro Phe Gln Pro Asp Ser Pro
65                  70                  75                  80

Thr Pro Phe Thr Pro Ser Pro Leu Pro Arg Leu Thr Asn Gln Asp Asn
                85                  90                  95

Arg Pro Val Phe Thr Ser Pro Thr Pro Ala Val Ala Ala Ala Pro Thr
            100                 105                 110

Gln Pro His Ser Arg Lys Lys Pro Trp Asn Pro Glu Ser Glu Pro Pro
        115                 120                 125

Glu Leu Tyr Ile Thr Ser Pro Leu Pro Pro Gly Pro Ser Met Ala Val
    130                 135                 140

Pro Thr Leu His Pro Glu Asp Arg Pro Ser Thr Thr Pro Pro Ser Gln
145                 150                 155                 160

Ala Trp Thr Pro Thr Gln Glu Gly Pro Gly Asp Met Gly Arg Pro Trp
                165                 170                 175

Val Pro Glu Ile Met Ser Lys Thr Thr Gly Leu Gly Ile Glu Gly Thr
            180                 185                 190

Ile Ala Thr Ser Thr Ala Ser Gly Asp Asp Glu Glu Thr Thr Thr Thr
        195                 200                 205

Thr Ile Ile Thr Thr Val Thr Thr Ile Gln Pro Pro Gly Pro Cys Ser
    210                 215                 220

Trp Asn Phe Ser Gly Pro Glu Gly Ser Leu Asp Ser Pro Ala Val Pro
225                 230                 235                 240

Ser Val Pro Ser Asp Val Gly Leu Asp Cys Leu Tyr Tyr Ile Ser Val
                245                 250                 255

Tyr Pro Gly Tyr Gly Val Glu Ile Lys Val Lys Asn Ile Ser Leu Gln
            260                 265                 270

Glu Gly Glu Thr Ile Thr Val Glu Gly Leu Gly Gly Pro Asp Pro Leu
        275                 280                 285

Pro Leu Ala Asn Gln Ser Phe Leu Leu Arg Gly Gln Val Ile Arg Ser
    290                 295                 300

Pro Thr His Gln Ala Ala Val Arg Phe Gln Ser Leu Pro Leu Pro Ala
305                 310                 315                 320
```

```
Gly Pro Gly Thr Phe His Phe His Tyr Gln Ala Tyr Leu Leu Ser Cys
                325                 330                 335

His Phe Pro Arg Arg Pro Ala Tyr Gly Asp Val Thr Val Thr Ser Leu
            340                 345                 350

His Pro Gly Gly Ser Ala Arg Phe His Cys Ala Thr Gly Tyr Gln Leu
        355                 360                 365

Lys Gly Ala Arg Phe Leu Thr Cys Leu Asn Ala Thr Gln Pro Phe Trp
    370                 375                 380

Asp Ser Gln Glu Pro Val Cys Ile Ala Ala Cys Gly Gly Val Ile Arg
385                 390                 395                 400

Asn Ala Thr Thr Gly Arg Ile Val Ser Pro Gly Phe Pro Gly Asn Tyr
                405                 410                 415

Ser Asn Asn Leu Thr Cys His Trp Leu Leu Glu Ala Pro Glu Ser Gln
            420                 425                 430

Arg Leu His Leu His Phe Glu Lys Val Ser Leu Ala Glu Asp Asp Asp
        435                 440                 445

Arg Leu Ile Ile Arg Asn Gly Asn Asn Val Glu Ala Pro Pro Val Tyr
    450                 455                 460

Asp Ser Tyr Glu Val Glu Tyr Leu Pro Ile Glu Gly Leu Leu Ser Ser
465                 470                 475                 480

Gly Arg His Phe Phe Val Glu Phe Ser Thr Asp Ser Ser Gly Ala Ala
                485                 490                 495

Ala Gly Met Ala Leu Arg Tyr Glu Ala Phe Gln Gln Gly His Cys Tyr
            500                 505                 510

Glu Pro Phe Val Lys Tyr Gly Asn Phe Ser Ser Ser Ala Pro Ser Tyr
        515                 520                 525

Pro Val Gly Thr Thr Val Glu Phe Ser Cys Asp Pro Gly Tyr Thr Leu
    530                 535                 540

Glu Gln Gly Ser Ile Ile Ile Glu Cys Val Asp Leu Arg Asp Pro Gln
545                 550                 555                 560

Trp Asn Glu Thr Glu Pro Ala Cys Arg Ala Val Cys Ser Gly Glu Ile
                565                 570                 575
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```
Thr Asp Ser Ala Gly Val Val Leu Ser Pro Asn Trp Pro Glu Pro Tyr
            580                 585                 590

Gly Arg Gly Gln Asp Cys Ile Trp Gly Val His Val Glu Glu Asp Lys
        595                 600                 605

Arg Ile Met Leu Asp Ile Arg Val Leu Arg Ile Gly Ser Gly Asp Val
    610                 615                 620

Leu Thr Phe Tyr Asp Gly Asp Asp Leu Thr Ala Arg Val Leu Gly Gln
625                 630                 635                 640

Tyr Ser Gly Pro Arg Gly His Phe Lys Leu Phe Thr Ser Met Ala Asp
                645                 650                 655

Val Thr Ile Gln Phe Gln Ser Asp Pro Gly Thr Ser Ala Leu Gly Tyr
            660                 665                 670

Gln Gln Gly Phe Val Ile His Phe Phe Glu Val Pro Arg Asn Asp Thr
        675                 680                 685

Cys Pro Glu Leu Pro Glu Ile Pro Asn Gly Trp Lys Asn Pro Ser Gln
    690                 695                 700

Pro Glu Leu Val His Gly Thr Val Val Thr Tyr Gln Cys Tyr Pro Gly
705                 710                 715                 720

Tyr Gln Val Val Gly Ser Ser Ile Leu Met Cys Gln Trp Asp Leu Ser
                725                 730                 735

Trp Ser Glu Asp Leu Pro Ser Cys Gln Arg Val Thr Ser Cys His Asp
            740                 745                 750

Pro Gly Asp Val Glu His Ser Arg Arg Leu Ile Ser Ser Leu Lys Phe
        755                 760                 765

Pro Val Gly Ala Thr Val Gln Tyr Ile Cys Asp Gln Gly Phe Val Leu
    770                 775                 780

Thr Gly Ser Ala Ile Leu Thr Cys His Asp Arg Gln Ala Gly Ser Pro
785                 790                 795                 800

Lys Trp Ser Asp Arg Ala Pro Lys Cys Leu Leu Glu Gln Phe Lys Pro
                805                 810                 815

Cys His Gly Leu Ser Ala Pro Glu Asn Gly Ala Arg Ser Pro Glu Lys
            820                 825                 830
```

Arg Leu His Pro Ala Gly Ala Thr Ile His Phe Ser Cys Ala Pro Gly
835 840 845

Tyr Val Leu Lys Gly Gln Ala Ser Ile Lys Cys Val Pro Gly His Pro
850 855 860

Ser His Trp Ser Asp Pro Pro Pro Ile Cys Arg Ala Ala Ser Leu Asp
865 870 875 880

Gly Phe Tyr Asn Gly Arg Ser Leu Asp Val Ala Lys Ala Pro Ala Thr
885 890 895

Ser Ser Ala Leu Asp Ala Ala His Met Ala Ala Ala Ile Phe Leu Pro
900 905 910

Leu Val Ala Met Val Leu Leu Val Gly Gly Val Tyr Leu Tyr Phe Ser
915 920 925

Arg Leu Gln Gly Lys Ser Pro Leu Gln Leu Pro Gly Thr His Pro Arg
930 935 940

Pro Tyr Asn Arg Ile Thr Val Glu Ser Ala Phe Asp Asn Pro Thr Tyr
945 950 955 960

Glu Thr Gly Ser Leu Ser Phe Ala Gly Asp Glu Arg Ile
965 970

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<212> DNA
<213> Macaca fascicularis

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gaagaaaccg atggcgaact caccgctgcc cctacccctg agcaacccga aaggggagtg 180

cactttgtga ccaccgctcc caccctgaag ctgctcaatc accacccccct cctggaggag 240

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cccgaccctc ctacccccctt tacacctagc cctctcccta gactggccaa ccaagactcc 360

agacctgtgt tcaccagccc tacacctgct acagctgccg tccctaccca acctcaatcc 420

aaggagggac cttggagcct cgagagcgag cctcccgtgc tgagaatcac agctcctctc 480

cctcctggcc cttccatggc tgtccccaca ctcggacctg gcgaaaggcc cagcacaaca 540

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gtccctgaag tcgtgagcca aggcgccggc atcggaatcc agggaaccat cgccagctcc 660

acagccagcg gagacgatga ggaaacaacc accacaacca ccatcatcac caccacaatc 720

acaacagtcc agacccccgg cccttgcagc tggaattttt ccggccctga gggatccctg 780

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gaaacagtca ccgtggaagg actgggcgga cccgctcctc tgcctctcgc caaccaatcc 960

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<213> Macaca fascicularis

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20 25 30

Gly Lys Gly Gln Ala Pro Gly Ile Glu Glu Thr Asp Gly Glu Leu Thr
35 40 45

Ala Ala Pro Thr Pro Glu Gln Pro Glu Arg Gly Val His Phe Val Thr
50 55 60

Thr Ala Pro Thr Leu Lys Leu Leu Asn His His Pro Leu Leu Glu Glu
65 70 75 80

Phe Leu Gln Glu Gly Leu Glu Lys Gly Asp Glu Glu Leu Arg Pro Ala
85 90 95

Leu Pro Phe Gln Pro Asp Pro Pro Thr Pro Phe Thr Pro Ser Pro Leu
100 105 110

Pro Arg Leu Ala Asn Gln Asp Ser Arg Pro Val Phe Thr Ser Pro Thr
115 120 125

Pro Ala Thr Ala Ala Val Pro Thr Gln Pro Gln Ser Lys Glu Gly Pro
130 135 140

Trp Ser Leu Glu Ser Glu Pro Pro Val Leu Arg Ile Thr Ala Pro Leu
145 150 155 160

Pro Pro Gly Pro Ser Met Ala Val Pro Thr Leu Gly Pro Gly Glu Arg
165 170 175

```
Pro Ser Thr Thr Pro Pro Ser Arg Ala Trp Thr Pro Thr Gln Glu Gly
            180                 185                 190

Pro Gly Asp Met Gly Arg Pro Trp Val Pro Glu Val Val Ser Gln Gly
        195                 200                 205

Ala Gly Ile Gly Ile Gln Gly Thr Ile Ala Ser Ser Thr Ala Ser Gly
    210                 215                 220

Asp Asp Glu Glu Thr Thr Thr Thr Thr Thr Ile Ile Thr Thr Thr Ile
225                 230                 235                 240

Thr Thr Val Gln Thr Pro Gly Pro Cys Ser Trp Asn Phe Ser Gly Pro
                245                 250                 255

Glu Gly Ser Leu Asp Ser Pro Thr Asp Leu Ser Ser Pro Pro Asp Val
            260                 265                 270

Gly Leu Asp Cys Phe Phe Tyr Ile Ser Val Tyr Pro Gly Tyr Gly Val
        275                 280                 285

Glu Ile Lys Val Gln Asn Ile Ser Leu Arg Glu Gly Glu Thr Val Thr
    290                 295                 300

Val Glu Gly Leu Gly Gly Pro Ala Pro Leu Pro Leu Ala Asn Gln Ser
305                 310                 315                 320

Phe Leu Leu Arg Gly Gln Val Ile Arg Ser Pro Thr His Gln Ala Ala
                325                 330                 335

Leu Arg Phe Gln Ser Leu Pro Pro Pro Ala Gly Pro Gly Thr Phe His
            340                 345                 350

Phe His Tyr Gln Ala Tyr Leu Leu Ser Cys His Phe Pro His Arg Pro
        355                 360                 365

Ala Tyr Gly Asp Val Thr Val Thr Ser Leu His Pro Gly Gly Ser Ala
    370                 375                 380

Arg Phe His Cys Ala Thr Gly Tyr Gln Leu Lys Gly Ala Arg His Leu
385                 390                 395                 400

Thr Cys Leu Asn Ala Thr Gln Pro Phe Trp Asp Ser Lys Glu Pro Val
                405                 410                 415

Cys Ile Ala Ala Cys Gly Gly Val Ile Arg Asn Ala Thr Thr Gly Arg
            420                 425                 430
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Ile Val Ser Pro Gly Phe Pro Gly Asn Tyr Ser Asn Asn Leu Thr Cys
        435                 440                 445

His Trp Leu Leu Glu Ala Pro Glu Gly Gln Arg Leu His Leu His Phe
    450                 455                 460

Glu Lys Val Ser Leu Ala Glu Asp Asp Asp Arg Leu Ile Ile Arg Asn
465                 470                 475                 480

Gly Asp Asn Val Glu Ala Pro Pro Val Tyr Asp Ser Tyr Glu Val Glu
                485                 490                 495

Tyr Leu Pro Ile Glu Gly Leu Leu Ser Ser Gly Lys His Phe Phe Val
            500                 505                 510

Glu Leu Ser Thr Asp Ser Ser Gly Ala Ala Ala Gly Met Ala Leu Arg
        515                 520                 525

Tyr Glu Ala Phe Gln Gln Gly His Cys Tyr Glu Pro Phe Val Lys Tyr
    530                 535                 540

Gly Asn Phe Ser Ser Ser Ala Pro Thr Tyr Pro Val Gly Thr Thr Val
545                 550                 555                 560

Glu Phe Ser Cys Asp Pro Gly Tyr Thr Leu Glu Gln Gly Ser Ile Ile
                565                 570                 575

Ile Glu Cys Val Asp Pro His Asp Pro Gln Trp Asn Glu Thr Glu Pro
            580                 585                 590

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

Val Leu Ser Pro Asn Trp Pro Glu Pro Tyr Gly Arg Gly Gln Asp Cys
    610                 615                 620

Ile Trp Gly Val His Val Glu Glu Asp Lys Arg Ile Met Leu Asp Val
625                 630                 635                 640

Arg Val Leu Arg Ile Gly Pro Gly Asp Val Leu Thr Phe Tyr Asp Gly
                645                 650                 655

Asp Asp Leu Thr Ala Arg Val Leu Gly Gln Tyr Ser Gly Pro His Ser
            660                 665                 670

His Phe Lys Leu Phe Thr Ser Met Ala Asp Val Thr Ile Gln Phe Gln
        675                 680                 685
```

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Ser Asp Pro Gly Thr Ser Val Leu Gly Tyr Gln Gln Gly Phe Val Ile
    690                 695                 700

His Phe Phe Glu Val Pro Arg Asn Asp Thr Cys Pro Glu Leu Pro Glu
705                 710                 715                 720

Ile Pro Asn Gly Trp Lys Ser Pro Ser Gln Pro Asp Leu Val His Gly
                725                 730                 735

Thr Val Val Thr Tyr Gln Cys Tyr Pro Gly Tyr Gln Val Val Gly Ser
            740                 745                 750

Ser Val Leu Met Cys Gln Trp Asp Leu Thr Trp Ser Glu Asp Leu Pro
        755                 760                 765

Ser Cys Gln Arg Val Thr Ser Cys His Asp Pro Gly Asp Val Glu His
    770                 775                 780

Ser Arg Arg Leu Ile Ser Ser Pro Lys Phe Pro Val Gly Ala Thr Val
785                 790                 795                 800

Gln Tyr Ile Cys Asp Gln Gly Phe Val Leu Thr Gly Thr Ser Ile Leu
                805                 810                 815

Thr Cys His Asp Arg Gln Ala Gly Ser Pro Lys Trp Ser Asp Arg Ala
            820                 825                 830

Pro Lys Cys Leu Leu Glu Gln Leu Lys Pro Cys His Gly Leu Ser Ala
        835                 840                 845

Pro Glu Asn Gly Ala Arg Ser Pro Glu Lys Arg Leu His Pro Ala Gly
    850                 855                 860

Ala Thr Ile His Phe Ser Cys Ala Pro Gly Tyr Val Leu Lys Gly Gln
865                 870                 875                 880

Ala Ser Ile Lys Cys Val Pro Gly His Pro Ser His Trp Ser Asp Pro
                885                 890                 895

Pro Pro Ile Cys Lys Ala Ala Ser Leu Asp Gly Phe Tyr Asn Ser Arg
            900                 905                 910

Ser Leu Asp Val Ala Lys Ala Pro Ala Ala Ser Ser Thr Leu Asp Ala
        915                 920                 925

Ala His Ile Ala Ala Ala Ile Phe Leu Pro Leu Val Ala Met Val Leu
    930                 935                 940
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```
Leu Val Gly Gly Val Tyr Phe Tyr Phe Ser Arg Leu Gln Gly Lys Ser
945                 950                 955                 960

Ser Leu Gln Leu Pro Arg Thr Arg Pro Arg Pro Tyr Asn Arg Ile Thr
                965                 970                 975

Val Glu Ser Ala Phe Asp Asn Pro Thr Tyr Glu Thr Gly Ser Leu Ser
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Phe Ala Gly Asp Glu Arg Ile
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<210> 16
<211> 2781
<212> DNA
<213> Homo sapiens

<400> 16

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gctcccccta gctccagcca gagcgctgag gtgctgggag aactggtcct cgacggaaca      180

gccccttccg cccatcacga tattcctgcc ctcagccctc tcctccccga ggaagctagg      240

cctaaacacg ccctcccccc taaaaagaag ctgccttccc tcaagcaggt caattccgcc      300

aggaagcagc tcagacccaa ggccacctcc gctgctacag tccaaagagc tggatcccag      360

cctgccagcc agggactcga tctgctcagc agctccacag aaaaacctgg acctcctggc      420

gatcctgacc ctattgtggc cagcgaagaa gctagcgaag tccctctgtg gctggacagg      480

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ccttatgtcg ctcatacact gcctcagagg cctgagcctg gcgaacctgg acctgacatg      600

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gaactgaccg gaagcgccag cgaggaaagc caggagacca ccaccagcac aatcatcacc      720

accaccgtca tcaccaccga acaggccccc gctctgtgtt ccgtgtcctt ttccaacccc      780

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ttcatgctgt cctgtaattt ccccaggaga cccgactccg gagacgtcac cgtcatggat     1140

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<400> 17
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Glu Gly Asp Ala Ser Pro Leu Gly Pro Tyr Leu Leu Pro Ser Gly Ala
        35                  40                  45

Pro Glu Arg Gly Ser Pro Gly Lys Glu His Pro Glu Glu Arg Val Val
    50                  55                  60

Thr Ala Pro Pro Ser Ser Ser Gln Ser Ala Glu Val Leu Gly Glu Leu
65                  70                  75                  80

Val Leu Asp Gly Thr Ala Pro Ser Ala His His Asp Ile Pro Ala Leu
                85                  90                  95

Ser Pro Leu Leu Pro Glu Glu Ala Arg Pro Lys His Ala Leu Pro Pro
            100                 105                 110

Lys Lys Lys Leu Pro Ser Leu Lys Gln Val Asn Ser Ala Arg Lys Gln
        115                 120                 125

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

Gln Pro Ala Ser Gln Gly Leu Asp Leu Leu Ser Ser Ser Thr Glu Lys
145                 150                 155                 160

Pro Gly Pro Pro Gly Asp Pro Asp Pro Ile Val Ala Ser Glu Glu Ala
                165                 170                 175

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

Thr Pro Ala Pro Leu Gln Ile Ser Pro Phe Thr Ser Gln Pro Tyr Val
        195                 200                 205

Ala His Thr Leu Pro Gln Arg Pro Glu Pro Gly Glu Pro Gly Pro Asp
    210                 215                 220

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

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

Glu Thr Thr Thr Ser Thr Ile Ile Thr Thr Thr Val Ile Thr Thr Glu
            260                 265                 270
```

```
Gln Ala Pro Ala Leu Cys Ser Val Ser Phe Ser Asn Pro Glu Gly Tyr
        275                 280                 285

Ile Asp Ser Ser Asp Tyr Pro Leu Leu Pro Leu Asn Asn Phe Leu Glu
    290                 295                 300

Cys Thr Tyr Asn Val Thr Val Tyr Thr Gly Tyr Gly Val Glu Leu Gln
305                 310                 315                 320

Val Lys Ser Val Asn Leu Ser Asp Gly Glu Leu Leu Ser Ile Arg Gly
                325                 330                 335

Val Asp Gly Pro Thr Leu Thr Val Leu Ala Asn Gln Thr Leu Leu Val
            340                 345                 350

Glu Gly Gln Val Ile Arg Ser Pro Thr Asn Thr Ile Ser Val Tyr Phe
        355                 360                 365

Arg Thr Phe Gln Asp Asp Gly Leu Gly Thr Phe Gln Leu His Tyr Gln
    370                 375                 380

Ala Phe Met Leu Ser Cys Asn Phe Pro Arg Arg Pro Asp Ser Gly Asp
385                 390                 395                 400

Val Thr Val Met Asp Leu His Ser Gly Gly Val Ala His Phe His Cys
                405                 410                 415

His Leu Gly Tyr Glu Leu Gln Gly Ala Lys Met Leu Thr Cys Ile Asn
            420                 425                 430

Ala Ser Lys Pro His Trp Ser Ser Gln Glu Pro Ile Cys Ser Ala Pro
        435                 440                 445

Cys Gly Gly Ala Val His Asn Ala Thr Ile Gly Arg Val Leu Ser Pro
    450                 455                 460

Ser Tyr Pro Glu Asn Thr Asn Gly Ser Gln Phe Cys Ile Trp Thr Ile
465                 470                 475                 480

Glu Ala Pro Glu Gly Gln Lys Leu His Leu His Phe Glu Arg Leu Leu
                485                 490                 495

Leu His Asp Lys Asp Arg Met Thr Val His Ser Gly Gln Thr Asn Lys
            500                 505                 510

Ser Ala Leu Leu Tyr Asp Ser Leu Gln Thr Glu Ser Val Pro Phe Glu
        515                 520                 525
```

```
Gly Leu Leu Ser Glu Gly Asn Thr Ile Arg Ile Glu Phe Thr Ser Asp
    530                 535                 540

Gln Ala Arg Ala Ala Ser Thr Phe Asn Ile Arg Phe Glu Ala Phe Glu
545                 550                 555                 560

Lys Gly His Cys Tyr Glu Pro Tyr Ile Gln Asn Gly Asn Phe Thr Thr
                565                 570                 575

Ser Asp Pro Thr Tyr Asn Ile Gly Thr Ile Val Glu Phe Thr Cys Asp
            580                 585                 590

Pro Gly His Ser Leu Glu Gln Gly Pro Ala Ile Ile Glu Cys Ile Asn
        595                 600                 605

Val Arg Asp Pro Tyr Trp Asn Asp Thr Glu Pro Leu Cys Arg Ala Met
    610                 615                 620

Cys Gly Gly Glu Leu Ser Ala Val Ala Gly Val Val Leu Ser Pro Asn
625                 630                 635                 640

Trp Pro Glu Pro Tyr Val Glu Gly Glu Asp Cys Ile Trp Lys Ile His
                645                 650                 655

Val Gly Glu Glu Lys Arg Ile Phe Leu Asp Ile Gln Phe Leu Asn Leu
            660                 665                 670

Ser Asn Ser Asp Ile Leu Thr Ile Tyr Asp Gly Asp Glu Val Met Pro
        675                 680                 685

His Ile Leu Gly Gln Tyr Leu Gly Asn Ser Gly Pro Gln Lys Leu Tyr
    690                 695                 700

Ser Ser Thr Pro Asp Leu Thr Ile Gln Phe His Ser Asp Pro Ala Gly
705                 710                 715                 720

Leu Ile Phe Gly Lys Gly Gln Gly Phe Ile Met Asn Tyr Ile Glu Val
                725                 730                 735

Ser Arg Asn Asp Ser Cys Ser Asp Leu Pro Glu Ile Gln Asn Gly Trp
            740                 745                 750

Lys Thr Thr Ser His Thr Glu Leu Val Arg Gly Ala Arg Ile Thr Tyr
        755                 760                 765

Gln Cys Asp Pro Gly Tyr Asp Ile Val Gly Ser Asp Thr Leu Thr Cys
    770                 775                 780
```

```
Gln Trp Asp Leu Ser Trp Ser Ser Asp Pro Pro Phe Cys Glu Lys Ile
785                 790                 795                 800

Met Tyr Cys Thr Asp Pro Gly Glu Val Asp His Ser Thr Arg Leu Ile
                805                 810                 815

Ser Asp Pro Val Leu Leu Val Gly Thr Thr Ile Gln Tyr Thr Cys Asn
            820                 825                 830

Pro Gly Phe Val Leu Glu Gly Ser Ser Leu Leu Thr Cys Tyr Ser Arg
        835                 840                 845

Glu Thr Gly Thr Pro Ile Trp Thr Ser Arg Leu Pro His Cys Val Ser
    850                 855                 860

Glu Glu Ser Leu Ala Cys Asp Asn Pro Gly Leu Pro Glu Asn Gly Tyr
865                 870                 875                 880

Gln Ile Leu Tyr Lys Arg Leu Tyr Leu Pro Gly Glu Ser Leu Thr Phe
                885                 890                 895

Met Cys Tyr Glu Gly Phe Glu Leu Met Gly Glu Val Thr Ile Arg Cys
            900                 905                 910

Ile Leu Gly Gln Pro Ser His Trp Asn Gly Pro Leu Pro Val Cys Lys
        915                 920                 925

Val Asn Gln Asp Ser Phe Glu His Ala Leu Glu Val Ala Glu Ala Ala
    930                 935                 940

Ala Glu Thr Ser Leu Glu Gly Gly Leu Ala Gly His His His His His
945                 950                 955                 960

His His His His
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<210> 18
<211> 2487
<212> DNA
<213> Homo sapiens

<400> 18
ctgcctctca aagaggaaga gattctcccc gagcccggat ccgagacacc cacagtggct 60

tccgaagccc tcgctgaact gctgcacgga gccctcctga gaaggggacc tgaaatgggc 120

tatctccctg gctccgacag agatcccaca ctcgccacac ctcctgctgg acagaccctc 180

gctgtgcctt ccctgcccag agccacagaa cccggaacag gccctctcac aacagctgtg 240

acccctaacg gcgtcagagg agctggacct acagcccctg agctgctgac acctcctcct 300

ggcacaaccg ctcctcctcc tccttcccct gctagccctg gacccctct cggacctgaa 360

ggaggcgagg aggagacaac caccaccatt attaccacca ccaccgtgac aaccacagtg 420

accagccctg tcctgtgcaa caacaacatc agcgaaggcg aaggctatgt ggaatcccct 480

gacctgggct cccctgtgtc cagaacactc ggcctcctgg attgcacata ctccattcac 540

gtgtaccccg gctacggaat cgagattcag gtgcagaccc tgaatctgtc ccaggaggag 600

gaactgctgg tgctggctgg cggaggaagc cctggcctcg ctcctagact cctcgctaac 660

tcctccatgc tcggcgaagg ccaggtcctc agatccccta ccaacaggct gctcctgcac 720

ttccagagcc ccagagtgcc tagaggaggc ggcttcagga ttcactacca ggcctatctc 780

ctgagctgtg gattccctcc cagacccgct catggcgatg tctccgtcac cgacctccac 840

cccggaggaa cagccacctt ccactgtgat tccggatacc agctgcaagg cgaggagacc 900

ctgatttgcc tcaatggcac caggcccagc tggaacggag agacacctag ctgcatggct 960

agctgcggcg gaaccatcca taatgccacc ctcggcagga tcgtcagccc tgaacctggc 1020

ggagctgtgg gacctaacct cacatgcaga tgggtgatcg aagctgctga aggcaggaga 1080

ctccacctcc acttcgagag ggtgtccctg gacgaggaca acgacaggct catggtcaga 1140

agcggcggaa gccctctcag ccctgtgatt tacgacagcg acatggacga tgtgcctgag 1200

aggggcctca tctccgatgc ccaaagcctg tacgtggaac tcctctccga gacccccgct 1260

aacccctcc tcctgagcct cagattcgag gccttcgagg aggacagatg tttcgctcct 1320

tttctggccc atggcaacgt gaccacaacc gaccccgagt acagacccgg agctctggct 1380

accttcagct gtctgcctgg ctacgccctc gaacctcccg gacctcctaa tgccatcgaa 1440

tgtgtggatc ccaccgaacc ccattggaac gacaccgagc ccgcttgtaa ggctatgtgc 1500

ggcggagaac tcagcgaacc tgccggagtg gtcctctccc ctgattggcc ccagagctat 1560

tcccccggac aagactgtgt ctggggcgtg cacgtccagg aggaaaagag gatcctcctc 1620

caggtggaga ttctgaacgt cagagaggga gacatgctga ccctgttcga cggagacgga 1680

ccttccgcca gagtcctcgc tcagctgaga ggccctcagc ccagaaggag actgctcagc 1740

tccggccccg atctgacact ccagtttcag gccccccctg gccccctaa tcctggcctg 1800

ggacagggct tcgtgctcca cttcaaggag gtccccagga atgatacatg ccccgaactg 1860

cctcctcccg agtggggatg gaggacagct tcccatggcg acctgatcag gggaaccgtg 1920

ctgacatatc agtgtgaacc cggctacgag ctgctgggaa gcgatatcct gacctgtcag 1980

tgggatctct cctggagcgc tgctcccct gcctgtcaga aaatcatgac ctgcgctgac 2040

cctggagaga tcgctaacgg ccacaggacc gcttccgacg ctggatttcc cgtgggctcc 2100

cacgtgcaat acaggtgcct ccccggatac tccctcgaag gcgctgccat gctgacatgc 2160

tacagcaggg acaccggcac acccaagtgg tccgacaggg tgcccaaatg tgctctgaag 2220

tacgagccct gtctcaatcc cggagtgccc gagaacggat accagaccct gtacaagcac 2280

cactatcagg ccggcgaatc cctgagattc ttctgctacg agggcttcga gctcatcggc 2340

gaggtgacaa ttacctgtgt gcccggccat ccttcccagt ggaccagcca gccccctctc 2400

tgtaaggtcg cctacgaaga gctgctcgac aataggaagc tggaggtcac ccagaccacc 2460

gacccttcca gacaactgga aggcggc 2487

<210> 19
<211> 865
<212> PRT
<213> Homo sapiens

<400> 19

Met	Glu	Thr	Asp	Thr	Leu	Leu	Leu	Trp	Val	Leu	Leu	Leu	Trp	Val	Pro
1				5				10				15			

Gly	Ser	Thr	Gly	Asp	Gly	Ala	Pro	Leu	Pro	Leu	Lys	Glu	Glu	Glu	Ile
			20					25					30		

Leu	Pro	Glu	Pro	Gly	Ser	Glu	Thr	Pro	Thr	Val	Ala	Ser	Glu	Ala	Leu
		35					40					45			

Ala	Glu	Leu	Leu	His	Gly	Ala	Leu	Leu	Arg	Arg	Gly	Pro	Glu	Met	Gly
	50					55					60				

Tyr	Leu	Pro	Gly	Ser	Asp	Arg	Asp	Pro	Thr	Leu	Ala	Thr	Pro	Pro	Ala
65					70					75					80

Gly	Gln	Thr	Leu	Ala	Val	Pro	Ser	Leu	Pro	Arg	Ala	Thr	Glu	Pro	Gly
				85					90					95	

Thr	Gly	Pro	Leu	Thr	Thr	Ala	Val	Thr	Pro	Asn	Gly	Val	Arg	Gly	Ala
			100					105					110		

Gly	Pro	Thr	Ala	Pro	Glu	Leu	Leu	Thr	Pro	Pro	Pro	Gly	Thr	Thr	Ala
		115					120					125			

Pro	Pro	Pro	Pro	Ser	Pro	Ala	Ser	Pro	Gly	Pro	Pro	Leu	Gly	Pro	Glu
	130					135					140				

Gly	Gly	Glu	Glu	Glu	Thr	Thr	Thr	Thr	Ile	Ile	Thr	Thr	Thr	Thr	Val
145					150					155					160

Thr	Thr	Thr	Val	Thr	Ser	Pro	Val	Leu	Cys	Asn	Asn	Asn	Ile	Ser	Glu
				165					170					175	

Gly	Glu	Gly	Tyr	Val	Glu	Ser	Pro	Asp	Leu	Gly	Ser	Pro	Val	Ser	Arg
			180					185					190		

```
Thr Leu Gly Leu Leu Asp Cys Thr Tyr Ser Ile His Val Tyr Pro Gly
        195                 200                 205

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

Glu Leu Leu Val Leu Ala Gly Gly Gly Ser Pro Gly Leu Ala Pro Arg
225                 230                 235                 240

Leu Leu Ala Asn Ser Ser Met Leu Gly Glu Gly Gln Val Leu Arg Ser
                245                 250                 255

Pro Thr Asn Arg Leu Leu Leu His Phe Gln Ser Pro Arg Val Pro Arg
            260                 265                 270

Gly Gly Gly Phe Arg Ile His Tyr Gln Ala Tyr Leu Leu Ser Cys Gly
        275                 280                 285

Phe Pro Pro Arg Pro Ala His Gly Asp Val Ser Val Thr Asp Leu His
    290                 295                 300

Pro Gly Gly Thr Ala Thr Phe His Cys Asp Ser Gly Tyr Gln Leu Gln
305                 310                 315                 320

Gly Glu Glu Thr Leu Ile Cys Leu Asn Gly Thr Arg Pro Ser Trp Asn
                325                 330                 335

Gly Glu Thr Pro Ser Cys Met Ala Ser Cys Gly Gly Thr Ile His Asn
            340                 345                 350

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

Pro Asn Leu Thr Cys Arg Trp Val Ile Glu Ala Ala Glu Gly Arg Arg
    370                 375                 380

Leu His Leu His Phe Glu Arg Val Ser Leu Asp Glu Asp Asn Asp Arg
385                 390                 395                 400

Leu Met Val Arg Ser Gly Gly Ser Pro Leu Ser Pro Val Ile Tyr Asp
                405                 410                 415

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

Ser Leu Tyr Val Glu Leu Leu Ser Glu Thr Pro Ala Asn Pro Leu Leu
        435                 440                 445
```

```
Leu Ser Leu Arg Phe Glu Ala Phe Glu Glu Asp Arg Cys Phe Ala Pro
    450                 455                 460

Phe Leu Ala His Gly Asn Val Thr Thr Thr Asp Pro Glu Tyr Arg Pro
465                 470                 475                 480

Gly Ala Leu Ala Thr Phe Ser Cys Leu Pro Gly Tyr Ala Leu Glu Pro
                485                 490                 495

Pro Gly Pro Pro Asn Ala Ile Glu Cys Val Asp Pro Thr Glu Pro His
            500                 505                 510

Trp Asn Asp Thr Glu Pro Ala Cys Lys Ala Met Cys Gly Gly Glu Leu
        515                 520                 525

Ser Glu Pro Ala Gly Val Val Leu Ser Pro Asp Trp Pro Gln Ser Tyr
    530                 535                 540

Ser Pro Gly Gln Asp Cys Val Trp Gly Val His Val Gln Glu Glu Lys
545                 550                 555                 560

Arg Ile Leu Leu Gln Val Glu Ile Leu Asn Val Arg Glu Gly Asp Met
                565                 570                 575

Leu Thr Leu Phe Asp Gly Asp Gly Pro Ser Ala Arg Val Leu Ala Gln
            580                 585                 590

Leu Arg Gly Pro Gln Pro Arg Arg Arg Leu Leu Ser Ser Gly Pro Asp
        595                 600                 605

Leu Thr Leu Gln Phe Gln Ala Pro Pro Gly Pro Pro Asn Pro Gly Leu
    610                 615                 620

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

Cys Pro Glu Leu Pro Pro Pro Glu Trp Gly Trp Arg Thr Ala Ser His
                645                 650                 655

Gly Asp Leu Ile Arg Gly Thr Val Leu Thr Tyr Gln Cys Glu Pro Gly
            660                 665                 670

Tyr Glu Leu Leu Gly Ser Asp Ile Leu Thr Cys Gln Trp Asp Leu Ser
        675                 680                 685

Trp Ser Ala Ala Pro Pro Ala Cys Gln Lys Ile Met Thr Cys Ala Asp
    690                 695                 700
```

```
Pro Gly Glu Ile Ala Asn Gly His Arg Thr Ala Ser Asp Ala Gly Phe
705                 710                 715                 720


Pro Val Gly Ser His Val Gln Tyr Arg Cys Leu Pro Gly Tyr Ser Leu
                725                 730                 735


Glu Gly Ala Ala Met Leu Thr Cys Tyr Ser Arg Asp Thr Gly Thr Pro
            740                 745                 750


Lys Trp Ser Asp Arg Val Pro Lys Cys Ala Leu Lys Tyr Glu Pro Cys
        755                 760                 765


Leu Asn Pro Gly Val Pro Glu Asn Gly Tyr Gln Thr Leu Tyr Lys His
    770                 775                 780


His Tyr Gln Ala Gly Glu Ser Leu Arg Phe Phe Cys Tyr Glu Gly Phe
785                 790                 795                 800


Glu Leu Ile Gly Glu Val Thr Ile Thr Cys Val Pro Gly His Pro Ser
                805                 810                 815


Gln Trp Thr Ser Gln Pro Pro Leu Cys Lys Val Ala Tyr Glu Glu Leu
            820                 825                 830


Leu Asp Asn Arg Lys Leu Glu Val Thr Gln Thr Thr Asp Pro Ser Arg
        835                 840                 845


Gln Leu Glu Gly Gly Leu Ala Gly His His His His His His His His
    850                 855                 860


His
865


<210> 20
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 20
Gln Ile Val Leu Thr Gln Ser Pro Ala Leu Met Ser Ala Ser Pro Gly
1               5                   10                  15


Glu Lys Val Ser Leu Thr Cys Ser Ala Asn Ser Thr Val Ser Phe Met
            20                  25                  30
```

```
Tyr Trp Tyr Gln Gln Lys Pro Arg Ser Ser Pro Thr Pro Trp Ile Tyr
        35                  40                  45

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65                  70                  75                  80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Asn Ser Pro Ile
                85                  90                  95

Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
            100                 105


<210> 21
<211> 118
<212> PRT
<213> Artificial Sequence

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

<400> 21
Ser Asp Val Gln Leu Gln Asp Ser Gly Pro Gly Leu Val Lys Pro Ser
1               5                   10                  15

Gln Ser Leu Ser Val Thr Cys Thr Val Thr Gly Tyr Ser Ile Thr Trp
            20                  25                  30

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

Trp Met Gly Asn Ile His Asn Ser Gly Gly Thr Asn Tyr Asn Pro Ser
    50                  55                  60

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

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

Cys Ala Thr Thr Asn Trp Asp Tyr Phe Asp Tyr Trp Gly Gln Gly Thr
            100                 105                 110

Thr Leu Thr Val Ser Ser
        115
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<210> 22
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 22
Asp Ile Val Met Ser Gln Ser Pro Ser Ser Leu Ala Val Ser Val Gly
1 5 10 15

Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys Lys Gln
85 90 95

Ser Tyr Asn Leu Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 23
<211> 117
<212> PRT
<213> Artificial Sequence

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

<400> 23
Gln Val Gln Leu Gln Gln Ser Asp Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

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

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

Gly Tyr Ile Tyr Pro Arg Asp Gly Ser Thr Lys Tyr Asn Glu Glu Phe
50 55 60

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

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

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

Leu Thr Val Ser Ser
115

<210> 24
<211> 111
<212> PRT
<213> Artificial Sequence

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

<400> 24
Asp Ile Val Met Ser Gln Ser Pro Ser Ser Leu Ala Val Ser Val Gly
1 5 10 15

Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Val Lys Ala Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln
85 90 95

Tyr Tyr Asn Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Lys
100 105 110

<210> 25
<211> 120
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 25
Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Ile Val Arg Pro Gly Ala
1 5 10 15

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

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

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

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

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

Cys Ala Arg Arg Gly Thr Pro Gly Lys Pro Leu Val Tyr Trp Gly Gln
100 105 110

Gly Thr Leu Val Thr Val Ser Ala
115 120

<210> 26
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 26
Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Val Ser Val Gly
1 5 10 15

Glu Thr Val Thr Ile Thr Cys Arg Ala Ser Ala Asn Ile Asn Ser Asn
20 25 30

Leu Val Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val
35 40 45

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

Ser Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser

65 70 75 80

Glu Asp Phe Gly Asn Tyr Tyr Cys Gln His Phe Trp Gly Thr Pro Arg
85 90 95

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

<210> 27
<211> 116
<212> PRT
<213> Artificial Sequence

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

<400> 27
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Met Lys Pro Gly Ala
1 5 10 15

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

Asn Met Tyr Trp Val Lys Gln Asn Gln Gly Lys Ser Leu Glu Trp Ile
35 40 45

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

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

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

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

Thr Val Ser Ser
115

<210> 28
<211> 111
<212> PRT
<213> Artificial Sequence

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

<400> 28
Asp Ile Val Val Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Glu Tyr Tyr
20 25 30

Gly Thr Ser Leu Met Gln Trp Phe Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Lys Leu Leu Ile Tyr Ala Ala Ser Asn Val Glu Ser Gly Val Pro Ala
50 55 60

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Ser Leu Asn Ile His
65 70 75 80

Pro Val Glu Glu Asp Asp Ile Ala Met Tyr Phe Cys Gln Gln Asp Arg
85 90 95

Lys Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 29
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 29
Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Pro Ser Gln
1 5 10 15

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

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

Trp Leu Ala His Ile Trp Trp Asn Gly Asp Lys Tyr Tyr Asn Pro Ala
50 55 60

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

Phe Leu Lys Ile Ala Ser Val Val Thr Ala Asp Thr Ala Thr Tyr Phe
85 90 95

Cys Ala Arg Ile Arg Gln Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 30
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 30
Asp Ile Val Met Ser Gln Ser Pro Ser Ser Leu Ala Val Ser Val Gly
1 5 10 15

Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Val Lys Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Ser Tyr Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 31
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 31
Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

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

```
Tyr Trp Ile His Cys Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp
        35                  40                  45

Ile Gly Val Ile Asn Pro Ser Asn Gly Arg Thr Asn Tyr Asn Glu Lys
    50                  55                  60

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

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

Cys Val Arg Gly Gly Thr Gly Tyr Thr Met Asp Tyr Trp Gly Gln Gly
            100                 105                 110

Thr Ser Val Thr Val Ser Ser
        115
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<210> 32
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 32

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

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

Leu Thr Trp Phe Gln Gln Lys Pro Gly Lys Ser Pro Lys Thr Leu Ile
        35                  40                  45

Tyr Arg Ala Asn Arg Leu Ile Asp Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60

Ser Gly Ser Gly Gln Asp Tyr Ser Leu Thr Ile Ser Ser Leu Asp Tyr
65                  70                  75                  80

Glu Asp Met Gly Ile Tyr Tyr Cys Leu Gln Tyr Asp Asp Phe Pro Trp
                85                  90                  95

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

<210> 33
<211> 116
<212> PRT
<213> Artificial Sequence

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

<400> 33
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

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

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

Gly Trp Ile Asn Thr Glu Thr Gly Glu Pro Thr Tyr Ser Glu 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 Tyr Phe Cys
85 90 95

Val Lys Asn Lys Gly Trp Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ala
115

<210> 34
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 34
Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1 5 10 15

Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
20 25 30

Asn Gly Asp Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser

35 40 45

Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Leu Tyr Phe Cys Ser Gln Ser
85 90 95

Thr Leu Ile Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Asp Ile Lys
100 105 110

Arg

<210> 35
<211> 114
<212> PRT
<213> Artificial Sequence

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

<400> 35
Gln Val His Leu Gln Gln Ser Gly Thr Glu Val Met Lys Pro Gly Ala
1 5 10 15

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

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

Gly Glu Ile Leu Pro Gly Ser Gly Asn Thr Asn Asn Asn Glu Lys Phe
50 55 60

Lys Gly Lys Ala Thr Ile Thr Ala Asp Thr Ser Ser Asn Ile Ala Tyr
65 70 75 80

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

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

Ser Ala

<210> 36
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 36
Asp Ile Val Met Ser Gln Ser Pro Ser Ser Leu Ala Val Ser Val Gly
1 5 10 15

Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Val Lys Thr Glu Asp Leu Ala Leu Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Trp Phe Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
100 105 110

Lys

<210> 37
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 37
Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Leu Ser Cys Thr Ala Ser Gly Phe Asn Ile Lys Asp Thr
20 25 30

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

Gly Arg Ile Asp Pro Ala Asn Val Asn Thr Lys Tyr Asp Pro Lys Phe
    50                  55                  60

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

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

Val Arg Gly Asn Val Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
            100                 105                 110

Ala
```

<210> 38
<211> 108
<212> PRT
<213> Artificial Sequence

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

<400> 38

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

Glu Lys Val Thr Met Thr Cys Arg Ala Ser Ser Ser Val Ser Ser Ser
            20                  25                  30

Tyr Leu His Trp Tyr Gln Gln Lys Ser Gly Ala Ser Pro Lys Leu Trp
        35                  40                  45

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

Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Val Glu
65                  70                  75                  80

Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Asp Tyr Pro
                85                  90                  95

Phe Thr Phe Gly Ser Gly Thr Lys Leu Val Ile Lys
            100                 105
```

<210> 39

<211> 122
<212> PRT
<213> Artificial Sequence

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

<400> 39
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
1 5 10 15

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

Tyr Met His Trp Val Lys Gln Ser His Gly Gln Ser Leu Glu Trp Ile
35 40 45

Gly Glu Val Ile Pro Tyr Asn Asp Glu Thr Phe Tyr Asn Arg Lys Phe
50 55 60

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

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

Ala Arg Arg His Arg Tyr Asp Gly Phe Arg Tyr Ala Ile Asp Tyr Trp
100 105 110

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

<210> 40
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 40
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1 5 10 15

Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
20 25 30

Asn Gly Asn Thr Tyr Leu Glu Trp Phe Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
                85   90   95

Ser His Val Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105   110

Arg

<210> 41
<211> 118
<212> PRT
<213> Artificial Sequence

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

<400> 41
Glu Val Gln Leu Gln Gln Ser Gly Pro Val Leu Val Lys Pro Gly Ala
1   5   10   15

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

Asn Met Asn Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile
        35   40   45

Gly Val Ile Asn Pro Tyr Asn Gly Asn Thr Arg Tyr Asn Gln Met Phe
    50   55   60

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

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

Thr Arg Trp Gly Thr Thr Val Val Gly Ala Asn Trp Gly Gln Gly Thr
            100   105   110

Thr Leu Thr Val Ser Ser
        115

<210> 42
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 42
Gln Ile Val Leu Thr Gln Ser Pro Ala Leu Met Ser Ala Ser Pro Gly
1 5 10 15

Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Asn Tyr Met
20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Arg Ser Ser Pro Lys Pro Trp Ile Tyr
35 40 45

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

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

Phe Gly Ser Gly Thr Lys Leu Glu Leu Lys
100 105

<210> 43
<211> 122
<212> PRT
<213> Artificial Sequence

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

<400> 43
Asp Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Lys Leu Gly Gly
1 5 10 15

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

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

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

```
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65                  70                  75                  80


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


Ala Arg Arg Asp Tyr Tyr Gly Ser Ser Tyr Val Met Phe Ala Tyr Trp
            100                 105                 110


Gly Gln Gly Thr Leu Val Thr Val Ser Ala
        115                 120


<210> 44
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 44
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
1               5                   10                  15


Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
            20                  25                  30


His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr
        35                  40                  45


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


Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65                  70                  75                  80


Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Thr Pro Pro Thr
                85                  90                  95


Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
            100                 105


<210> 45
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 45
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Val Met Lys Pro Gly Ala
1 5 10 15

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

Asn Met His Trp Val Lys Gln Asn Gln Gly Lys Ser Leu Glu Trp Ile
35 40 45

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

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

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

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

Gly Thr Leu Val Thr Val Ser Ala
115 120

<210> 46
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 46
Asp Ile Gln Met Thr Gln Ser Ser Ser Tyr Leu Ser Val Ser Leu Gly
1 5 10 15

Gly Arg Val Thr Ile Thr Cys Lys Ala Ser Asp His Ile Asn Asn Trp
20 25 30

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

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

Ser Gly Ser Gly Lys Asp Tyr Thr Leu Ser Ile Thr Ser Leu Gln Thr

65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Trp Ser Ile Pro Leu
85 90 95

Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
100 105

<210> 47
<211> 126
<212> PRT
<213> Artificial Sequence

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

<400> 47
Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Gly Phe Ser Leu
20 25 30

Ser Thr Ser Thr Met Gly Val Gly Trp Ile Arg Gln Pro Ser Gly Lys
35 40 45

Gly Leu Glu Trp Leu Ala Asp Ile Trp Trp Asp Asp Ser Lys Tyr Tyr
50 55 60

Asn Pro Ser Leu Lys Ser Arg Leu Thr Ile Ser Lys Asp Thr Ser Ser
65 70 75 80

Asn Gln Val Phe Leu Lys Ile Thr Ser Val Asp Thr Ala Asp Thr Ala
85 90 95

Thr Tyr Tyr Cys Ala Arg Lys Gly Arg Thr Ala Arg Ala Thr Arg Gly
100 105 110

Phe Ala Tyr Trp Gly His Gly Thr Leu Val Thr Val Ser Ala
115 120 125

<210> 48
<211> 109
<212> PRT
<213> Artificial Sequence

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

<400> 48
Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Gln Arg Ala Ala Ile Ser Cys Lys Pro Ser Gln Ser Val Asp Tyr Asp
20 25 30

Gly Asp Ser Tyr Met Asn Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Lys Leu Leu Ile Tyr Ala Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala
50 55 60

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His
65 70 75 80

Pro Val Glu Glu Glu Asp Ala Ala Thr Tyr Tyr Cys His Gln Ile Asn
85 90 95

Asp Asp Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Lys
100 105

<210> 49
<211> 122
<212> PRT
<213> Artificial Sequence

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

<400> 49
Ser Asp Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser
1 5 10 15

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

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

Trp Met Gly Tyr Ile His Tyr Ser Gly Ser Thr Asn Tyr Asn Pro Ser
50 55 60

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

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

Cys Ala Arg Ser Arg Tyr Tyr Tyr Asp Ala Tyr Gly Phe Ala Tyr Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ala
115 120

<210> 50
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 50
Asp Val Val Leu Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1 5 10 15

Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ile
20 25 30

Asn Arg His Thr Tyr Leu Gly Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Leu Lys Leu Leu Ile Tyr Gly Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Met Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95

Thr His Val Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 51
<211> 121
<212> PRT
<213> Artificial Sequence

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

<400> 51
Gln Ile Gln Met Met Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

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

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

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr 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 Met Ala Thr Tyr Phe Cys
                85                  90                  95

Thr Arg Gly Tyr Tyr Gly Ser Ser Tyr Asp Ala Leu Asp Tyr Trp Gly
            100                 105                 110

Gln Gly Thr Ser Val Thr Val Ser Ser
        115                 120
```

<210> 52
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 52

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

Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
            20                  25                  30

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
    50                  55                  60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65                  70                  75                  80

Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys Lys Gln
                85                  90                  95

Ser Tyr Asn Leu Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110
```

<210> 53
<211> 118
<212> PRT
<213> Artificial Sequence

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

<400> 53
Gln Val Gln Leu Gln Gln Ser Asp Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

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

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

Gly Tyr Ile Tyr Pro Arg Asp Gly Ser Thr Lys Tyr Asn Glu Glu Phe
50 55 60

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

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

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

Thr Leu Thr Val Ser Ser
115

<210> 54
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 54
Asp Val Val Met Thr Gln Thr Pro Leu Thr Leu Ser Val Thr Ile Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Lys Lys Ser Ser Gln Ser Leu Leu Glu
20 25 30

Ser Asp Gly Lys Thr Tyr Leu Asn Trp Leu Leu Gln Arg Pro Gly Gln

35 40 45

Ser Pro Lys Arg Leu Ile Tyr Leu Val Ser Lys Leu Asp Ser Gly Val
50 55 60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys
65 70 75 80

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

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

Lys

<210> 55
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 55
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Pro Gly Ala
1 5 10 15

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

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

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

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

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

Thr Arg Trp Phe Ser Tyr Trp Gly Pro Gly Thr Leu Val Thr Val Ser
100 105 110

Ala

<210> 56
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 56
Asp Ile Leu Leu Thr Gln Ser Pro Ala Ile Leu Ser Val Ser Pro Gly
1 5 10 15

Glu Gly Val Ser Phe Ser Cys Arg Ala Ser Gln Ser Ile Gly Thr Ser
20 25 30

Ile His Trp Tyr Gln Gln Arg Thr Asn Gly Ser Pro Arg Leu Leu Ile
35 40 45

Lys Tyr Ala Ser Glu Ser Ile Ser Gly Ile Pro Ser Arg Phe Ser Gly
50 55 60

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

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

Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
100 105

<210> 57
<211> 117
<212> PRT
<213> Artificial Sequence

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

<400> 57
Gln Val His Leu Pro Gln Ser Arg Pro Glu Leu Val Lys Pro Gly Ala
1 5 10 15

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

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

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

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

Met His Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Ile Tyr Phe Cys
                85                  90                  95

Ala Arg Gly Gly Val Arg Tyr Phe Asp Val Trp Gly Ala Gly Thr Thr
            100                 105                 110

Val Thr Val Ser Ser
        115


<210> 58
<211> 110
<212> PRT
<213> Artificial Sequence

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

<400> 58
Asp Ile Val Met Thr Gln Ser His Lys Phe Met Ser Thr Ser Val Gly
1               5                   10                  15

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

Thr Asp Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu
        35                  40                  45

Leu Ile Tyr Trp Ala Ser Thr Arg His Thr Gly Val Pro Asp Arg Phe
    50                  55                  60

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

Gln Ser Glu Asp Leu Ala Asp Tyr Phe Cys Gln Gln Tyr Ser Ser Tyr
                85                  90                  95

Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105                 110


<210> 59
<211> 116
<212> PRT
<213> Artificial Sequence
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<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 59
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Met Lys Pro Gly Ala
1 5 10 15

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

Asn Met His Trp Val Lys Gln Asn Gln Gly Lys Ser Leu Glu Trp Ile
35 40 45

Gly Glu Ile Asn Pro His Asn Gly Gly Thr Gly Tyr Asn Gln Lys Phe
50 55 60

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

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

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

Thr Val Ser Ser
115

<210> 60
<211> 109
<212> PRT
<213> Artificial Sequence

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

<400> 60
Glu Asn Val Leu Thr Gln Ser Pro Ala Ile Val Ser Ala Ser Pro Gly
1 5 10 15

Glu Lys Val Thr Met Thr Cys Cys Arg Ala Ser Ser Ser Val Ile Ser
20 25 30

Ser Tyr Leu His Trp Tyr Gln Gln Lys Ser Gly Ala Ser Pro Lys Leu
35 40 45

Trp Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe
50 55 60

```
Ser Gly Ser Ala Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Val
65                  70                  75                  80


Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Gly Tyr
                85                  90                  95


Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
            100                 105


<210> 61
<211> 124
<212> PRT
<213> Artificial Sequence

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

<400> 61
Glu Val Lys Leu Val Glu Ser Glu Gly Gly Leu Val Gln Pro Gly Ser
1               5                   10                  15


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


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


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


Lys Ser Arg Phe Ile Ile Ser Arg Asp Asn Ala Lys Asn Ile Leu Tyr
65                  70                  75                  80


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


Ala Arg Asp Asp Tyr Tyr Gly Ser Ser Pro Ser Tyr Trp Tyr Phe Asp
            100                 105                 110


Val Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser
        115                 120


<210> 62
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 62
Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Glu Thr Val Thr Met Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr
20 25 30

Leu Val Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val
35 40 45

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

Ser Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Gly Ser Tyr Tyr Gln His Phe Trp Ser Thr Pro Pro Thr
85 90 95

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

<210> 63
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 63
Glu Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

Ala Glu Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala Glu
50 55 60

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

Val Phe Leu Gln Met Asn Asn Leu Arg Thr Glu Asp Thr Gly Ile Tyr
85 90 95

Tyr Cys Thr Arg His Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Ser Val Thr Val Ser Ser
115

<210> 64
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 64
Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Met Tyr Ala Ser Leu Gly
1 5 10 15

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

Leu Ser Trp Phe Gln Gln Lys Pro Gly Lys Ser Pro Lys Thr Leu Ile
35 40 45

Tyr Arg Ala Asn Arg Leu Val Asp Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

Glu Asp Met Gly Ile Tyr Tyr Cys Leu Gln Tyr Asp Glu Phe Pro Pro
85 90 95

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

<210> 65
<211> 118
<212> PRT
<213> Artificial Sequence

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

<400> 65
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ser
1 5 10 15

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

Asn Met Asp Trp Val Lys Gln Ser His Gly Lys Arg Leu Glu Trp Ile
        35                  40                  45

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

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

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

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

Leu Val Thr Val Ser Ala
        115
```

<210> 66
<211> 108
<212> PRT
<213> Artificial Sequence

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

<400> 66

```
Glu Asn Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
1               5                   10                  15

Glu Lys Val Thr Leu Thr Cys Arg Ala Ser Ser Ser Met Ser Ser Ser
            20                  25                  30

Tyr Leu His Trp Tyr Gln Gln Lys Ser Gly Ala Ser Pro Lys Leu Trp
        35                  40                  45

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

Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Val Glu
65                  70                  75                  80

Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Ala Tyr Pro
                85                  90                  95

Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
```

100 105

<210> 67
<211> 121
<212> PRT
<213> Artificial Sequence

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

<400> 67
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
1 5 10 15

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

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

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

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

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

Ala Arg Arg Gly Trp Tyr Leu Thr Gly Tyr Ala Met Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 68
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 68
Gln Ile Val Leu Thr Gln Ser Pro Ala Leu Met Ser Ala Ser Pro Gly
1 5 10 15

Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
20 25 30

```
Tyr Trp Tyr Gln Gln Lys Pro Arg Ser Ser Pro Lys Pro Trp Ile Tyr
        35                  40                  45

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65                  70                  75                  80

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

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


<210> 69
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 69
Glu Val Gln Leu Gln Glu Ser Gly Pro Ser Leu Val Lys Pro Ser Gln
1               5                   10                  15

Ser Gln Ser Leu Thr Cys Ser Val Thr Gly Asp Ser Ile Thr Ser Asp
            20                  25                  30

Tyr Trp Asn Trp Ile Arg Lys Phe Pro Gly Lys Lys Val Glu Tyr Met
        35                  40                  45

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

Ser Arg Ile Ser Ile Thr Arg Asp Thr Ser Lys Asn Gln Tyr Tyr Leu
65                  70                  75                  80

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

Arg Thr Ser Tyr Tyr Asn Lys Phe Leu Pro Phe Ala Tyr Trp Gly Gln
            100                 105                 110

Gly Thr Leu Val Thr Val Ser Ala
        115                 120
```

<210> 70
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 70
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1 5 10 15

Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Arg
20 25 30

Asn Gly Asn Thr Tyr Phe His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser Gln Ser
85 90 95

Thr Tyr Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 71
<211> 117
<212> PRT
<213> Artificial Sequence

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

<400> 71
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

Ala Tyr Ile Ser Ser Asn Asp Gly Thr Ile Tyr Tyr Ala Asp Thr Val
50 55 60

```
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Phe
65                  70                  75                  80


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


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


Leu Thr Val Ser Ser
        115


<210> 72
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 72
Asp Val Val Met Thr Gln Thr Pro Leu Ser Arg Pro Val Thr Leu Gly
1               5                   10                  15


Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
            20                  25                  30


Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45


Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50                  55                  60


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


Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser Gln Asn
                85                  90                  95


Thr His Val Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110


<210> 73
<211> 116
<212> PRT
<213> Artificial Sequence

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

<400> 73
Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Ile Val Arg Pro Gly Ala
1 5 10 15

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

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

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

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

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

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

Thr Val Ser Val
115

<210> 74
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 74
Gln Ile Val Leu Thr Gln Ser Pro Ala Leu Met Ser Ala Ser Pro Gly
1 5 10 15

Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Arg Ser Ser Pro Lys Pro Trp Ile Tyr
35 40 45

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Gly Ala Glu

65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Asn Thr Asn Pro Pro Thr
85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
100 105

<210> 75
<211> 122
<212> PRT
<213> Artificial Sequence

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

<400> 75
Asp Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Lys Leu Gly Gly
1 5 10 15

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

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

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

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65 70 75 80

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

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

Gly Gln Gly Thr Leu Val Thr Val Ser Ala
115 120

<210> 76
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 76
Glu Asn Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
1   5   10   15

Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Asn Tyr Met
            20   25   30

Tyr Trp Tyr Gln Gln Lys Ser Ser Thr Ser Pro Lys Leu Trp Ile Tyr
        35   40   45

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

Gly Ser Gly Asn Ser Tyr Ser Leu Thr Ile Ser Asn Met Glu Ala Glu
65   70   75   80

Asp Val Ala Thr Tyr Tyr Cys Phe Gln Gly Ser Gly Tyr Pro Leu Thr
                85   90   95

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

<210> 77
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 77
Asp Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Arg Pro Gly Gly
1   5   10   15

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

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

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

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

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

```
Thr Asn Gly Asn His Trp Gly Gln Gly Thr Thr Leu Thr Val Ser Ser
            100                 105                 110


<210> 78
<211> 105
<212> PRT
<213> Artificial Sequence

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

<400> 78
Glu Asn Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
1               5                   10                  15


Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Asn Tyr Met
            20                  25                  30


Tyr Trp Tyr Gln Gln Lys Ser Ser Thr Ser Pro Lys Leu Trp Ile Tyr
        35                  40                  45


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


Ser Gly Asn Ser Tyr Ser Leu Thr Ile Ser Asn Met Glu Ala Glu Asp
65                  70                  75                  80


Val Ala Thr Tyr Tyr Cys Phe Gln Gly Ser Gly Tyr Pro Leu Thr Phe
                85                  90                  95


Gly Ser Gly Thr Lys Leu Glu Ile Lys
            100                 105


<210> 79
<211> 114
<212> PRT
<213> Artificial Sequence

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

<400> 79
Gln Val Gln Leu Gln Gln Pro Gly Ser Val Leu Val Arg Pro Gly Asp
1               5                   10                  15


Ser Glu Lys Leu Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
            20                  25                  30


Trp Met His Trp Val Lys Gln Ser Pro Gly Gln Gly Leu Glu Trp Ile
        35                  40                  45
```

Gly Glu Ile His Pro His Ser Gly Ser Thr Asn Tyr Asn Glu Lys Phe
    50   55   60

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

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

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

Ser Ser

<210> 80
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 80
Ser Phe Val Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
1   5   10   15

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

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

Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
    50   55   60

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

Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr Ser Ser Pro Arg
                85   90   95

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

<210> 81
<211> 120
<212> PRT

<213> Artificial Sequence

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

<400> 81
Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

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

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

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

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

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

Ala Arg Glu Tyr Tyr Asp Gly Thr Tyr Asp Ala Met Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Ser Val Thr Val Ser
115 120

<210> 82
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 82
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
1 5 10 15

Glu Lys Val Ser Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
20 25 30

His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser

```
    50                  55                  60

Gly Ser Gly Ser Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65                  70                  75                  80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Thr Pro Pro Thr
                85                  90                  95

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

<210> 83
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 83
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
1               5                   10                  15

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

Tyr Met Arg Trp Val Lys Gln Ser Pro Glu Lys Ser Leu Glu Trp Ile
        35                  40                  45

Gly Glu Ile Asn Pro Ser Thr Gly Gly Thr Thr Thr Tyr Asn Gln Asn
    50                  55                  60

Phe Lys Ala Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser Thr Ala
65                  70                  75                  80

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

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

Gly Thr Thr Leu Thr Val Ser Ser
        115                 120

<210> 84
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 84
Asp Val Val Met Thr Gln Thr Pro Leu Thr Leu Ser Val Thr Ile Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu Glu Ser
20 25 30

Asp Gly Lys Thr Tyr Leu Asn Trp Leu Leu Gln Arg Pro Gly Gln Ser
35 40 45

Pro Lys Arg Leu Ile Tyr Leu Val Ser Lys Leu Asp Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Trp Gln Gly
85 90 95

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

<210> 85
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 85
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Pro Gly Ala
1 5 10 15

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

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

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

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

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

Thr Arg Trp Phe Ser Tyr Trp Gly Pro Gly Thr Leu Val Thr Val Ser
100 105 110

Ala

<210> 86
<211> 111
<212> PRT
<213> Artificial Sequence

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

<400> 86
Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Ala Ser Leu Gly
1 5 10 15

Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Gln Ser Val Ser Thr Ser
20 25 30

Ser Tyr Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Lys Leu Leu Ile Lys Tyr Ala Ser Asn Leu Glu Ser Gly Val Pro Ala
50 55 60

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His
65 70 75 80

Pro Val Glu Glu Glu Asp Thr Ala Thr Tyr Tyr Cys Gln His Ser Trp
85 90 95

Glu Ile Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 87
<211> 121
<212> PRT
<213> Artificial Sequence

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

<400> 87
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15

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

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

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

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

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

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

Thr Gly Thr Thr Val Thr Val Ser Ser
        115                 120
```

<210> 88
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 88

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

Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Gln Ser Val Ser Thr Ser
            20                  25                  30

Ser Tyr Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly His Pro Pro
        35                  40                  45

Lys Leu Leu Ile Arg Tyr Ala Ser Asn Leu Glu Ser Gly Val Pro Ala
    50                  55                  60

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His
65                  70                  75                  80

Pro Val Glu Glu Glu Asp Thr Ala Thr Tyr Tyr Cys Gln His Ser Trp
                85                  90                  95
```

Glu Ile Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105 110

<210> 89
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 89
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
1 5 10 15

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

Asn Met His Trp Val Lys Gln Ser His Gly Lys Arg Leu Glu Trp Ile
35 40 45

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

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

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

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

Thr Leu Val Thr Val Arg Ala
115

<210> 90
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 90
Asp Val Val Leu Thr Gln Thr Pro Leu Thr Leu Ser Val Thr Ile Gly
1 5 10 15

Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser

20 25 30

Asp Gly Lys Thr Tyr Leu Asn Trp Leu Leu Gln Arg Pro Gly Gln Ser
35 40 45

Pro Lys Arg Leu Ile Tyr Leu Val Ser Lys Leu Asp Ser Gly Val Pro
50 55 60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Leu Tyr Tyr Cys Trp Gln Gly
85 90 95

Thr His Phe Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 91
<211> 114
<212> PRT
<213> Artificial Sequence

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

<400> 91
Glu Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

Ala Glu Ile Arg Met Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala Glu
50 55 60

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

Val Tyr Leu Gln Met Asn Asn Leu Arg Pro Glu Asp Thr Gly Ile Tyr
85 90 95

Tyr Cys Thr Arg Gly Gly Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val
100 105 110

Ser Ser

<210> 92
<211> 114
<212> PRT
<213> Artificial Sequence

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

<400> 92
Asp Ile Val Met Ser Gln Ser Pro Ser Ser Leu Ala Val Ser Val Gly
1 5 10 15

Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Val Lys Ala Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln
85 90 95

Tyr Tyr Asn Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
100 105 110

Lys Arg

<210> 93
<211> 117
<212> PRT
<213> Artificial Sequence

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

<400> 93
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

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

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

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

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

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

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

Thr Leu Thr Val Ser
        115


<210> 94
<211> 108
<212> PRT
<213> Artificial Sequence

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

<400> 94
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Leu Gly
1               5                   10                  15

Glu Arg Val Thr Met Thr Cys Thr Ala Ser Ser Ser Val Ser Ser Ser
            20                  25                  30

Tyr Leu His Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Leu Trp
        35                  40                  45

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

Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu
65                  70                  75                  80

Ala Glu Asp Ala Ala Thr Tyr Tyr Cys His Gln Tyr His Arg Ser Pro
                85                  90                  95

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

<210> 95
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<211> 121
<212> PRT
<213> Artificial Sequence

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

<400> 95
Gln Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Lys Pro Gly Glu
1 5 10 15

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

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

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

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

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

Ala Arg Gly Arg Tyr Tyr Gly His Asp Tyr Ala Met Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 96
<211> 108
<212> PRT
<213> Artificial Sequence

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

<400> 96
Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Glu Thr Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Leu His Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val
35 40 45

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

Ser Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Pro
65                  70                  75                  80

Glu Asp Phe Gly Thr Tyr Phe Cys Gln His Phe Trp Ser Ile Pro Pro
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105
```

<210> 97
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 97

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

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

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

Ala Glu Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala Glu
    50                  55                  60

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

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

Tyr Cys Thr Arg Leu Trp Asp Phe Ala Met Asp Tyr Trp Gly Gln Gly
            100                 105                 110

Thr Ser Val Thr Val Ser Ser
        115
```

<210> 98
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 98
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
1 5 10 15

Glu Lys Val Thr Ile Ser Cys Ser Ala Ser Ser Ser Val Ser Tyr Ile
20 25 30

Tyr Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
35 40 45

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

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

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

<210> 99
<211> 125
<212> PRT
<213> Artificial Sequence

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

<400> 99
Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Pro Ser Gln
1 5 10 15

Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser Thr Phe
20 25 30

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

Trp Leu Ala Gln Ile Trp Trp Asp Asp Tyr Lys Tyr Tyr Asn Pro Ala
50 55 60

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

```
Phe Leu Lys Ile Ala Asn Val Asp Thr Ala Asp Thr Ala Thr Tyr Tyr
                85                  90                  95


Cys Ala Arg Ile Gly Tyr Tyr Ser Gly Ser Ser Arg Cys Trp Tyr Phe
            100                 105                 110


Asp Val Trp Gly Thr Gly Ser Thr Val Thr Val Ser Ser
        115                 120                 125


<210> 100
<211> 108
<212> PRT
<213> Artificial Sequence

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

<400> 100
Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
1               5                   10                  15


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


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


Ser Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
    50                  55                  60


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


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


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


<210> 101
<211> 117
<212> PRT
<213> Artificial Sequence

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

<400> 101
```

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

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

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

Gly Tyr Ile Tyr Pro Gly Asp Ser Asn Thr Lys Tyr Asn Glu Lys Phe
    50                  55                  60

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

Met Gln Leu Asn Ser Leu Thr Ser Glu Asp Ser Val Val Tyr Phe Cys
                85                  90                  95

Ala Arg Met Ile Thr Pro Tyr Tyr Phe Asp Tyr Trp Gly Gln Gly Thr
            100                 105                 110

Thr Leu Thr Val Ser
        115


<210> 102
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 102
Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
1               5                   10                  15

Glu Thr Val Thr Ile Ala Cys Arg Ala Ser Gly Asn Ile His Asn Tyr
            20                  25                  30

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

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

Ser Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Pro
65                  70                  75                  80

Glu Asp Phe Gly Ser Tyr Tyr Cys Gln His Phe Trp Asn Thr Pro Pro
```

85 90 95

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

<210> 103
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 103
Glu Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Met Lys Leu Ser Cys Val Ala Ser Gly Ile Ile Phe Ser Asn Tyr
20 25 30

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

Ala Glu Ile Arg Leu Lys Ser Asn Asn Tyr Ser Thr His Tyr Ala Glu
50 55 60

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

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

Tyr Cys Thr Arg His Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Ser Val Thr Val Ser Ser
115

<210> 104
<211> 108
<212> PRT
<213> Artificial Sequence

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

<400> 104
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

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

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
        35                  40                  45

Tyr Tyr Thr Ser Ser Leu His Ser Gly Val Pro Ser Lys Phe Ser Gly
    50                  55                  60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Pro
65                  70                  75                  80

Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Lys Leu Pro Tyr
                85                  90                  95

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


<210> 105
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 105
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1               5                   10                  15

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

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

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

Lys Gly Arg Leu Thr Ile Ser Arg Asp Asn Gly Lys Asn Thr Leu Tyr
65                  70                  75                  80

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

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

Thr Leu Val Thr Val Ser Ala
        115

<210> 106
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 106
Asp Ile Gln Met Thr Gln Ser Ser Ser Tyr Leu Ser Val Ser Leu Gly
1   5   10   15

Gly Arg Val Thr Ile Thr Cys Lys Ala Ser Asp His Ile Asn Asn Trp
            20   25   30

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

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

Ser Gly Ser Gly Lys Asp Tyr Thr Leu Ser Ile Thr Ser Leu Gln Thr
65   70   75   80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Trp Ser Thr Pro Pro
                85   90   95

Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
            100   105

<210> 107
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 107
Gln Val Gln Leu Lys Gln 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 Asp Trp Val Arg Gln Ser Pro Gly Lys Gly Leu Glu Trp Leu
        35   40   45

```
Gly Val Ile Trp Gly Gly Gly Ser Thr Asn Tyr Asn Ser Ala Leu Lys
    50                  55                  60

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

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

Ser Gly Asp Tyr Asp Gly Ser Leu Trp Phe Ala Tyr Trp Gly Gln Gly
            100                 105                 110

Thr Leu Val Thr Val Ser Ala
        115


<210> 108
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 108
Asp Ile Val Ile Thr Gln Asp Glu Leu Ser Asn Pro Val Thr Ser Gly
1               5                   10                  15

Glu Ser Val Ser Ile Ser Cys Arg Ser Ser Lys Ser Leu Leu Tyr Lys
            20                  25                  30

Asp Gly Lys Thr Tyr Leu Asn Trp Phe Leu Gln Arg Pro Gly Gln Ser
        35                  40                  45

Pro Gln Leu Leu Ile Tyr Leu Met Ser Thr Arg Ala Ser Gly Val Ser
    50                  55                  60

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

Ser Arg Val Lys Ala Glu Asp Val Gly Val Tyr Tyr Cys Gln Gln Leu
                85                  90                  95

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


<210> 109
<211> 113
<212> PRT
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<213> Artificial Sequence

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

<400> 109
Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
1 5 10 15

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

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

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

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

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

Ser Arg His Gly Trp Gly Trp Gly Gln Gly Thr Leu Val Thr Val Ser
100 105 110

Ala

<210> 110
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 110
Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Glu Thr Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val
35 40 45

Tyr Asn Ala Lys Ala Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly

50 55 60

Ser Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Gly Ser Tyr Tyr Cys Gln His Phe Trp Ser Ile Pro Pro
85 90 95

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

<210> 111
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 111
Glu Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

Ala Glu Ile Arg Leu Lys Ser Asn Asn Tyr Ala Thr His Tyr Ala Glu
50 55 60

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

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

Tyr Cys Thr Arg His Tyr Asp Tyr Ala Met Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Ser Val Thr Val Ser Ser
115

<210> 112
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 112
Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Glu Thr Val Thr Ile Thr Cys Arg Ala Ser Gly Asn Ile His Asn Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val
35 40 45

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

Ser Gly Ser Gly Thr Gln Tyr Ser Leu Arg Ile Asn Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Gly Ser Tyr Tyr Cys Gln His Phe Trp Ser Thr Pro Pro
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 113
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 113
Glu Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

Ala Glu Ile Arg Leu Ile Ser Asn Asn Tyr Ala Thr His Tyr Ala Glu
50 55 60

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

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

Tyr Cys Thr Arg His Tyr Tyr Tyr Ala Leu Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Ser Val Thr Val Ser Ser
115

<210> 114
<211> 114
<212> PRT
<213> Artificial Sequence

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

<400> 114
Asp Ile Val Met Ser Gln Ser Pro Ser Ser Leu Thr Val Ser Val Gly
1 5 10 15

Glu Lys Val Thr Leu Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Ala
65 70 75 80

Ile Ser Asn Val Lys Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Ser Tyr Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
100 105 110

Lys Arg

<210> 115
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 115
Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Leu Ser Cys Thr Ala Ser Gly Phe Asn Ile Asn Asp Thr
20 25 30

Tyr Tyr His Trp Leu Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
35 40 45

Gly Arg Ile Asp Pro Ala Asn Val Asn Thr Lys Tyr Asp Pro Lys Phe
50 55 60

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

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

Gly Arg Gly Asn Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser
100 105 110

Ala

<210> 116
<211> 104
<212> PRT
<213> Artificial Sequence

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

<400> 116
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Leu Gly
1 5 10 15

Glu Glu Ile Thr Leu Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
20 25 30

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

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

Gly Ser Gly Thr Phe Tyr Ser Leu Thr Ile Ser Ser Val Glu Ala Glu
65 70 75 80

Asp Ala Ala Asp Tyr Tyr Cys His Gln Trp Ser Ser Phe Thr Phe Gly
85 90 95

Ser Gly Thr Lys Leu Glu Ile Lys
100

<210> 117
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 117
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
1 5 10 15

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

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

Gly Arg Val Asn Pro Asn Asn Gly Gly Ala Ser Tyr Asn His Lys Phe
50 55 60

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

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

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

Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 118
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 118
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly

1 5 10 15

Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Ile Ser Tyr Met
20 25 30

His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Asn Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Thr Pro Pro Thr
85 90 95

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

<210> 119
<211> 118
<212> PRT
<213> Artificial Sequence

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

<400> 119
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Met Lys Pro Gly Ala
1 5 10 15

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

Asn Asn Met His Trp Val Lys Gln Asn Gln Gly Lys Ser Leu Glu Trp
35 40 45

Ile Gly Glu Val Asn Pro Asn Thr Gly Gly Ile Gly Tyr Asn Gln Lys
50 55 60

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

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

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

Thr Leu Thr Val Ser Ser
        115

<210> 120
<211> 111
<212> PRT
<213> Artificial Sequence

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

<400> 120
Asp Ile Val Met Thr Gln Ala Ala Phe Ser Asn Pro Val Thr Leu Gly
1   5   10   15

Thr Ser Ala Ser Ile Ser Cys Arg Ser Ser Lys Ser Leu Leu His Ser
            20   25   30

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

Pro Gln Leu Leu Ile Tyr Gln Met Ser Asn Leu Ala Ser Gly Val Pro
    50   55   60

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

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Ala Gln Asn
                85   90   95

Leu Glu His Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 121
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 121
Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
1   5   10   15

Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
            20   25   30

```
Gly Met Ser Trp Val Arg Gln Thr Pro Asp Lys Arg Leu Glu Trp Val
        35                  40                  45

Ala Thr Ile Ser Thr Gly Gly Thr Tyr Thr Tyr Tyr Pro Asp Ser Val
    50                  55                  60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65                  70                  75                  80

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

Val Gly Gln Ser Tyr Ser Asp Tyr Val Ser Phe Ala Tyr Trp Gly Gln
            100                 105                 110

Gly Thr Gln Val Thr Val Ser Ala
        115                 120


<210> 122
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 122
Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1               5                   10                  15

Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
            20                  25                  30

Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45

Pro Lys Leu Leu Ile Ser Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50                  55                  60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser Gln Ser
                85                  90                  95

Thr His Val Pro Pro Met Phe Gly Gly Gly Thr Arg Leu Glu Ile Lys
            100                 105                 110

<210> 123
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<211> 115
<212> PRT
<213> Artificial Sequence

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

<400> 123
Glu Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Leu Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Leu Ser Cys Thr Ala Ser Gly Leu Asn Ile Lys Asp Tyr
20 25 30

Tyr Ile His Trp Val Tyr Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
35 40 45

Gly Arg Ile Asp Pro Glu Ser Asp Asn Thr Leu Tyr Asp Pro Lys Phe
50 55 60

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

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

Thr Thr Asn Thr Pro Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Thr
115

<210> 124
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 124
Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1 5 10 15

Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
20 25 30

Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
35 40 45

```
Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50                  55                  60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
                85                  90                  95

Ser His Val Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110

<210> 125
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 125
Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Pro Gly Thr
1               5                   10                  15

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

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

Gly Val Ile Asn Pro Gly Ser Gly Gly Thr Asn Tyr Asn Glu Lys Phe
    50                  55                  60

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

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

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

Gly Thr Leu Val Thr Val Ser Ala
        115                 120

<210> 126
<211> 113
<212> PRT
<213> Artificial Sequence
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<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polypeptide"

<400> 126
Asp Ile Val Met Ser Gln Ser Pro Ser Ser Leu Ala Val Ser Val Gly
1 5 10 15

Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Lys Ser Gly Val
50 55 60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Val Lys Ala Glu Asp Leu Ala Val Tyr Tyr Cys His Gln
85 90 95

Tyr Tyr Ser Tyr Pro Leu Thr Phe Ala Ala Gly Thr Lys Leu Glu Leu
100 105 110

Lys

<210> 127
<211> 115
<212> PRT
<213> Artificial Sequence

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

<400> 127
Gln Val Gln Leu Gln Gln Pro Gly Ser Val Leu Val Arg Pro Gly Ala
1 5 10 15

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

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

Gly Glu Ile His Pro Asn Asn Gly Ser Thr Asn Tyr Asn Glu Lys Phe
50 55 60

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


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


Ala Arg Trp Thr Leu Phe Thr Tyr Trp Gly Gln Gly Thr Leu Val Thr
            100                 105                 110


Val Ser Ala
        115


<210> 128
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 128
Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1               5                   10                  15


Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
            20                  25                  30


Asn Gly Asn Thr Tyr Leu Leu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45


Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50                  55                  60


Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Ala Leu Lys Ile
65                  70                  75                  80


Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser Gln Ser
                85                  90                  95


Thr His Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110


<210> 129
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<221> source
```

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

<400> 129
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15

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

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

Ala Tyr Ile Ser Arg Gly Ser Ser Thr Ile His Tyr Ala Asp Thr Val
50 55 60

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

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

Ala Arg Pro Phe Asn Trp Tyr Phe Asp Val Trp Gly Ala Gly Thr Thr
100 105 110

Val Thr Val Ser Ser
115

<210> 130
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 130
Asp Ile Val Met Ser Gln Ser Pro Ser Ser Leu Ala Val Ser Val Gly
1 5 10 15

Glu Lys Val Thr Met Thr Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
20 25 30

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ile Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr

65 70 75 80

Ile Ser Ser Val Lys Ala Glu Asp Leu Ala Ile Tyr Tyr Cys Gln Gln
85 90 95

Tyr Tyr Arg Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
100 105 110

Lys

<210> 131
<211> 121
<212> PRT
<213> Artificial Sequence

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

<400> 131
Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Val Lys Pro Gly Ala
1 5 10 15

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

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

Gly Val Ile Asn Pro Arg Asn Gly Arg Asn Asn Tyr Asn Glu Lys Phe
50 55 60

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

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

Ala Arg Glu Asp Tyr Asp Gly Gly Asp Tyr Ala Met Asp Tyr Trp Gly
100 105 110

Gln Gly Thr Ser Val Thr Val Ser Ser
115 120

<210> 132
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

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

<400> 132
Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
1 5 10 15

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

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Thr Leu Leu Ile
35 40 45

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

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Pro
65 70 75 80

Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Lys Leu Pro Trp
85 90 95

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

<210> 133
<211> 121
<212> PRT
<213> Artificial Sequence

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

<400> 133
Glu Val Glu Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Ile Ser Cys Lys Thr Ser Gly Asn Thr Tyr Thr Glu Tyr
20 25 30

Thr Met Gln Trp Val Lys Leu Ser His Gly Lys Ser Leu Glu Trp Ile
35 40 45

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

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

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


Ala Arg Ala Gly Leu Gly Asn Tyr Val Trp Ala Met Asp Tyr Trp Gly
            100                 105                 110


Gln Gly Ala Ser Val Thr Val Ser Ser
        115                 120


<210> 134
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 134
Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
1               5                   10                  15


Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Asn
            20                  25                  30


Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45


Pro Asn Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50                  55                  60


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


Ser Ile Val Glu Ala Glu Asp Leu Gly Leu Tyr Phe Cys Ser Gln Ser
                85                  90                  95


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


<210> 135
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 135
Gln Val Gln Leu Pro Gln Ser Gly Ala Glu Leu Ala Lys Pro Gly Ala
1               5                   10                  15
```

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

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

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

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

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

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

Ser Thr Leu Thr Val Ser Ser
        115


<210> 136
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 136
Asp Ile Val Met Ser Gln Ser Pro Ser Ser Leu Ala Val Ser Val Gly
1               5                   10                  15

Glu Lys Val Thr Met Asn Cys Glu Ser Ser Gln Ser Leu Leu Tyr Ser
            20                  25                  30

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Asp Ser Gly Val
    50                  55                  60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65                  70                  75                  80

Ile Ser Ser Val Arg Ala Glu Asp Pro Ala Val Tyr Tyr Cys Gln Gln
                85                  90                  95
```

Tyr Tyr Ser Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
100 105 110

Lys

<210> 137
<211> 116
<212> PRT
<213> Artificial Sequence

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

<400> 137
Glu Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

Ala Glu Ile Arg Ser Lys Ala Asn Asn His Ala Thr Tyr Tyr Ala Glu
50 55 60

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

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

Tyr Cys Val Ser Thr Gly Thr Ser Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ala
115

<210> 138
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 138
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly

1 5 10 15

Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
20 25 30

His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln His Trp Ser Ser Asn Pro Pro Thr
85 90 95

Phe Gly Ala Gly Thr Lys Leu Glu Met Lys
100 105

<210> 139
<211> 116
<212> PRT
<213> Artificial Sequence

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

<400> 139
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Met Lys Pro Gly Ala
1 5 10 15

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

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

Gly Glu Val Asn Pro Asn Ile Gly Gly Ile Gly Tyr Asn Gln Lys Phe
50 55 60

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

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

Ala Met Gly Arg Trp Tyr Phe Asp Val Trp Gly Ala Gly Thr Thr Val
100 105 110

Thr Val Ser Ser
        115

<210> 140
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 140
Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Ser Leu Gly
1   5   10   15

Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
            20   25   30

Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35   40   45

Pro Lys Leu Leu Ile Tyr Lys Val Ser Ser Arg Phe Ser Gly Val Pro
    50   55   60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser Gln Ser
                85   90   95

Thr His Val Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 141
<211> 114
<212> PRT
<213> Artificial Sequence

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

<400> 141
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Met Val Lys Pro Gly Ala
1   5   10   15

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

```
Met His Trp Val Lys Gln Ser His Gly Lys Ser Leu Glu Trp Ile Gly
        35                  40                  45

Arg Val Asn Thr Asn Asn Gly Gly Thr Ser Tyr Asp Gln Lys Phe Glu
    50                  55                  60

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

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

Ile Pro Ala Trp Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
            100                 105                 110

Ser Ala
```

<210> 142
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 142

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

Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
            20                  25                  30

Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35                  40                  45

Pro Lys Leu Leu Ile Tyr Arg Val Ser Asn Arg Phe Ser Gly Val Pro
    50                  55                  60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
65                  70                  75                  80

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser Gln Ser
                85                  90                  95

Thr His Leu Pro Arg Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100                 105                 110
```

<210> 143

<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 143
Gln Val Gln Leu Gln Gln Ser Gly Ser Val Leu Val Arg Pro Gly Ala
1 5 10 15

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

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

Glu Ile His Pro Asn Ser Gly Asn Thr Asn Tyr Asn Glu Lys Phe Lys
50 55 60

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

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

Gly Gly Asn Tyr Asp Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val Ser
100 105 110

Ser

<210> 144
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 144
Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
1 5 10 15

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

Gly Asn Ser Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

```
Lys Val Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala
    50                  55                  60

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

Pro Val Glu Asp Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Ser Asn
                85                  90                  95

Glu Asp Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105                 110
```

<210> 145
<211> 117
<212> PRT
<213> Artificial Sequence

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

<400> 145

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

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

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

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

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

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

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

Val Thr Val Ser Ala
        115
```

<210> 146
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 146
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
1 5 10 15

Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
20 25 30

His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr
35 40 45

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Thr Glu
65 70 75 80

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

Phe Gly Ser Val Thr Lys Leu Glu Ile Lys
100 105

<210> 147
<211> 116
<212> PRT
<213> Artificial Sequence

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

<400> 147
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Met Lys Pro Gly Ala
1 5 10 15

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

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

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

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

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


Val Arg Gly Leu Tyr Phe Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu
            100                 105                 110


Thr Val Ser Ser
        115


<210> 148
<211> 112
<212> PRT
<213> Artificial Sequence

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

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


Glu Ser Val Ser Ile Ser Cys Arg Ser Ser Lys Ser Leu Leu Tyr Lys
            20                  25                  30


Asp Gly Lys Thr Tyr Leu Asn Trp Phe Leu Gln Arg Pro Gly Gln Ser
        35                  40                  45


Pro Gln Leu Leu Ile Tyr Leu Met Ser Thr Arg Ala Ser Gly Val Ser
    50                  55                  60


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


Ser Arg Val Lys Ala Glu Asp Val Gly Val Tyr Tyr Cys Gln Gln Leu
                85                  90                  95


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


<210> 149
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 149
```

```
Glu Val His Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
1               5                   10                  15


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


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


Ala Thr Ile Ser Ser Gly Gly Thr Tyr Thr Tyr Tyr Pro Asp Ser Val
    50                  55                  60


Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
65                  70                  75                  80


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


Ser Arg His Gly Trp Gly Trp Gly Gln Gly Thr Leu Val Thr Val Ser
            100                 105                 110


Ala
```

<210> 150
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 150

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


Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
            20                  25                  30


His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr
        35                  40                  45


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


Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65                  70                  75                  80


Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Thr Pro Pro Thr
```

85 90 95

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

<210> 151
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 151
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Met Lys Pro Gly Ala
1 5 10 15

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

Asn Met His Trp Val Lys Gln Asn Gln Gly Lys Ser Leu Glu Trp Ile
35 40 45

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

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

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

Thr Arg Gly Gly Tyr Asp His Tyr Trp Tyr Phe Asp Val Trp Gly Ala
100 105 110

Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 152
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 152
Asp Ile Val Leu Thr Gln Phe Pro Ala Ser Leu Ala Val Ser Leu Gly
1 5 10 15

```
Gln Arg Ala Thr Ile Pro Cys Arg Ala Ser Glu Ser Val Asp Ser Tyr
            20                  25                  30

Gly Asn Ser Phe Met His Trp Phe Gln Gln Lys Pro Gly Gln Pro Pro
        35                  40                  45

Lys Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Glu Ile Pro Ala
    50                  55                  60

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

Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln Gln Ser His
                85                  90                  95

Glu Asp Pro Tyr Thr Phe Gly Gly Gly Thr Lys Met Glu Ile Lys Arg
            100                 105                 110
```

<210> 153
<211> 116
<212> PRT
<213> Artificial Sequence

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

<400> 153

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

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

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

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

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

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

Arg Ser Gly Lys Gly Tyr Phe Ala Tyr Trp Gly Gln Gly Thr Leu Val
            100                 105                 110
```

Thr Val Ser Ala
        115

<210> 154
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 154
Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Ser Leu Gly
1   5   10   15

Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
            20   25   30

Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser
        35   40   45

Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
    50   55   60

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

Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly
                85   90   95

Ser His Val Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 155
<211> 119
<212> PRT
<213> Artificial Sequence

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

<400> 155
Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Pro Ser Gln
1   5   10   15

Thr Leu Ser Leu Thr Cys Ser Phe Ser Gly Phe Ser Leu Ser Thr Ser
            20   25   30

Gly Met Gly Val Val Ser Trp Ile Arg Lys Thr Ser Gly Lys Gly Leu
        35   40   45

```
Glu Trp Leu Ala His Ile Phe Trp Asp Asp Asp Lys Trp Tyr Asn Pro
    50                  55                  60

Ser Leu Lys Ser Arg Leu Thr Ile Ser Lys Ala Thr Ser Ser Asn Gln
65                  70                  75                  80

Val Phe Leu Ile Leu Thr Ser Val Asp Thr Ala Asp Thr Ala Thr Tyr
                85                  90                  95

Tyr Cys Ala Thr Phe Tyr Gly Leu Tyr Phe Ala Tyr Trp Gly Gln Gly
            100                 105                 110

Thr Thr Leu Thr Val Ser Ser
        115
```

<210> 156
<211> 113
<212> PRT
<213> Artificial Sequence

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

<400> 156

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

Glu Lys Val Thr Met Asn Cys Glu Ser Ser Gln Ser Leu Leu Tyr Asn
            20                  25                  30

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

Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Asp Ser Gly Val
    50                  55                  60

Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65                  70                  75                  80

Ile Ser Ser Val Arg Ala Asp Asp Pro Ala Val Tyr Tyr Cys Gln Gln
                85                  90                  95

Tyr Phe Asn Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
            100                 105                 110

Lys
```

<210> 157
<211> 116
<212> PRT
<213> Artificial Sequence

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

<400> 157
Glu Val Lys Leu Glu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

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

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

Ala Glu Ile Arg Ser Lys Pro Asn Asn His Ala Thr Tyr Tyr Ala Glu
50 55 60

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

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

Tyr Cys Val Ser Thr Gly Thr Ser Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ala
115

<210> 158
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 158
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
1 5 10 15

Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Ile Ser Tyr Met
20 25 30

His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr

35 40 45

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

Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Asn Met Glu Ala Glu
65 70 75 80

Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Thr Pro Pro Thr
85 90 95

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

<210> 159
<211> 117
<212> PRT
<213> Artificial Sequence

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

<400> 159
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Met Lys Pro Gly Ala
1 5 10 15

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

Asn Met His Trp Val Lys Gln Asn Gln Gly Lys Ser Leu Glu Trp Ile
35 40 45

Gly Glu Val Asn Pro Asn Thr Gly Gly Ile Gly Tyr Asn Gln Lys Phe
50 55 60

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

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

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

Leu Thr Val Ser Ser
115

<210> 160
<211> 107

<212> PRT
<213> Artificial Sequence

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

<400> 160
Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Met Tyr Ala Ser Leu Gly
1 5 10 15

Glu Arg Val Thr Leu Thr Cys Lys Ala Ser Gln Asp Ile Asn Ser Tyr
20 25 30

Leu Ser Trp Phe Gln Gln Lys Pro Gly Lys Ser Pro Glu Thr Leu Ile
35 40 45

Tyr Arg Ala Asn Arg Leu Ile Asp Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

Glu Asp Met Gly Ile Tyr Tyr Cys Leu Gln Tyr Asp Glu Phe Pro Pro
85 90 95

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

<210> 161
<211> 118
<212> PRT
<213> Artificial Sequence

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

<400> 161
Glu Val His Leu Gln Gln Ser Gly Pro Glu Leu Val Asn Pro Gly Ser
1 5 10 15

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

Asn Met Asp Trp Val Lys Gln Ser His Gly Lys Arg Leu Glu Trp Ile
35 40 45

Gly Asn Ile Tyr Pro Asn Asn Gly Gly Ala Gly Tyr Asn Gln Asn Phe
50 55 60

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


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


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


Leu Val Thr Val Ser Ala
        115


<210> 162
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 162
Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
1               5                   10                  15


Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
            20                  25                  30


His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Arg Trp Ile Tyr
        35                  40                  45


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


Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu
65                  70                  75                  80


Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Ser Pro Pro Thr
                85                  90                  95


Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
            100                 105


<210> 163
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 163
Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Met Lys Pro Gly Ala
1 5 10 15

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

Asn Met His Trp Val Lys Gln Asn Gln Gly Lys Ser Leu Glu Trp Ile
35 40 45

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

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

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

Ala Arg Ile Pro Ser Leu Arg Arg Tyr Tyr Phe Asp Tyr Trp Gly Gln
100 105 110

Gly Thr Thr Leu Thr Val Ser Ser
115 120

<210> 164
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 164
Asp Leu Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Ser Thr Ser
20 25 30

Gly Tyr Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45

Lys Leu Leu Ile Tyr Leu Ala Ser Asn Leu Glu Ser Gly Val Pro Ala
50 55 60

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His
65 70 75 80

Pro Val Glu Glu Glu Asp Ala Thr Thr Tyr Tyr Cys Gln His Ser Arg
85 90 95

Glu Leu Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105 110

<210> 165
<211> 122
<212> PRT
<213> Artificial Sequence

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

<400> 165
Gln Val Thr Leu Lys Glu Ser Gly Pro Gly Ile Leu Gln Pro Ser Gln
1 5 10 15

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

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

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

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

Phe Leu Lys Ile Ala Asn Val Asp Thr Ala Asp Thr Ala Thr Tyr Tyr
85 90 95

Cys Ala Arg Met Val Tyr Tyr Asp Tyr Asp Gly Gly Phe Ala Tyr Trp
100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ala
115 120

<210> 166
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 166
Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly

```
1               5                   10                  15

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

Gly Asn Ser Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
        35                  40                  45

Lys Pro Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala
    50                  55                  60

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

Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln Gln Ser Asn
                85                  90                  95

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


<210> 167
<211> 117
<212> PRT
<213> Artificial Sequence

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

<400> 167
Glu Val Gln Leu Gln Gln Ser Gly Thr Val Leu Ala Arg Pro Gly Ala
1               5                   10                  15

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

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

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

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

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

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

Val Thr Val Ser Ala
        115

<210> 168
<211> 111
<212> PRT
<213> Artificial Sequence

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

<400> 168
Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly
1   5   10   15

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

Gly Ile Ser Tyr Met His Trp Phe Gln Gln Lys Pro Gly Gln Pro Pro
        35   40   45

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

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Asn Ile His
65   70   75   80

Pro Val Glu Glu Glu Asp Ala Ala Thr Phe Tyr Cys Gln Gln Ser Ile
                85   90   95

Glu Asp Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105   110

<210> 169
<211> 115
<212> PRT
<213> Artificial Sequence

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

<400> 169
Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly Ala
1   5   10   15

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

```
Trp Ile Asn Trp Val Lys Gln Arg Pro Gly Gln Gly Leu Glu Trp Ile
        35                  40                  45

Gly Arg Ile Tyr Pro Gly Glu Gly Asp Thr Asn Tyr Ser Gly Asn Phe
    50                  55                  60

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

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

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

Val Ser Ser
        115


<210> 170
<211> 108
<212> PRT
<213> Artificial Sequence

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

<400> 170
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 Arg Ala Ser Ala Asn Ile Asn Ser
            20                  25                  30

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

Ile Tyr Ala Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe Ser
    50                  55                  60

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

Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln His Phe Trp Gly Thr Pro
                85                  90                  95

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

<210> 171
```

<211> 116
<212> PRT
<213> Artificial Sequence

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

<400> 171
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 Thr Phe Thr Asp Tyr
20 25 30

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

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

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

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

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

Thr Val Ser Ser
115

<210> 172
<211> 106
<212> PRT
<213> Artificial Sequence

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

<400> 172
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
20 25 30

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

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

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

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Trp Ser Ser Thr Pro Pro Thr
                85                  90                  95

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

<210> 173
<211> 120
<212> PRT
<213> Artificial Sequence

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

<400> 173

```
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 Thr Phe Thr Asp Tyr
            20                  25                  30

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

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

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

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

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

Gly Thr Leu Val Thr Val Ser Ser
        115                 120
```

<210> 174
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 174
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Lys Ser Ser Gln Ser Leu Leu Tyr Ser Ser
20 25 30

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

Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val Pro
50 55 60

Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
65 70 75 80

Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Lys Gln Ser
85 90 95

Tyr Asn Leu Arg Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
100 105 110

<210> 175
<211> 117
<212> PRT
<213> Artificial Sequence

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

<400> 175
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15

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

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

Gly Tyr Ile Tyr Pro Arg Asp Gly Ser Thr Lys Tyr Asn Glu Glu Phe
50 55 60

Lys Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Asp 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 Ser Tyr Ser Asn Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser
115

<210> 176
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 176
Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val Thr Pro Lys
1 5 10 15

Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Gly Thr Ser
20 25 30

Ile His Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Leu Leu Ile
35 40 45

Lys Tyr Ala Ser Glu Ser Ile Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

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

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

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

<210> 177
<211> 117
<212> PRT
<213> Artificial Sequence

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

<400> 177

```
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 Thr Phe Thr Arg Ser
            20                  25                  30


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


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


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


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


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


Val Thr Val Ser Ser
        115


<210> 178
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 178
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 Lys Ala Ser Gln Asp Ile Asn Ser Tyr
            20                  25                  30


Leu Ser Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Ser Leu Ile
        35                  40                  45


Tyr Arg Ala Asn Arg Leu Val Asp Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60


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


Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln Tyr Asp Glu Phe Pro Pro
```

85 90 95

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

<210> 179
<211> 118
<212> PRT
<213> Artificial Sequence

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

<400> 179
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 Thr Phe Thr Asp Tyr
20 25 30

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

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

Lys Gly Arg Val Thr Ile Thr Val Asp Thr Ser Ala 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

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

Leu Val Thr Val Ser Ser
115

<210> 180
<211> 107
<212> PRT
<213> Artificial Sequence

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

<400> 180
Ala 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 Lys Ala Ser Gln Ser Val Asn Asn Asp
            20                  25                  30

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

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

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

Glu Asp Phe Ala Thr Tyr Phe Cys Gln Gln Asp Tyr Ser Ser Pro Arg
                85                  90                  95

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

<210> 181
<211> 121
<212> PRT
<213> Artificial Sequence

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

<400> 181

```
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 Thr Phe Thr Ser Tyr
            20                  25                  30

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

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

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

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

Ala Arg Glu Tyr Tyr Asp Gly Thr Tyr Asp Ala Met Asp Tyr Trp Gly
            100                 105                 110
```

Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 182
<211> 111
<212> PRT
<213> Artificial Sequence

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

<400> 182
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Glu Ser Val Asp Ser Tyr
20 25 30

Gly Asn Ser Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
35 40 45

Arg Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Ile Pro Ala
50 55 60

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
65 70 75 80

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

Glu Asp Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 183
<211> 117
<212> PRT
<213> Artificial Sequence

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

<400> 183
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 Thr Phe Thr Ser Tyr
20 25 30

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

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

Lys Gly Arg Val Thr Met Thr Arg 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 Ser Gly Lys Gly Tyr Phe Ala Tyr Trp Gly Gln Gly Thr Leu
            100                 105                 110

Val Thr Val Ser Ser
        115
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<210> 184
<211> 114
<212> PRT
<213> Artificial Sequence

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

<400> 184

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

Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser
            20                  25                  30

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

Pro Pro Lys Leu Leu Ile Tyr Trp Trp Ala Ser Thr Arg Lys Ser Gly
    50                  55                  60

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

Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys His
                85                  90                  95

Gln Tyr Tyr Ser Tyr Pro Leu Thr Phe Gly Gln Gly Thr Lys Leu Glu
            100                 105                 110

Ile Lys
```

<210> 185
<211> 115
<212> PRT
<213> Artificial Sequence

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

<400> 185
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 Thr Phe Asn Ser Tyr
20 25 30

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

Gly Glu Ile His Pro Asn Asn Gly Ser Thr Asn Tyr Asn Glu Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Arg 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 Trp Thr Leu Phe Thr Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 186
<211> 112
<212> PRT
<213> Artificial Sequence

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

<400> 186
Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Thr Pro Gly
1 5 10 15

Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Ile Val His Ser
20 25 30

Asn Gly Asn Thr Tyr Leu Glu Trp Tyr Leu Gln Lys Pro Gly Gln Ser

35 40 45

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

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

Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Phe Gln Gly
85 90 95

Ser His Val Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
100 105 110

<210> 187
<211> 118
<212> PRT
<213> Artificial Sequence

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

<400> 187
Gln Val Thr Leu Lys Glu Ser Gly Pro Val Leu Val Lys Pro Thr Glu
1 5 10 15

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

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

Trp Leu Ala His Ile Phe Trp Asp Asp Asp Lys Trp Tyr Asn Pro Ser
50 55 60

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

Val Leu Thr Met Thr Asn Met Asp Pro Val Asp Thr Ala Thr Tyr Tyr
85 90 95

Cys Ala Thr Phe Tyr Gly Leu Tyr Phe Ala Tyr Trp Gly Gln Gly Thr
100 105 110

Leu Val Thr Val Ser Ser
115

<210> 188
<211> 114

<212> PRT
<213> Artificial Sequence

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

<400> 188
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15

Glu Arg Ala Thr Ile Asn Cys Glu Ser Ser Gln Ser Leu Leu Tyr Asn
20 25 30

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

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60

Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80

Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
85 90 95

Tyr Phe Asn Tyr Pro Leu Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
100 105 110

Lys Arg

<210> 189
<211> 116
<212> PRT
<213> Artificial Sequence

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

<400> 189
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 Phe Thr Phe Ser Asp Ala
20 25 30

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

```
Gly Glu Ile Arg Ser Lys Pro Asn Asn His Ala Thr Tyr Tyr Ala Glu
    50                  55                  60

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

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

Tyr Cys Ala Arg Thr Gly Thr Ser Tyr Trp Gly Gln Gly Thr Leu Val
            100                 105                 110

Thr Val Ser Ser
        115
```

<210> 190
<211> 111
<212> PRT
<213> Artificial Sequence

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

<400> 190

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

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Asp Tyr Asn
            20                  25                  30

Gly Ile Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
        35                  40                  45

Arg Leu Leu Ile Tyr Ala Ala Ser Asn Val Gln Ser Gly Ile Pro Ala
    50                  55                  60

Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
65                  70                  75                  80

Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Ser Ile
                85                  90                  95

Glu Asp Pro Pro Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100                 105                 110
```

<210> 191
<211> 114
<212> PRT
<213> Artificial Sequence

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

<400> 191
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

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

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

Gly Arg Ile Tyr Pro Gly Glu Gly Asp Thr Asn Tyr Ser Gly Asn Phe
50 55 60

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

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

Thr Arg Gly Leu Val Met Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser

<210> 192
<211> 111
<212> PRT
<213> Artificial Sequence

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

<400> 192
Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser Leu Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Asp Tyr Asp
20 25 30

Gly Ile Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro
35 40 45

Arg Leu Leu Ile Tyr Ala Ala Ser Asn Val Gln Ser Gly Ile Pro Ala
50 55 60

```
Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
65                  70                  75                  80


Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Ser Ile
                85                  90                  95


Glu Asp Pro Pro Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100                 105                 110


<210> 193
<211> 115
<212> PRT
<213> Artificial Sequence

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

<400> 193
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 Thr Phe Asp Ser Tyr
            20                  25                  30


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


Gly Glu Ile His Pro Asn Asn Gly Ser Thr Asn Tyr Asn Glu Lys Phe
    50                  55                  60


Lys Gly Arg Val Thr Met Thr Arg 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 Trp Thr Leu Phe Thr Tyr Trp Gly Gln Gly Thr Leu Val Thr
            100                 105                 110


Val Ser Ser
        115


<210> 194
<211> 115
<212> PRT
<213> Artificial Sequence

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

<400> 194
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 Thr Phe Thr Ser Tyr
20 25 30

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

Gly Glu Ile His Pro Asn Asn Gly Ser Thr Asn Tyr Asn Glu Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Arg 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 Trp Thr Leu Phe Thr Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 195
<211> 115
<212> PRT
<213> Artificial Sequence

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

<400> 195
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 Thr Phe Asn Tyr Tyr
20 25 30

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

Gly Glu Ile His Pro Asn Asn Gly Ser Thr Asn Tyr Asn Glu Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Arg 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 Trp Thr Leu Phe Thr Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 196
<211> 115
<212> PRT
<213> Artificial Sequence

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

<400> 196
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 Thr Phe Asn Ser Tyr
20 25 30

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

Gly Glu Ile His Pro Asn Asp Gly Ser Thr Asn Tyr Asn Glu Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Arg 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 Trp Thr Leu Phe Thr Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 197
<211> 115
<212> PRT
<213> Artificial Sequence

<220>
<221> source

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

<400> 197
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 Thr Phe Asn Ser Tyr
20 25 30

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

Gly Glu Ile His Pro Asn Gly Gly Ser Thr Asn Tyr Asn Glu Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Arg 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 Trp Thr Leu Phe Thr Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 198
<211> 115
<212> PRT
<213> Artificial Sequence

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

<400> 198
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 Thr Phe Asn Ser Tyr
20 25 30

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

Gly Glu Ile His Pro Asn Ser Gly Ser Thr Asn Tyr Asn Glu Lys Phe
50 55 60

Lys Gly Arg Val Thr Met Thr Arg 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 Trp Thr Leu Phe Thr Tyr Trp Gly Gln Gly Thr Leu Val Thr
100 105 110

Val Ser Ser
115

<210> 199
<211> 116
<212> PRT
<213> Artificial Sequence

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

<400> 199
Glu Val Gln Leu Val 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 Asp Ala
20 25 30

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

Gly Glu Ile Arg Ser Lys Pro Asn Asn His Ala Thr Tyr Tyr Ala Glu
50 55 60

Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser Lys Asn Ser
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 Ala Arg Thr Gly Thr Ser Tyr Trp Gly Gln Gly Thr Leu Val
100 105 110

Thr Val Ser Ser
115

<210> 200

<400> 200
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<210> 201

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<210> 220
<211> 322
<212> DNA
<213> Artificial Sequence

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

<400> 220
caaattgttc tcacccagtc tccagcactc atgtctgcat ctccagggga aaaggtctcc 60

ctgacctgca gtgccaactc aactgtaagt ttcatgtact ggtaccagca gaagccaaga 120

tcctccccca caccctggat ttatctcaca tccaacctgg cttctggagt ccctgctcgc 180

ttcagtggca gtgggtctgg gacctcttac tctcttacaa tcagcagcat ggaggctgaa 240

gatgctgcca cttattactg ccagcagtgg agtagtaact cacccatcac gttcggtgct 300

gggaccaagc tggagctgaa ac 322

<210> 221
<211> 354
<212> DNA
<213> Artificial Sequence

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

<400> 221
tctgatgtgc agcttcagga ctcaggacct ggcctggtga aaccttctca gtctctgtcc 60

gtcacctgca ctgtcactgg ctactccatc acctggggtt attactggaa ctggatccgg 120

cagtttccag gaaacaaact ggagtggatg ggtaacatac acaacagtgg tggcactaac 180

tacaacccat ctctcaagag tcgaatctct atcactcgag acacatccaa gaaccagttc 240

ttcctgcagt tgaattctgt gactactgag gacacagcca catattactg tgcaaccaca 300

aactgggact actttgacta ctggggccaa ggcaccactc tcacagtctc ctca 354

<210> 222
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 222
gacattgtga tgtcacagtc tccatcctcc ctggctgtgt cagttggaga gaaggtcact 60

atgagctgca agtccagtca gagcctttta tatagtagca atcaaaagag ctacttggcc 120

tggtaccagc agaaaccagg gcagtctcct aaactgttaa tctactgggc atccactagg 180

gaatctgggg tccctgaccg cttcacaggc agtggatcag ggacagattt cactctcacc 240

atcagcagtg tgcaggctga agacctggcc gtttattact gcaagcaatc ttataatctt 300

cggacgttcg gtggaggcac caagctggaa atcaaac 337

<210> 223
<211> 351
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 223
caggttcagc tgcagcagtc tgacgctgag ttggtgaaac ctggagcttc agtgaagata 60

tcctgcaagg tttctggcta caccttcact gaccatacta ttcactggat gaagcagagg 120

cctgaacagg gcctggaatg gattggatat atttatccta gagatggtag tactaagtac 180

aatgaggagt tcaagggcaa ggccacattg actgcagaca aatcctccag cacagcctac 240

atgcagctca acagcctgac atctgaggac tctgcagtct atttctgtgc aagatcatat 300

agtaactact ttgactactg gggccaaggc accactctca cagtctcctc a 351

<210> 224
<211> 333
<212> DNA
<213> Artificial Sequence

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

<400> 224
gacattgtga tgtcacagtc tccatcctcc ctagctgtgt cagttggaga gaaggttact 60

atgagctgca agtccagtca gagcctttta tatagtagca atcaaaagaa ctacttggcc 120

tggtaccagc agaaaccagg gcagtctcct aaactgctga tttactgggc atccactagg 180

gaatctgggg tccctgatcg cttcacaggc agtggatctg ggacagattt cactctcacc 240

atcagcagtg tgaaggctga agacctggca gtttatttct gtcagcaata ttataactat 300

ccgtacacgt tcggaggggg gaccaagctg aaa 333

<210> 225
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 225
caggtccaac tgcagcaacc tggggctgaa attgtgaggc ctggggcttc agtgaagctg 60

tcctgcaagg cttctggcta cacctttacc gactattgga tgaactgggt aaaacagagg 120

cctggacaag gccttgagtg gatcggagca attgatcctt ctgatagtta tactagctac 180

aatccaaaat tcaagggcaa ggccacattg actgtagaca cctcctccag ctcagcctac 240

atgcagctca gcagcctgac atctgaggac tctgcggtct atttctgtgc aagaagagga 300

acccctggta aacccccttgt ttactggggc caagggactc tggtcactgt ctctgca 357

<210> 226
<211> 322
<212> DNA
<213> Artificial Sequence

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

<400> 226
gacatccaga tgactcagtc tccagcctcc ctatctgtat ctgtgggaga aactgtcacc 60

atcacatgtc gagcaagtgc gaatattaac agtaatttag tatggtatca gcagaaacag 120

ggaaaatctc ctcagctcct ggtctatgct gcaacaaact tagcggatgg tgtgccatca 180

cggttcagtg gcagtggatc aggcacacag tattccctca agatcaacag cctgcagtct 240

gaagattttg ggaattacta ctgtcaacat ttttggggta ctcctcggac gttcggtgga 300

ggcaccaagc tggaaatcaa ac 322

<210> 227
<211> 348
<212> DNA
<213> Artificial Sequence

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

<400> 227
gaggtccagc tgcaacagtc tggacctgag ctaatgaagc ctggggcttc agtgaagatg 60

tcctgcaagg cttctggata cacattcact gactacaaca tgtactgggt gaagcagaac 120

caaggaaaga gcctagagtg gataggagaa attaatccta acaatggtgg tactgcctac 180

aaccagaagt tcagaggcaa ggccacgttg actgtagaca agtcctccag cacagcctac 240

atggagctcc gcagcctgac atctgaggac tctgcagtct attactgtgc aagatatgat 300

aaggggtttg actactgggg ccaaggcacc actctcacag tctcctca 348

<210> 228
<211> 334
<212> DNA
<213> Artificial Sequence

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

<400> 228
gacattgtgg tcacccaatc tccagcttct ttggctgtgt ctctggggca gagagccacc 60

atctcctgca gagccagtga aagtgttgaa tattatggca caagtttaat gcagtggttc 120

caacagaaac caggacagcc acccaaactc ctcatctatg ctgcatccaa cgtagaatct 180

ggggtccctg ccaggtttag tggcagtggg tctgggacag acttcagcct caacatccat 240

cctgtggagg aggatgatat tgcaatgtat ttctgtcagc aagataggaa ggttccttgg 300

acgttcggtg gaggcaccaa gctggaaatc aaac 334

<210> 229
<211> 360
<212> DNA
<213> Artificial Sequence

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

<400> 229
caggttactc tgaaagagtc tggccctggg atattgcagc cctcccagac cctcagtcta 60

acttgttctt tctctgggtt ttcactgaac acatctggta tgagtgtagg ctgggttcgt 120

cagccttcag ggaggggtct ggaatggctg gcccccattt ggtggaatgg tgataagtac 180

tataacccag ccctgaaaag ccggctcaca atctccaagg atacctccaa caaccaggtt 240

ttcctcaaga tcgccagtgt ggtcactgca gatactgcca catacttctg tgctcgaata 300

cggcaatatt actatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 230
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 230
gacattgtga tgtcacagtc tccatcctcc ctagctgtgt cagttggaga gaaggttact 60

atgagctgca agtccagtca gagcctttta tatagtagca atcaaaagaa ctacttggcc 120

tggtaccagc agaaaccagg gcagtctcct aaactgctga tttactgggc atccactagg 180

gaatctgggg tccctgatcg cttcacaggc agtggatctg ggacagattt cactctcacc 240

atcagcagtg tgaaggctga agacctggca gtttattact gtcagcaata ttatagctat 300

ccgacgttcg gtggaggcac caagctggaa atcaaac 337

<210> 231
<211> 354
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 231
caggtccaac tgcagcagcc tggggctgag cttgtgaagc ctggggcttc agtgaagctg 60

tcctgcaagg cttctggcta caccttcccc agctactgga tacactgtgt gaagcagagg 120

cctggacaag gccttgagtg gattggagtg attaatccta gcaacggtcg tactaactac 180

aatgagaagt tcaagaacaa ggccacactg actgtagaca aatcctccag cacagcctac 240

atgcaactca gcagcctgac atctgaggac tctgcggtct attactgtgt caggggggg 300

acgggctata ctatggacta ctggggtcaa ggaacctcag tcaccgtctc ctca 354

<210> 232
<211> 322
<212> DNA
<213> Artificial Sequence

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

<400> 232
gacatcaaga tgacccagtc tccatcttcc atgtatgcct ctctaggaga gagagtcact 60

atcacttgca aggcgagtca ggacattaat agctatttaa cctggttcca gcagaaacca 120

gggaaatctc ctaagaccct gatctatcgt gcaaacagat tgatagatgg ggtcccatca 180

aggttcagtg gcagtggatc tgggcaagat tattctctca ccatcagcag cctggattat 240

gaagatatgg gaatttatta ttgtctacag tatgatgact ttccgtggac gttcggtgga 300

ggcaccaagc tggaaatcaa ac 322

<210> 233
<211> 348
<212> DNA
<213> Artificial Sequence

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

<400> 233
cagatccagt tggtgcagtc tggacctgag ctgaagaagc ctggagagac agtcaagatc 60

tcctgcaagg cttctggtta taccttcaca gactattcaa tgcactgggt gaagcaggct 120

ccaggaaagg gtttaaagtg gctgggctgg ataaacactg agactggcga gccaacatat 180

tcagaagact tcaagggacg gtttgccttc tctttggaaa cctctgccag cactgcctat 240

ttgcagatca acaacctcaa aaatgaagac acggctactt atttctgtgt taaaaataag 300

ggctggtttg cttattgggg ccaagggact ctggtcactg tctctgca 348

<210> 234
<211> 338
<212> DNA
<213> Artificial Sequence

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

<400> 234
gatgttgtga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagccttgta cacagtaatg gagacaccta tttacattgg 120

tacctgcaga agccaggcca gtctccaaaa ctcctgatct acaaagtttc caaccgattt 180

tctggggtcc cagacaggtt cagtggcagt ggatcaggga cagatttcac actcaagatc 240

agcagagtgg aggctgagga tctgggactt tatttctgct ctcaaagtac acttattccg 300

tacacgttcg gaggggggac caagctggac ataaaacg 338

<210> 235
<211> 342
<212> DNA
<213> Artificial Sequence

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

<400> 235
caggttcacc tgcagcagtc tggaactgaa gtgatgaagc ctggggcctc agtgaagata 60

tcctgcaagg ctactggcta cacattcagt agctactgga tagagtggat aaagcagagg 120

cctggacatg gccttgagtg gattggagag attttgcctg gaagtggtaa tactaacaac 180

aatgagaagt tcaagggcaa ggccacaatc actgcagata catcctccaa tatagcctac 240

atacaattaa gcagcctgac atctgaggac tctgccgtct attactgtgc gggaggcccg 300

gcggcttact ggggccaagg gactctggtc actgtctctg ca 342

<210> 236
<211> 341
<212> DNA
<213> Artificial Sequence

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

<400> 236
gacattgtga tgtcacagtc tccatcctcc ctagctgtgt cagttggaga gaaggttact 60

atgagctgca agtccagtca gagcctttta tatagtagca atcaaaagaa ctacttggcc 120

tggtaccagc agaaaccagg gcagtctcct aaactgctga tttactgggc atccactagg 180

gaatctgggg tccctgatcg cttcacaggc agtggatctg ggacagattt cactctcacc 240

atcagcagtg tgaagactga agacctggca ctttattact gtcagcaata ttattggttt 300

ccgtacacgt tcggaggggg gaccaagctg gaaataaaac g 341

<210> 237
<211> 339
<212> DNA
<213> Artificial Sequence

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

<400> 237
gaggttcagc tgcagcagtc tggggcagaa cttgtgaagc caggggcctc agtcaagttg 60

tcctgcacag cttctggctt caacattaaa gacacctata tgcactgggt gaagcagagg 120

cctgaacagg gcctggagtg gattggaagg attgatcctg cgaatgttaa tactaaatat 180

gacccgaagt tccagggcaa ggccactata acagcagaca catcctccaa cacagcctac 240

ctgcagctca gcagcctgac atctgaggac actgccgtct attactgtgt taggggggaat 300

gtttactggg gccaagggac tctggtcact gtctctgca 339

<210> 238
<211> 325
<212> DNA
<213> Artificial Sequence

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

<400> 238
gaaaatgtgc tcacccagtc tccagcaatc atgtctgcat ctccagggga aaaggtcacc 60

atgacctgca gggccagctc aagtgtaagt tccagttact tgcactggta ccagcagaag 120

tcaggtgcct cccccaaact ctggatttat agcacatcca acttggcttc tggagtccct 180

gctcgcttca gtggcagtgg gtctgggacc tcttactctc tcacaatcag cagtgtggag 240

gctgaagatg ctgccactta ttactgccag cagtacagtg attacccatt cacgttcggc 300

tcggggacaa agttggtaat aaaac 325

<210> 239
<211> 366
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 239
gaggtccagc tgcagcagtc tggacctgag ctggtgaaac ctggggcttt agtgatgatg 60

tcctgcaagg cttctggata cacattcact gactactaca tgcactgggt gaagcagagc 120

catggacaga gccttgagtg gattggagag gttattcctt acaatgatga aactttctac 180

aaccggaagt tcaaggacaa ggccacattg actgtagaca aatcctctag tacagcctac 240

atggagctcc ggagcctgac atctgaggac tctgcaatct attattgtgc aagaagacat 300

aggtacgacg ggtttcgtta tgctatagac tactggggtc aaggaacctc agtcaccgtc 360

tcctca 366

<210> 240
<211> 338
<212> DNA
<213> Artificial Sequence

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

<400> 240
gatgttttga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagcattgtc catagtaatg gaaacaccta tttagagtgg 120

ttcctgcaga aaccaggcca gtctccaaag ctcctgatct acaaagtttc caaccgattt 180

tctggggtcc cagacaggtt cagtggcagt ggatcaggga cagatttcac actcaagatc 240

agcagagtgg aggctgagga tctgggagtt tattactgct ttcaaggttc acatgttccg 300

tacacgttcg gaggggggac caagctggaa ataaaacg 338

<210> 241
<211> 354
<212> DNA
<213> Artificial Sequence

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

<400> 241
gaggtccagc tgcaacagtc tggacctgtg ctggtgaagc ctggggcttc agtgaagatg 60

tcctgtaagg cttctggata cacaatcact gactacaata tgaactgggt gaagcagagc 120

catggaaaga gccttgagtg gattggagtt attaatcctt acaacggtaa tactagatat 180

aaccagatgt tcaagggcaa ggccacattg actgttgaca agtcctccag cacagcctac 240

atggagctca acagcctgac atctgaggac tctgcagtct attactgtac aagatggggt 300

actacggtgg taggtgcgaa ctggggccaa ggcaccactc tcacagtctc ctca 354

<210> 242
<211> 319
<212> DNA
<213> Artificial Sequence

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

<400> 242
caaattgttc tcacccagtc tccagcactc atgtctgcat ctccagggga gaaggtcacc 60

atgacctgca gtgccagctc aagtgtaaat tacatgtact ggtaccagca gaagccaaga 120

tcctcccccа aaccctggat ttatctcaca tccaacctgg cttctggagt ccctgttcgc 180

ttcagtggca gtgggtctgg gacctcttac tctctcacaa tcagcagcat ggaggctgaa 240

gatgctgcca cttactactg ccagcagtgg agtaataacc cacccacgtt cggttctggg 300

accaagctgg agctgaaac 319

<210> 243
<211> 366
<212> DNA
<213> Artificial Sequence

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

<400> 243
gacgtgaagc tcgtggagtc tgggggaggc ttagtgaagc ttggagggtc cctgaaactc 60

tcctgtgcag cctctggatt cactttcagt agctatgcca tgtcttgggt tcgccagact 120

ccggagaaga ggctggagtg ggtcgcaacc attactagtg gtggtggtaa cacctactat 180

ccagacagtg tgaagggtcg attcaccatc tccagagaca atgccaagaa caccctgtac 240

ctgcaaatga gcagtttgaa gtctgaggac acggccatgt attactgtgc aagaagggat 300

tactacggta gtagttacgt tatgtttgct tattggggcc aagggactct ggtcactgtc 360

tctgca 366

<210> 244
<211> 319
<212> DNA
<213> Artificial Sequence

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

<400> 244
caaattgttc tcacccagtc tccagcaatc atgtctgcat ctccagggga gaaggtcacc 60

atgacctgca gtgccagctc aagtgtaagt tacatgcact ggtaccagca gaagtcaggc 120

acctccccca aaagatggat ttatgacaca tccaaactgc cttctggagt ccctgctcgc 180

ttcagtggca gtgggtctgg gacctcttac tctctcacaa tcagcagcat ggaggctgaa 240

gatgctgcca cttattactg ccagcagtgg agtagtaccc cacccacgtt cggtgctggg 300

accaagctgg agctgaaac 319

<210> 245
<211> 360
<212> DNA
<213> Artificial Sequence

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

<400> 245
gaggtccagc tgcaacagtc tggacctgag gtaatgaagc ctggggcttc agtgaagatg 60

tcctgcaagg cttctggata cacattcact gactacaaca tgcactgggt gaagcagaac 120

caaggaaaga gcctagagtg gataggagaa attaatccta acattggtgg tactggctac 180

aaccagaagt tcaaaggcaa ggccacattg actgtacaca agtcctccag cacagcctac 240

atggagctcc gcagcctgac atctgaggac tctgcagtct attactgtgc aagaacctat 300

agttactata gttacgagtt tgcttactgg ggccaaggga ctctggtcac tgtctctgca 360

<210> 246
<211> 322
<212> DNA
<213> Artificial Sequence

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

<400> 246
gacatccaga tgacacaatc ttcatcctac ttgtctgtat ctctaggagg cagagtcacc 60

attacttgca aggcaagtga ccacattaat aattggttag cctggtatca gcagaaacca 120

ggaaatgctc ctaggctctt aatatctggt gcaaccagtt tggaaactgg ggttccttca 180

agattcagtg gcagtggatc tggaaaggat tacactctca gcattaccag tcttcagact 240

gaagatgttg ctacttatta ctgtcaacag tattggagta ttccgctcac gttcggtgcg 300

gggaccaagc tggagctgaa ac 322

<210> 247
<211> 369

<212> DNA
<213> Artificial Sequence

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

<400> 247
caggttactc tgaaagagtc tggccctggg atattgcagc cctcccagac cctcagtctg 60

acttgttctt tctctgggtt ttcactgagc acttctacta tgggtgtagg ctggattcgt 120

cagccttcag gaaagggtct agagtggctg gcagacattt ggtgggatga cagtaagtac 180

tataatccat ccctgaagag ccggctcaca atctccaagg atacctccag caaccaggta 240

ttcctcaaga tcaccagtgt ggacactgca gatactgcca cttactactg tgcgcgaaag 300

ggaaggacag ctcgggctac gagagggttt gcttactggg gccacgggac tctggtcact 360

gtctctgca 369

<210> 248
<211> 327
<212> DNA
<213> Artificial Sequence

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

<400> 248
gacattgtgc tgacccaatc tccagcttct ttggctgtgt ctctagggca gagggccgcc 60

atctcttgca agcccagcca aagtgttgat tatgatggtg atagttatat gaactggtac 120

caacagaaac caggccagcc acccaaactc ctcatttatg ctgcatccaa tctagaatct 180

gggatcccag ccaggtttag tggcagtggg tctgggacag acttcaccct caacatccat 240

cctgtggagg aggaggatgc tgcaacctat tactgtcacc aaattaatga cgatccgtgg 300

acgttcggtg gaggcaccaa gctgaaa 327

<210> 249
<211> 366
<212> DNA
<213> Artificial Sequence

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

<400> 249
tctgatgtgc agcttcagga gtcaggacct ggcctggtga aaccttctca gtctctgtct 60

gtcacctgca ctgtcactgg ctactccatc accagtagtt atacctggaa ctggatccgg 120

cagtttccag gaaacaaact ggagtggatg ggctacatac attacagtgg tagcactaac 180

tacaacccat ctctcagaag tcgaatctct attactcgag acacgtccaa gaaccagttc 240

ttcctgcagt tgaattctgt gactactgag gacacagcca catattactg tgcaagatcc 300

cgttattact acgatgctta cgggtttgct tactggggcc aagggactct ggtcactgtc 360

tctgca 366

<210> 250
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 250
gatgttgtgt tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagcattgta cacattaata gacacaccta cttaggatgg 120

tacctgcaga aaccaggcca gtcgctaaag ctcctgatat atggggtttc caaccgattt 180

tctggggtcc cagacaggtt cagtggcagt ggatcaggga cagatttcac actcaagatc 240

agcagagtgg aggctgagga tatgggagtt tattactgct ttcaaggtac acatgttcca 300

ttcacgttcg gctcggggac aaagttggaa ataaaac 337

<210> 251
<211> 363
<212> DNA
<213> Artificial Sequence

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

<400> 251
cagatccaga tgatgcagtc tggacctgag ctgaagaagc ctggagagac agtcaagatc 60

tcctgcaagg cttctgggta ttccttcaca aactatggaa tgaactgggt gaagcaggct 120

ccaggaaagg gtttaaagtg gatgggctgg ataaacacct acactggaga gccaacatat 180

gctgatgact tcaagggacg gtttgccttc tctttggaaa cctctgccag cactgcctat 240

ttgcagatca acaacctcaa aaatgaggac atggctacat atttctgtac aagaggttac 300

tacggtagta gctacgatgc tttggactac tggggtcaag gaacctcagt caccgtctcc 360

tca 363

<210> 252
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 252
gacattgtga tgtcacagtc tccatcctcc ctggctgtgt cagttggaga gaaggtcact 60

atgagctgca agtccagtca gagcctttta tatagtagca atcaaaagag ctacttggcc 120

tggtaccagc agaaaccagg gcagtctcct aaactgttaa tctactgggc atccactagg 180

gaatctgggg tccctgaccg cttcacaggc agtggatcag ggacagattt cactctcacc 240

atcagcagtg tgcaggctga agacctggcc gtttattact gcaagcaatc ttataatctt 300

cggacgttcg gtggaggcac caagctggaa atcaaac 337

<210> 253
<211> 351
<212> DNA
<213> Artificial Sequence

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

<400> 253
caggttcagc tgcagcagtc tgacgctgag ttggtgaaac ctggagcttc agtgaagata 60

tcctgcaagg tttctggcta caccttcact gaccatacta ttcactggat gaagcagagg 120

cctgaacagg gcctggaatg gattggatat atttatccta gagatggtag tactaagtac 180

aatgaggagt tcaagggcaa ggccacattg actgcagaca aatcctccag cacagcctac 240

atgcagctca acagcctgac atctgaggac tctgcagtct atttctgtgc aagatcatat 300

agtaactact ttgactactg gggccaaggc accactctca cagtctcctc a 351

<210> 254
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 254
gatgttgtga tgacccagac tccactcact ttgtcggtta ccattggaca accagcctcc 60

atctcttgca agtcaagtca gagcctctta gaaagtgatg gaaagacata tttgaattgg 120

ttgttacaga ggccaggcca gtctccaaag cgcctaatct atctggtgtc taaactggac 180

tctggagtcc ctgacaggtt cacgggcagt ggatcaggga cagatttcac actgaaaatc 240

agcagagtgg aggctgagga tttgggagtt tattattgct ggcaaggtat acaacatcct 300

cggacgttcg gtggaggcac caagctggaa atcaaac 337

<210> 255
<211> 339
<212> DNA
<213> Artificial Sequence

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

<400> 255
caggttcaac tgcagcagtc tggggctgag ctggtgaggc ctggggcttc agtgacgctg 60

tcctgcaagg cttcgggcta cacatttact gactatgaaa tgcactgggt gaagcagaca 120

cctgtgcatg gcctggaatg gattggaggt attgatcctg aaactggtgg tactgcctac 180

aatcagaagt tcaagggcaa ggccacactg actgcagaca aatcctccag cacagcctac 240

atggagctcc gcagcctgac atctgaggac tctgccgtct acttctgtac aagatggttt 300

tcttactggg gcccagggac tctggtcact gtctctgca 339

<210> 256
<211> 322
<212> DNA
<213> Artificial Sequence

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

<400> 256
gacatcttgc tgactcagtc tccagccatc ctgtctgtga gtccaggaga aggagtcagt 60

ttctcctgca gggccagtca gagcattggc acaagcatac actggtatca gcaaagaaca 120

aatggttctc caagacttct cataaagtat gcttctgagt ctatctctgg gatcccttct 180

aggtttagtg gcagtgggtc agggacagat tttactcttc gcatcaacag tctggagtct 240

gaagatattg cagattatta ctgtcaacaa agtaatagct ggccactcac gttcggtgct 300

gggaccaagc tggagctgaa ac 322

<210> 257
<211> 351
<212> DNA
<213> Artificial Sequence

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

<400> 257
caggtccacc tgccgcagtc tagacctgaa ctggtgaagc ctggagcttc agtgaagata 60

tcctgcaagg cttctggcta cggcttcaca cgcagctata tacactgggt gaagcagagg 120

cctggacagg gcctagagtg gattggatat atttcttctg gaagtggtgg tactacctac 180

aatcagaagt ttaagggcaa ggcctcactg actgcagaca atccctccag cactgcctac 240

atgcatctca gtagcctgac atctgaggac tctgcgatct atttctgtgc aagaggggg 300

gtacggtact tcgatgtctg gggcgcaggg accacggtca ccgtctcctc a 351

<210> 258
<211> 325
<212> DNA
<213> Artificial Sequence

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

<400> 258
gacattgtga tgacccagtc tcacaaattc atgtccacat cagtaggaga cagggtcagc 60

atcacctgca aggccagtca ggatgtgggt actgatgtag cctggtatca acagaaacca 120

gggcaatctc ctaaactact gatttactgg gcatccaccc ggcacactgg agtccctgat 180

cgcttcacag gcagtggatc tgggacagat ttcactctca ccattagcaa tgtgcagtct 240

gaagacttgg cagattattt ctgtcagcaa tatagcagct atccgtacac gttcggaggg 300

gggacaaagc tggaaataaa acgsc 325

<210> 259
<211> 348
<212> DNA
<213> Artificial Sequence

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

<400> 259
gaggtccagc tgcaacagtc tggacctgag ctaatgaagc ctggggcttc agtgaagatg 60

tcctgcaagg cttctggata cacattcact gactacaaca tgcactgggt gaagcagaac 120

caaggaaaga gcctagagtg gattggagaa attaatcctc acaatggtgg tactggctac 180

aaccagaagt tcaaaggcaa ggccacattg actgtagaca agtcctccag cacatcctac 240

atggagctcc gcagcctgac atctgaggac tctgcagtct attactgtgc aggcggttac 300

ccggcctttg actactgggg ccaaggcacc actctcacag tctcctca 348

<210> 260
<211> 325
<212> DNA
<213> Artificial Sequence

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

<400> 260
gaaaatgtgc tcacccagtc tccagcaatc gtgtctgcat ctccagggga aaaggtcacc 60

atgacctgca gggccagctc aagtgtaatt tccagttact tgcactggta ccagcagaag 120

tcaggtgcct cccccaaact ctggatttat agcacatcca acttggcttc tggagtccct 180

gctcgcttca gtggcagtgc gtctgggacc tcttactctc tcacaatcag cagtgtggag 240

gctgaagatg ctgccactta ttactgccag cagtacagtg gttacccgct cacgttcggt 300

gctgggacca agctggagct gaaac 325

<210> 261
<211> 372
<212> DNA
<213> Artificial Sequence

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

<400> 261
gaagtgaagc tggtggagtc tgagggaggc ttagtgcagc ctggaagttc catgaaactc 60

tcctgcacag cctctggatt cactttcagt gactattaca tggcttgggt ccgccaggtt 120

ccagaaaagg gtctagaatg ggttgcaaac attaattatg atggtagtag cacttactat 180

ctggactcct tgaagagccg tttcatcatc tcgagagaca atgcaaagaa cattctatac 240

ctgcaaatga gcagtctgaa gtctgaggac acagccacgt attactgtgc aagagatgat 300

tattacggta gtagcccaag ctactggtac ttcgatgtct ggggcgcagg gaccacggtc 360

accgtctcct ca 372

<210> 262
<211> 322
<212> DNA
<213> Artificial Sequence

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

<400> 262
gacatccaga tgactcagtc tccagcctcc ctatctgcat ctgtgggaga aactgtcacc 60

atgacatgtc gagcaagtgg gaatattcac aattatttag tatggtatca gcagaaacag 120

ggaaaatctc ctcagctcct ggtctataat gcaaaaacct tagcagatgg tgtgccatca 180

aggttcagtg gcagtggatc aggaacacaa tattctctca agatcaacag cctgcagcct 240

gaagattttg ggagttatta ctgtcaacat ttttggagta ctcctccgac gttcggtgga 300

ggcaccaagc tggaaatcaa ac 322

<210> 263
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 263
gaagtgaaac ttgaggagtc tggaggaggc ttggtgcaac ctggaggatc catgaaactc 60

tcctgtgttg cctctggatt cactttcagt aactactgga tgagctgggt ccgccagtct 120

ccagagaagg ggcttgagtg ggttgctgaa attagattga aatctaataa ttatgcaaca 180

cattatgcgg agtctgtgaa agggaggttc accatctcaa gagacgattc caaaagtagt 240

gtcttcctgc aaatgaacaa cttaagaact gaagacactg gcatttatta ctgtaccagg 300

cactattact atgctatgga ctactggggt caaggaacct cagtcaccgt ctcctca 357

<210> 264
<211> 322
<212> DNA
<213> Artificial Sequence

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

<400> 264
gacatcaaga tgacccagtc tccatcttcc atgtatgcat ctctaggaga gagagtcact 60

atcacctgca aggcgagtca ggacattaat agctatttaa gctggttcca gcagaaacca 120

gggaaatctc ctaagaccct gatctatcgt gcaaacagat tggtagatgg ggtcccatca 180

aggttcagtg gcagtggatc tgggcaagat tattctctca ccatcagtag cctggagtat 240

gaagatatgg gaatttatta ttgtctacag tatgatgagt ttcctccgac gttcggtgga 300

ggcaccaagc tggaaatcaa ac 322

<210> 265
<211> 354
<212> DNA
<213> Artificial Sequence

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

<400> 265
gaggtccagc tacaacagtc tggacctgag ctggtgaagc ctgggtcttc agtgaagata 60

tcctgcaagg cttctggata cacattcact gactacaaca tggactgggt gaagcagagc 120

catggaaaga gacttgagtg gattggatat atttatcctg acaatggtgg tgctggctac 180

aaccagaagt tcaagggcaa ggccacattg actgtagaca agtcctccag cacagcctac 240

atggagctcc gcagcctgac atctgaggac tctgcagtct attactgttc aagatccatt 300

actacggctt ggtttgctta ctggggccaa gggactctgg tcactgtctc tgca 354

<210> 266
<211> 325
<212> DNA
<213> Artificial Sequence

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

<400> 266
gaaaatgtgc tcacccagtc tccagcaatc atgtctgcat ctccagggga aaaggtcacc 60

ctgacctgca gggccagctc aagtatgagt tccagttact tgcactggta ccagcagaag 120

tcaggtgcct cccccaaact ctggatttat agcacatcca acttggcttc tggagtccct 180

gctcgcttca gtggcagtgg gtctgggacc tcttactctc tcacaatcag cagtgtggag 240

gctgaagatg ctgccactta ttactgccag cagtacagtg cttacccatt cacgttcggc 300

tcggggacaa agttggaaat aaaac 325

<210> 267
<211> 363
<212> DNA
<213> Artificial Sequence

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

<400> 267
gaggtccagc tgcagcagtc tggacctgag ctagtgaaac ctggggcttt agtgaagatg 60

tcctgcaagg cttctggata cacattcact gactactaca tacactgggt gaagcagagc 120

catggaaaga gccttgagtg gattggagaa attaatcctt acaatggtga gactttctac 180

aaccagaagt tcaagggcaa ggccacattg actgtagaca aatcctctag tacagcctac 240

atggaactcc ggagcctgac atctgaggac tctgcagtct attattgtgc aagaagggga 300

tggtatctaa caggctatgc tatggactac tggggtcaag gaacctcagt caccgtctcc 360

tca 363

<210> 268
<211> 320
<212> DNA
<213> Artificial Sequence

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

<400> 268
caaattgttc tcacccagtc tccagcactc atgtctgcat ctccagggga gaaggtcacc 60

atgacctgca gtgccagctc aagtgtaagt tacatgtact ggtaccagca gaagccaaga 120

tcctccccca aaccctggat ttatctcaca tccaacctgg cttctggagt ccctgctcgc 180

ttcagtggca gtgggtctgg gacctcttac tctctcacaa tcagcagcat ggaggctgaa 240

gatgctgcca cttattactg ccagcagtgg agtagtaacc cacccacgtt cggaggggg 300

accaagctgg aaataaaacg 320

<210> 269
<211> 360
<212> DNA
<213> Artificial Sequence

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

<400> 269
gaggtgcagc ttcaggagtc aggacctagc ctcgtgaaac cttctcagtc tcagtccctc 60

acctgttctg tcactggcga ctccatcacc agtgattact ggaactggat ccggaaattc 120

ccagggaaga aagttgagta catggggtac ataaactaca gtggtagcac ttactacaat 180

ccatctctca aaagtcgaat ctccatcact cgagacacat ccaagaacca gtactacctg 240

cagttgaact ctgtgacttc tgaggacaca gccacatatt actgtgcacg tacctcgtac 300

tataataagt ttctaccatt tgcttactgg ggccaaggga ctctggtcac tgtctctgca 360

<210> 270
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 270
gatgttttaa tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagtcttgta cacagaaatg gaaacaccta ttttcattgg 120

tacctgcaga agccaggcca gtctccaaag ctcctgatct acaaagtttc caaccgattt 180

tctggggtcc cagacaggtt cagtggcagt ggatcaggga cagatttcac actcaagatc 240

agcagagtgg aggctgagga tctgggagtt tatttctgct ctcaaagtac atatgttccg 300

tggacgttcg gtggaggcac caagctggaa atcaaac 337

<210> 271
<211> 351
<212> DNA
<213> Artificial Sequence

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

<400> 271
gaggtgcagc tggtggagtc tgggggaggc ttagtgcagc ctggagggtc ccggaaactc 60

tcctgtgcag cctctggatt cactttcagt agctatggaa tgcactgggt ccgtcaggct 120

ccagagaagg ggctggagtg ggtcgcatat attagtagta acgatggtac catctactat 180

gcagacacag tgaggggccg attcaccatc tccagagaca atgccaagaa caccctgttc 240

ttgcaaatga ccagtctaag gtctgaggac acggccatgt attactgtgc aagaccttct 300

aactgggtct ttgactactg gggccaaggc accactctca cagtctcctc a 351

<210> 272
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 272
gatgttgtga tgacccaaac tccactctcc cggcctgtca ctcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagccttgta cacagtaatg gaaacaccta tttacattgg 120

tacctgcaga agccaggcca gtctccaaag ctcctgatct acaaagtttc caaccgattt 180

tctggggtcc ctgacaggtt cagtggcagt ggatcaggga cagatttcac actcaagatc 240

agcagagtgg aggctgagga tctgggagtt tatttctgct ctcaaaatac acatgttcca 300

ttcacgttcg gctcggggac aaagttggaa ataaaac 337

<210> 273
<211> 348
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 273
caggtccaac tgcagcagcc tggggctgaa attgtgaggc ctggggcttc agtgaagctg 60

tcctgcaagg cttctggcta cacctttacc gactattgga tgaactgggt gaagcagagg 120

cctggacaag gccttgagtg gatcggaaca attgatcctt ctgatagtta tactcgttac 180

aatcaaaagt tcaagggcaa ggccacattg actgtagaca catccttcag ctcagcctac 240

atgcagctca gcagcctgac atctgaggac tctgcggtct atttctgtgc aagtggggga 300

cgggggtttg gttactgggg ccaagggact ccggtcactg tctctgta 348

<210> 274
<211> 319
<212> DNA
<213> Artificial Sequence

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

<400> 274
caaattgttc tcacccagtc tccagcactc atgtctgcat ctccagggga gaaggtcacc 60

atgacctgca gtgccagctc aagtgtaagt tacatgtact ggtaccagca gaagccaaga 120

tcctccccca aaccctggat ttatctcaca tccaacctgg cttctggagt ccctactcgc 180

ttcagtggca gtgggtctgg gacctcttac tctctcacaa tcagcagcat gggggctgaa 240

gatgctgcca cttattactg ccagcagtgg aatactaacc cacccacgtt cggtgctggg 300

accaagctgg agctgaaac 319

<210> 275
<211> 365
<212> DNA
<213> Artificial Sequence

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

<400> 275
gacgtgaagc tcgtggagtc tgggggaggc ttagtgaagc ttggagggtc cctgaaactc 60

tcctgtgcag cctctggatt cactttcagt agctatgcca tgtcttgggt tcgccagact 120

ccggagaaga ggctggagtg ggtcgcaacc attagtagtg gtggtggtaa cacctactat 180

ccagacagtg tgaagggtcg attcaccatc tccagagaca atgccaagaa caccctgtac 240

ctgcaaatga gcagtttgaa gtctgaggac acggccatgt attactgtgc aagaagggat 300

tactacggta ctagctacgt tatgtttgct tactggggcc aagggactct ggtcactgtc 360

tctgc 365

<210> 276
<211> 319
<212> DNA
<213> Artificial Sequence

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

<400> 276
gaaaatgttc tcacccagtc tccagcaatc atgtctgcat ctccagggga aaaggtcacc 60

atgacctgta gtgccagctc aagtgtaaat tacatgtact ggtaccagca gaagtcaagc 120

acctccccca aactctggat ttatgacaca tccaaactga cttctggagt cccaggtcgc 180

ttcagtggca gtgggtctgg aaactcttac tctctcacga tcagcaacat ggaggctgaa 240

gatgttgcca cttattactg ttttcagggg agtgggtacc cactcacgtt cggctcgggg 300

acaaaattgg aaataaaac 319

<210> 277
<211> 336
<212> DNA
<213> Artificial Sequence

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

<400> 277
gacgtgaagc tggtggagtc ggggggaggc ttagtgaggc ctggagggtc cctgaaactc 60

tcctgtgcag cctctggatt cactttcagt agatatacca tgtcttgggt tcgccagaca 120

ccggagaaga ggctggagtg ggccgcaacc attaatagtg gtggtagtaa cacctactat 180

ccagacagtg tgaagggccg attcaccatc tccagagaca atgccaagaa caccctgttc 240

ctgcaaatga gcagtctgaa gtctgaggac acagccatgt attactgtac aaatggtaac 300

cactggggcc aaggcaccac tctcacagtc tcctca 336

<210> 278
<211> 319
<212> DNA
<213> Artificial Sequence

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

<400> 278
gaaaatgttc tcacccagtc tccagcaatc atgtctgcat ctccagggga aaaggtcacc 60

atgacctgta gtgccagctc aagtgtaaat tacatgtact ggtaccagca gaagtcaagc 120

acctccccca aactctggat ttatgacaca tccaaactga cttctggagt cccaggtcgc 180

ttcagtggca gtgggtctgg aaactcttac tctctcacga tcagcaacat ggaggctgaa 240

gatgttgcca cttattactg ttttcagggg agtgggtacc cactcacgtt cggctcgggg 300

acaaaattgg aaataaaac 319

<210> 279
<211> 342
<212> DNA
<213> Artificial Sequence

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

<400> 279
caggtgcaac tgcagcagcc tgggtctgtg ctggtgaggc ctggagattc agtgaagctg 60

tcgtgcaagg cttctggcta cacattcacc agctactgga tgcactgggt gaagcagagc 120

cctggacaag gccttgagtg gattggagag attcatcctc atagtggtag tactaactac 180

aatgagaagt tcaagggcaa ggccacactg actgtagaca catcctccag cacagcctac 240

gtggatctca gcagcctgac atctgaggac tctgcggtct attactgtgt aggtggtcac 300

tacgactact ggggccaagg caccactctc acagtctcct ca 342

<210> 280
<211> 322
<212> DNA
<213> Artificial Sequence

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

<400> 280
agttttgtga tgacccaaac tcccaaattc ctgcttgtat cagcaggaga cagggttacc 60

ataacctgca aggccagtca gagtgtgaat aatgatgtag cttggtacca acagaagcca 120

gggcagtctc ctaaactgct gatatactat gcatccaatc gctacactgg agtccctgat 180

cgcttcactg gcagtggata tgggacggat ttcactttca ccatcagcac tgtgcaggct 240

gaagacctgg cagtttattt ctgtcagcag gattatagct ctcctcggac gttcggtgga 300

ggcaccaagc tggaaatcaa ac 322

<210> 281
<211> 359
<212> DNA
<213> Artificial Sequence

<220>

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

<400> 281
caggtccaac tgcagcagcc tggtgctgag cttgtgaagc ctggggcctc aatgaagctg 60

tcctgcaagg cttctggcta cactttcacc agctactgga taaactgggt gaagcagagg 120

cctggacaag gccttgagtg gattggaaat atttttcctg atactactac tactaactac 180

aatgagaagt tcaagagcaa ggccacactg actgtagaca catcctccag cacagcctat 240

atgcagctca gcagcctgac atctgacgac tctgcggtct attattgtgc aagggagtac 300

tacgatggta cctacgatgc tatggattac tggggtcaag gaacctcagt caccgtctc 359

<210> 282
<211> 320
<212> DNA
<213> Artificial Sequence

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

<400> 282
caaattgttc tcacccagtc tccagcaatc atgtctgcat ctccagggga gaaggtctcc 60

atgacctgca gtgccagctc aagtgtaagt tacatgcact ggtaccagca gaagtcaggc 120

acctccccca aaagatggat ttatgacaca tccaaactgg cttctggagt ccctgctcgc 180

ttcagtggca gtgggtctgg gtcctcttac tctctcacaa tcagcagcat ggaggctgaa 240

gatgctgcca cttattactg ccagcagtgg agtagcaccc cccccacgtt cggaggggg 300

accaagctgg aaataaaacg 320

<210> 283
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 283
gaggtccagc tgcagcagtc tggacctgag ctggtgaagc ctggggcttc agtgaagata 60

tcctgcaagg cttctggtta ctcattcact gactactaca tgcgctgggt gaagcaaagt 120

cctgaaaaga gccttgagtg gattggagag attaatccta gcactggtgg tactacctac 180

aaccagaact tcaaggccaa ggccacattg actgtagaca aatcctccag cacagcctac 240

atgcagctca agagcctgac atctgaggac tctgcagtct attactgtgc aagaggggt 300

tacttcttgt actactttga ctactggggc caaggcacca ctctcacagt ctcctca 357

<210> 284
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 284
gatgttgtga tgacccagac tccactcact ttgtcggtta ccattggaca accagcctcc 60

atctcttgca agtcaagtca gagcctctta gaaagtgatg gaaagacata tttgaattgg 120

ttgttacaga ggccaggcca gtctccaaag cgcctaatct atctggtgtc taaactggac 180

tctggagtcc ctgacaggtt cacgggcagt ggatcaggga cagatttcac actgaaaatc 240

agcagagtgg aggctgagga tttgggagtt tattattgct ggcaaggtat acaacatcct 300

cggacgttcg gtggaggcac caagctggaa atcaaac 337

<210> 285
<211> 339
<212> DNA
<213> Artificial Sequence

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

<400> 285
caggttcaac tgcagcagtc tggggctgag ctggtgaggc ctggggcttc agtgacgctg 60

tcctgcaagg cttcgggcta cacatttact gactatgaaa tgcactgggt gaagcagaca 120

cctgtgcatg gcctggaatg gattggaggt attgatcctg aaactggtgg tactgcctac 180

aatcagaagt tcaagggcaa ggccacactg actgcagaca aatcctccag cacagcctac 240

atggagctcc gcagcctgac atctgaggac tctgccgtct acttctgtac aagatggttt 300

tcttactggg gcccagggac tctggtcact gtctctgca 339

<210> 286
<211> 334
<212> DNA
<213> Artificial Sequence

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

<400> 286
gacattgtgc tgacacagtc tcctgcttcc ttagctgcat ctctggggca gagggccacc 60

atctcatgca gggccagcca aagtgtcagt acatctagct atagttatat gcactggtac 120

caacagaaac caggacagcc acccaaactc ctcatcaagt atgcatccaa cctagaatct 180

ggggtccctg ccaggttcag tggcagtggg tctgggacag acttcaccct caacatccat 240

cctgtggagg aggaggatac tgcaacatat tactgtcagc acagttggga gattccgtgg 300

acgttcggtg gaggcaccaa gctggaaatc aaac 334

<210> 287
<211> 363
<212> DNA
<213> Artificial Sequence

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

<400> 287
gaggtgcagc tggtggagtc tgggggaggc ttagtgaagc ctggagggtc cctgaaactc 60

tcctgtgcag cctctggatt cactttcagt gactatggaa tgcactgggt tcgtcaggct 120

ccagagaagg ggctggagtg ggttgcatac attagtagtg gcagtagaac catctactat 180

gcagacacag tgaagggccg attcaccatc tccagagaca atgccaagaa caccctgttc 240

ctgcaaatga ccagtctgag gtctgaggac acggccatgt attactgtgc aagggtttac 300

tacggaagta cctacgggta tttcgatgtc tggggcacag ggaccacggt caccgtctcc 360

tca 363

<210> 288
<211> 335
<212> DNA
<213> Artificial Sequence

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

<400> 288
gacattgtgc tgacacagtc tcctgcttcc ttagctgcat ctctggggca gagggccacc 60

atctcatgca gggccagtca aagtgtcagt acatctagct atagttatat gcactggtac 120

caacagaagc caggacatcc acccaaactc ctcatcaggt atgcatccaa cctagagtct 180

ggggtccctg ccaggttcag tggcagtggg tctgggacag acttcaccct caacatccat 240

cctgtggagg aggaggatac tgcaacatat tactgtcagc acagttggga gattccgtac 300

acgttcggag gggggaccaa gctggaaata aaacg 335

<210> 289
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 289
gaggtccagc ttcagcagtc aggacctgag ctggtgaaac ctggggcctc agtgaagata 60

tcctgcaagg cttctggata cacattcact gactacaaca tgcactgggt gaagcagagc 120

catggaaagc gccttgagtg gattggatat attcatcctt acaatggtgg tagtggctac 180

aaccagaagt tcaagaggaa ggccacattg actgtagaca attcctccaa cacaacctac 240

atggagctcc gcagcctgac atctgaggac tctgcagtct attactgtgc aagatcttat 300

gattacgaca cctggtttgg ttactggggc caagggactc tggtcactgt ccgtgca 357

<210> 290
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 290
gatgttgtgc tgacccagac tccactcact ttgtcggtta ccattggaca accagcctcc 60

atctcttgca agtcaagtca gagcctctta tatagtgatg gaaagacata tttgaattgg 120

ttgttacaga ggccaggcca gtctccaaag cgcctaatct atctggtgtc taaactggac 180

tctggagtcc ctgacaggtt cactggcagt ggatcaggga cagatttcac actgaaaatc 240

agcagagtgg aggctgagga tttgggactt tattattgct ggcaaggtac acattttccg 300

tggacgttcg gtggaggcac caagctggaa atcaaac 337

<210> 291
<211> 341
<212> DNA
<213> Artificial Sequence

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

<400> 291
gaagtgaaac ttgaggagtc tggaggaggc ttggtgcaac ctggaggatc catgaaactc 60

tcctgtgttg cctctggatt cactttcagt aactactgga taaactgggt ccgccagtct 120

ccagagaagg ggcttgagtg ggttgctgaa atcagaatga aatctaataa ttatgcaaca 180

cattatgcgg agtctgtgaa agggaggttc accatctcaa gagatgattc caaaagttgt 240

gtctacctgc aaatgaacaa cttaagacct gaagacactg gcatttatta ctgtaccagg 300

ggggggctact ggggccaagg caccactctc accgtctcct c 341

<210> 292
<211> 341
<212> DNA
<213> Artificial Sequence

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

<400> 292
gacattgtga tgtcacagtc tccatcctcc ctagctgtgt cagttggaga gaaggttact 60

atgagctgca agtccagtca gagcctttta tatagtagca atcaaaagaa ctacttggcc 120

tggtaccagc agaaaccagg gcagtctcct aaactgctga tttactgggc atccactagg 180

gaatctgggg tccctgatcg cttcacaggc agtggatctg ggacagattt cactctcacc 240

atcagcagtg tgaaggctga agacctggca gtttatttct gtcagcaata ttataactat 300

ccgtacacgt tcggaggggg gaccaagctg gaaataaaac g 341

<210> 293
<211> 350
<212> DNA
<213> Artificial Sequence

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

<400> 293
cagatccagt tggtgcagtc tggacctgaa ctgaagaagc ctggagagac agtcaagatc 60

tcctgcaagg cttctgggta taccttcaca aactatggaa tgaactgggt gaagcaggct 120

ccaggaaagg gtttaaagtg gatggcctgg ataaacacct acactggaga gccaacatat 180

gctgatgact tcaagggacg gtttgccttc tctttggaaa cctctgccag cactgcctct 240

ttgcagatca tcaacctcaa aaatgaggac acggctacat atttctgtgc aaggatcggc 300

gatagtagtc cctctgacta ctggggccag ggcaccactc tcacagtctc 350

<210> 294
<211> 325
<212> DNA
<213> Artificial Sequence

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

<400> 294
caaattgttc tcacccagtc tccagcaatc atgtctgcat ctctagggga acgggtcacc 60

atgacctgca ctgccagctc aagtgtaagt tccagttact tgcactggta ccagcagaag 120

ccaggatcct cccccaaact ctggatttat agcacatcca acctggcttc tggagtccca 180

cctcgcttca gtggcagtgg gtctgggacc tcttactctc tcacaatcag cagcatggag 240

gctgaagatg ctgccactta ttactgccac cagtatcatc gttccccacc gacgttcggt 300

ggaggcacca agctggaaat caaac 325

<210> 295
<211> 363
<212> DNA
<213> Artificial Sequence

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

<400> 295
cagatccagt tggtgcagtc tggacctgaa ctgaagaagc ctggagagac agtcaagatc 60

tcctgcaagg cttctgatta taccttcaca gacttttcaa tacactgggt gaggcagtct 120

ccaggaaagg gtttaaagtg gatgggctgg ataaacactg agactggtga gccaacagtt 180

gcagaagact tcaagggacg gtttgccttc tctttggaga cctctgccag cactgccttt 240

ttgcagatct acaacctcaa aaatgaggac tcggcaacat atttctgtgc taggggcgt 300

tactacggcc atgactatgc tatggactac tggggtcaag gaacctcagt caccgtctcc 360

tca 363

<210> 296
<211> 323
<212> DNA
<213> Artificial Sequence

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

<400> 296
gacatccaga tgactcagtc tccagcctcc ctatctgcat ctgtgggaga aactgtcacc 60

atcacatgtc gagcaagtgg gaatcttcac aattatttag catggtatca gcagaaacag 120

ggaaaatctc ctcagctcct ggtctataat gcaaaaacct tagcagatgg tgtgccatca 180

aggttcagtg gcagtggatc aggaacacaa tattctctca agatcaacag cctgcagcct 240

gaagattttg ggacttattt ctgtcaacat ttttggagta ttcctcccac gttcgggggg 300

gggaccaagc tggaaataaa acg 323

<210> 297
<211> 357

<212> DNA
<213> Artificial Sequence

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

<400> 297
gaagtgaagc ttgaggagtc tggaggaggc ttggtgcaac ctgggggatc catgaaactc 60

tcctgtgttg cctctggatt cactttcagt aactattgga tgaactgggt ccgccagtct 120

ccagagaagg ggcttgagtg ggttgctgaa attagattga aatctaataa ttatgcaaca 180

cattatgcgg agtctgtgaa agggaggttc accatctcaa gagatgattc caaaagtagt 240

gtctacctgc aaatgaacaa cttaagagct gaagacactg gcatttatta ctgtaccaga 300

ctctgggact ttgctatgga ctactggggt caaggaacct cagtcaccgt ctcctca 357

<210> 298
<211> 319
<212> DNA
<213> Artificial Sequence

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

<400> 298
caaattgttc tcacccagtc tccagcaatc atgtctgcat ctccagggga gaaggtcacc 60

atatcctgca gtgccagctc aagtgtaagt tacatatact ggtaccagca gaagccagga 120

tcctccccca aaccctggat ttatcgcaca tccaacctgg cttctggagt ccctgctcgc 180

ttcagtggca gtgggtctgg gacctcttac tctctcacaa tcagcagcat ggaggctgaa 240

gatgctgcca cttattactg ccagcagtat catagttacc cgtggacgtt cggtggaggc 300

accaagctgg aaatcaaac 319

<210> 299
<211> 375
<212> DNA
<213> Artificial Sequence

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

<400> 299
caggttactc tgaaagagtc tggccctggg atattgcagc cctcccagac cctcagtctg 60

acttgttctt tctctgggtt ttcactgagc actttttggta tgggtgtagg ctggattcgt 120

cagccttcag ggaagggtct ggagtggctg gcacagattt ggtgggatga ttataagtac 180

tataacccag ccctgaagag tcggctcaca atctccaagg atacctccaa aaaccaggta 240

ttcctcaaga tcgccaatgt ggacactgca gatactgcca catactactg tgctcgaatc 300

ggatattact ccggtagtag ccgttgctgg tacttcgatg tctggggcac agggagcacg 360

gtcaccgtct cctca 375

<210> 300
<211> 323
<212> DNA
<213> Artificial Sequence

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

<400> 300
agtattgtga tgacccagac tcccaaattc ctgcttgtat cagcaggaga cagggttgcc 60

ataacctgca aggccagtca gagtgtgagt aatgatgtag cttggtacca acagaagcca 120

gggcagtctc ctacactgct gatatcctat gcatccaatc gctacactgg agtccctgat 180

cgcttcactg gcagtggata tgggacggat ttcactttca ccatcagcac tgtgcaggct 240

gaagacctgg cagtttattt ctgtcagcag ggttatagct ctccgttcac gttcggaggg 300

gggaccaagc tggaaataaa acg 323

<210> 301
<211> 350
<212> DNA
<213> Artificial Sequence

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

<400> 301
caggttcagc tgcaacagtc tgacgctgag ttggtgaaac ctggggcttc agtgaagata 60

tcctgcaagg ctgctggcta caccttcact gaccttacta ttcactgggt gaaacagagg 120

cctgaacagg gcctggagtg gattggatat atttatcctg gagatagtaa tactaagtac 180

aatgagaagt tcaagggcaa ggccacattg actgcagata aatcctccag cactgcctat 240

atgcagctca acagcctgac atctgaggat tctgtagtgt atttctgtgc aagaatgatt 300

actccttact actttgacta ctggggccaa ggcaccactc tcacagtctc 350

<210> 302
<211> 322
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 302
gacatccaga tgactcagtc tccagcctcc ctatctgcct ctgtgggaga aactgtcacc 60

atcgcatgtc gagcaagtgg gaatattcac aattatttaa catggtatca gcagagacag 120

ggaaaatctc ctcagctcct ggtctataat gcaaaaacct tagcagttgg tgtgccatca 180

aggttcagtg gcagtggctc aggaacacaa tattctctca agatcaacag cctgcagcct 240

gaagattttg ggagttatta ctgtcaacat ttttggaata ctcctccgac gttcggtgga 300

ggcaccaagc tggaaatcaa ac 322

<210> 303
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 303
gaagtgaagc ttgaggagtc tggaggaggc ttggtgcaac ctggaggatc catgaaactc 60

tcctgtgttg cctctggaat cattttcagt aactactgga tgaattgggt ccgccagtct 120

ccagagaagg ggcttgagtg ggttgctgaa attagattga aatctaataa ttattcaaca 180

cattatgcgg agtctgtgaa agggaggttc accatctcaa gagatgattc caaaagtagt 240

gtctacctgc aaatgaacaa cttaagagct gaagacactg gcatttatta ctgtaccagg 300

cactattact atgctatgga ctactggggt caaggaacct cagtcaccgt ctcctca 357

<210> 304
<211> 323
<212> DNA
<213> Artificial Sequence

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

<400> 304
gatatccaga tgacacagac tacatcctcc ctgtctgcct ctctgggaga cagagtcacc 60

atcagttgca gtgcaagtca gggcattagc aattatttaa actggtatca gcagaaacca 120

gatggaactg ttaaactcct gatctattac acatcaagtt tacactcagg agtcccatca 180

aagttcagtg gcagtgggtc tgggacagat tattctctca ccatcagcaa cctggaacct 240

gaagatatcg ccacttacta ttgtcagcag tatagtaagc ttccgtacac gttcggaggg 300

gggaccaagc tggaaataaa acg 323

<210> 305
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 305
gaggtgcagc tggtggagtc tgggggaggc ttagtgaagc ctggagggtc cctgaaactc 60

tcctgtgcag cctctggatt cactttcagt agctatggca tgtcttgggt tcgccagact 120

ccggagaaga ggctggagtg ggtcgcagcc attaatagta atggtggtag cacctactat 180

ccagacactg tgaagggccg actcaccatc tccagagaca atggcaagaa caccctgtac 240

ctgcaaatga gcagtctgag gtctgaggac acagccttgt attactgtgt aagggatgat 300

ggttactacg ttttctttgc ttactggggc caagggactc tggtcactgt ctctgca 357

<210> 306
<211> 322
<212> DNA
<213> Artificial Sequence

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

<400> 306
gacatccaga tgacacaatc ttcatcctac ttgtctgtat ctctaggagg cagagtcacc 60

attacttgca aggcaagtga ccacattaat aattggttag cctggtatca gcagaaacca 120

ggaaatgctc ctaggctctt aatatctggt gcaaccagtt tggaaactgg ggttccttca 180

agattcagtg gcagtggatc tggaaaggat tacactctca gcattaccag tcttcagact 240

gaagatgttg ctacttatta ctgtcaacag tattggagta ctcctcccac gttcggtgct 300

gggaccaagc tggagctgaa ac 322

<210> 307
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 307
caggtgcagc tgaagcagtc aggacctggc ctagtggcgc cctcacagag cctgtccatc 60

acatgcactg tctctgggtt ctcattaacc agctatggtg tagactgggt tcgccagtct 120

ccaggaaagg gtctggagtg gctgggagtg atatggggtg gtggaagcac aaattataat 180

tcagctctca aatccagact gagcatcacc aaggacaact ccaagagcca agttttctta 240

aaaatgaaca gtctgcaaac tgatgacaca gccatgtact actgtgccag tggagactac 300

gatggtagcc tctggtttgc ttactggggc caagggactc tggtcactgt ctctgca 357

<210> 308
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 308
gatattgtga taacccagga tgaactctcc aatcctgtca cttctggaga atcagtttcc 60

atctcctgca ggtctagtaa gagtctccta tataaggatg ggaagacata cttgaattgg 120

tttctgcaga gaccaggaca atctcctcag ctcctgatct atttgatgtc cacccgtgca 180

tcaggagtct cagaccggtt tagtggcagt gggtcaggaa cagatttcac cctggaaatc 240

agtagagtga aggctgagga tgtgggtgtg tattactgtc aacaacttgt agagtatcct 300

cggacgttcg gtggaggcac caagctggaa atcaaac 337

<210> 309
<211> 339
<212> DNA
<213> Artificial Sequence

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

<400> 309
gaggtgcagc tggtggagtc tgggggagac ttagtgaagc ctggagggtc cctgaaactc 60

tcctgtgtag cctctggatt cactttcagt agctatggca tgtcttgggt tcgccagact 120

ccagacaaga ggctggagtg ggtcgcaacc attagtagtg gtggtacttt cacctactat 180

ccagacagtg tgaaggggcg attcaccgtc tccagagaca atgccaagaa caccctgtac 240

ctgcaaatga gcagtctgaa gtctgaggac acagccatgt attactgttc aagacatggg 300

tggggctggg gccaagggac tctggtcact gtctctgca 339

<210> 310
<211> 322
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 310
gacatccaga tgactcagtc tccagcctcc ctatctgcat ctgtgggaga aactgtcacc 60

atcacatgtc gagcaagtgg gaatattcac aattatttag catggtatca gcagaaacag 120

ggaaaatctc ctcagctcct ggtctataat gcaaaagcct tagcagatgg tgtgccatca 180

aggttcagtg gcagtggatc aggaacacaa tattctctca agatcaacag cctgcagcct 240

gaagattttg ggagttatta ctgtcaacat ttttggagta ttcctccgac gttcggtgga 300

ggcaccaagc tggaaatcaa ac 322

<210> 311
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 311
gaagtgaagc ttgaggagtc tggaggaggc ttggtgcaac ctggaggatc catgaaactc 60

tcctgtgttg cctctggatt cactttcagt aactactgga tgaactgggt ccgccagtct 120

ccagagaagg ggcttgagtg ggttgctgaa attagattga aatctaataa ttatgcaaca 180

cattatgcgg agtctgtgaa agggaggttc accatctcaa gagatgattc caaaagtagt 240

gtctacctgc aaatgaacaa cttaagagtt gaagacactg ccatttatta ctgtaccagg 300

cactatgact atgctatgga ctactggggt caaggaacct cagtcaccgt ctcctca 357

<210> 312
<211> 322
<212> DNA
<213> Artificial Sequence

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

<400> 312
gacatccaga tgactcagtc tccagcctcc ctatctgcat ctgtgggaga aactgtcacc 60

atcacatgtc gagcaagtgg gaatattcac aattatttag catggtatca gcagaaacag 120

ggaaaatctc ctcagctcct ggtctataat gcaaaaacct tagcagatgg tgtgccatca 180

aggttcagtg gcagtggatc aggaacacaa tattctctca ggatcaacag cctgcagcct 240

gaagattttg ggagttatta ctgtcaacat ttttggagta ctcctccgac gttcggtgga 300

ggcaccaagg tggaaatcaa ac 322

<210> 313
<211> 357
<212> DNA
<213> Artificial Sequence

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

<400> 313
gaagtgaagc ttgaggagtc tggaggaggc ttggtacaac ctggaggatc catgaaactc 60

tcctgtgttg cctctggatt cactttcagt gactactgga tgaactgggt ccgccagtct 120

ccagagaagg ggcttgagtt ggttgctgaa attagattga tatctaataa ttatgcaaca 180

cattatgcgg agtctgtgaa agggaggttc accatctcaa gagatgattc caaaagtagt 240

gtctacctgc aaatgaacaa cttaagagct gaagacactg gcatttatta ctgtaccagg 300

cactattact atgctttgga ctactggggt caaggaacct cagtcaccgt ctcctca 357

<210> 314
<211> 341
<212> DNA
<213> Artificial Sequence

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

<400> 314
gacattgtga tgtcacagtc tccatcctcc ctaactgtgt cagttggaga gaaggttact 60

ttgagctgca agtccagtca gagcctttta tatagtacca atcaaaagat ctacttggcc 120

tggtaccagc agaaaccagg gcagtctcct aaactgctga tttactgggc atccactagg 180

gaatctgggg tccctgatcg cttcacaggc agtggatctg ggacagattt cactctcgcc 240

atcagcaatg tgaaggctga agacctggca gtttattact gtcagcaata ttatagctat 300

ccgtacacgt tcggaggggg gaccaagctg gaaataaaac g 341

<210> 315
<211> 339
<212> DNA
<213> Artificial Sequence

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

<400> 315
gaggttcagc tgcagcagtc tggggcagag cttgtgaagc caggggcctc agtcaagttg 60

tcctgcacag cttctggctt caacattaat gacacctatt accattggtt gaagcagagg 120

cctgaacagg gcctggagtg gattggaagg attgatcctg cgaatgttaa tactaaatat 180

gacccgaagt tccagggcaa ggccacttta acagcagaca catcctccaa cacagcctac 240

ctgcagctca gcagcctgac atctgaggac actgccgtct attactgtgg taggggaat 300

gcttactggg gccaagggac tctggtcact gtctctgca 339

<210> 316
<211> 313
<212> DNA
<213> Artificial Sequence

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

<400> 316
caaattgttc tcacccagtc tccagcaatc atgtctgcat ctctagggga ggagatcacc 60

ctaacctgca gtgccagttc gagtgtaagt tacatgcact ggtaccagca gaagtcaggc 120

acttctccca aactcttgat ttatagcaca tccaacctgg cttctggagt cccttctcgc 180

ttcagtggca gtgggtctgg gacctttat tctctcacaa tcagcagtgt ggaggctgaa 240

gatgctgccg attattactg ccatcagtgg agtagtttca cgttcggctc ggggacaaag 300

ttggaaataa aac 313

<210> 317
<211> 360
<212> DNA
<213> Artificial Sequence

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

<400> 317
gaggtccagc tgcaacagtc tggacctgag ctggtgaagc ctggggcttc agtgaagatg 60

tcctgtaagg cttctggata cacattcact gactcctaca tgaactgggt gaagcagagt 120

catggaaaga gccttgagtg gattggacgt gttaatccta acaatggtgg tgctagctac 180

aaccacaagt tcaagggcaa ggccacattg acagtagaca aatccctcag cacagcctac 240

atgcgcctca acagcctgac atctgaggac tctgcggtct attactgttc aagatctgga 300

gacctttatt actatgctat ggactactgg ggtcaaggaa cctcagtcac cgtctcctca 360

<210> 318
<211> 320
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 318
caaattgttc tcacccagtc tccagcaatc atgtctgcat ctccagggga gaaggtcacc 60

atgacctgca gtgccagctc aagtataagt tacatgcact ggtaccagca gaagtcaggc 120

acctccccca aaagatggat ttatgacaca tccaaactgg cttctggagt ccctgctcgc 180

ttcagtggca gtgggtctgg gacctcttac tctctcacaa tcagcaacat ggaggctgaa 240

gatgctgcca cttattactg ccagcagtgg agtagtaccc cacccacgtt cggaggggg 300

accaagctgg aaataaaacg 320

<210> 319
<211> 351
<212> DNA
<213> Artificial Sequence

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

<400> 319
gaggtccagt tgcaacagtc tggacctgag ctaatgaagc ctggggcttc agtgaagatg 60

tcctgcaagg cttctggata tatatttact gactacaaca tgcactgggt gaagcagaac 120

caaggaaaga gcctagagtg gataggagaa gttaatccta acactggtgg tattggctac 180

aatcagaaat tcaaaggcaa ggccacattg actgtagaca agtcctccag cacagcctac 240

atggacctcc gcagcctgac atctgaggac tctgcagtct attactgtgc aagagatggc 300

aattattgct ttgactactg gggccaaggc accactctca cagtctcctc a 351

<210> 320
<211> 334
<212> DNA
<213> Artificial Sequence

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

<400> 320
gatattgtga tgacgcaggc tgcattctcc aatccagtca ctcttggaac atcagcttcc 60

atctcctgca ggtctagtaa gagtctccta catagtaatg gcatcactta tttgtattgg 120

tatctgcaga agccaggcca gtctcctcag ctcctgattt atcagatgtc caaccttgcc 180

tcaggagtcc cagagaggtt cagtagcagt gggtcaggat ctgatttcac actgagaatc 240

agcagagtgg aggctgagga tgtgggtgtt tattactgtg ctcaaaatct agaacatccg 300

acgttcggtg gaggcaccaa gctggaaatc aaac 334

<210> 321
<211> 360
<212> DNA
<213> Artificial Sequence

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

<400> 321
gaggtgcagc tggtggagtc tgggggagac ttagtgaagc ctggagggtc cctgaaactc 60

tcctgtgcag cctctggatt cactttcagt aactatggca tgtcttgggt tcgccagact 120

ccagacaaga ggctggagtg ggtcgcaacc attagtactg gtggtactta cacctactat 180

ccagacagtg tgaaggggcg attcaccatc tccagagaca atgccaagaa caccctgtac 240

ctgcaaatga gcagtctgaa gtctgaggac acagccatgt attactgtgt aggacagtcc 300

tatagtgact acgtctcgtt tgcttattgg ggccaaggga ctcaggtcac tgtctctgca 360

<210> 322
<211> 338
<212> DNA
<213> Artificial Sequence

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

<400> 322
gatgttgtga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagccttgta cacagtaatg gaaacaccta tttacattgg 120

tacctgcaga agccaggcca gtctccaaag ctcctgatct ccaaagtttc caaccgattt 180

tctggggtcc cagacaggtt cagtggcagt ggatcaggga cagatttcac tctcaagatc 240

agcagagtgg aggctgaaga tctgggagtt tatttctgct ctcaaagtac acatgttcct 300

cccatgttcg gagggggggac caggctggaa ataaaacg 338

<210> 323
<211> 345
<212> DNA
<213> Artificial Sequence

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

<400> 323
gaggttcagc tgcagcagtc tggggctgag cttctgaagc caggggcctc agtcaagttg 60

tcctgcacag cttctggcct caacattaaa gactactata tacactgggt gtaccagagg 120

cctgaacagg gcctggagtg gattggaagg attgatcctg agagtgataa tactttatat 180

gacccgaagt tccagggcaa ggccagtata acagcagaca catcctccaa cacagcctac 240

ctgcagctca gcagcctgac atctgaggac actgccgtct attactgtac tactaatacc 300

ccttttgctt actggggcca agggactctg gtcactgtct ctaca 345

<210> 324
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 324
gatgttttga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagcattgta catagtaatg gaaacaccta tttagaatgg 120

tacctgcaga aaccaggcca gtctccaaag ctcctgatct acaaagtttc caaccgattt 180

tctggggtcc cagacaggtt cagtggcagt ggatcaggga cagatttcac actcaagatc 240

agtagagtgg aggctgagga tctgggagtt tattattgct ttcaaggttc acatgttcca 300

ttcacgttcg gctcggggac aaagttggaa ataaaac 337

<210> 325
<211> 360
<212> DNA
<213> Artificial Sequence

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

<400> 325
caggtccagt tgcaacagtc tggagctgaa ctggtaaggc ctgggacttc agtgaaggtg 60

tcctgcaaga cttctggata cgccttcact aattacttga tagagtgggt aaagcagagg 120

cctggacagg gccttgagtg gattggggtg attaatcctg gaagtggtgg tactaactac 180

aatgagaagt tcaaggtcaa ggcaacactg actgcagaca aatcctccag cactgcctac 240

atgcagctca ccagcctgac atctgatgac tctgcggtct atttctgtac aagaagggat 300

ggttacttct ttccctggtt tgcttactgg ggccaaggga ctctggtcac tgtctctgca 360

<210> 326
<211> 340
<212> DNA
<213> Artificial Sequence

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

polynucleotide"

<400> 326
gacattgtga tgtcacagtc tccatcctcc ctagctgtgt cagttggaga gaaggttact 60

atgagctgca agtccagtca gagcctttta tatagtagca atcaaaagaa ctacttggcc 120

tggtaccagc agaaaccagg gcagtctcct aaactgctga tttactgggc atccactagg 180

aaatctgggg tccctgatcg cttcacaggc agtggatctg ggacagattt cactctcacc 240

atcagcagtg tgaaggctga agacctggca gtttattact gtcatcaata ttatagctat 300

ccgctcacgt tcgctgctgg gaccaagctg gagctgaaac 340

<210> 327
<211> 345
<212> DNA
<213> Artificial Sequence

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

<400> 327
caggtgcaac tgcagcagcc tgggtctgtg ctggtgaggc ctggagcttc agtgaagctg 60

tcctgcaagg cttctggcta cacattcacc agctactgga tgcactgggt gaagcagagg 120

cctggacaag gccttgagtg gattggagag attcatccta ataatggtag tactaactac 180

aatgagaagt tcaagggcaa ggccacactg actgtagaca catcctccag cacagcctac 240

gtggatctca gcagcctgac atctgaggac tctgcggtct attactgtgc aagatggact 300

ttgtttactt actggggcca agggactctg gtcactgtct ctgca 345

<210> 328
<211> 337
<212> DNA
<213> Artificial Sequence

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

<400> 328
gatgttgtga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagccttgta cacagtaatg gaaacaccta tttactttgg 120

tacctgcaga agccaggcca gtctccaaag ctcctgatct acaaagtttc caaccgattt 180

tctggggtcc cagacaggtt cagtggcagt ggatcaggga cagatttcgc actcaagatc 240

agcagagtgg aggctgagga tctgggagtt tatttctgct ctcaaagtac acatgttccg 300

tggacgttcg gtggaggcac caagctggaa atcaaac 337

<210> 329
<211> 351
<212> DNA
<213> Artificial Sequence

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

<400> 329
gaggtgcagc tggtggagtc tgggggaggc ttagtgaagc ctggagggtc ccggaaactc 60

tcctgtgcag cctctggatt cactttcagt gactatggaa tgcactgggt ccgtcaggct 120

ccagagaagg ggctggagtg ggttgcatac attagtcgtg gcagtagtac catccactat 180

gcagacacag tgaagggccg attcaccatc tccagagaca atgccaagaa caccctgttc 240

ctgcaaatga ccagtctaag gtctgaggac acagccatgt attactgtgc aaggcctttc 300

aactggtact tcgatgtctg gggcgcaggg acaacggtca ccgtctcctc a 351

<210> 330
<211> 340
<212> DNA
<213> Artificial Sequence

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

<400> 330
gacattgtga tgtcacagtc tccatcctcc ctagctgtgt cagttggaga gaaggttact 60

atgacctgca agtccagtca gagcctttta tatagtagca atcaaaagaa ctacttggcc 120

tggtaccagc agaaaccagg gcagtctcct aaactactaa tttactgggc atccactagg 180

gaatctgggg tccctgatcg cttcataggc agtggctctg ggacagattt cactctcacc 240

atcagcagtg tgaaggctga agacctggca atttattact gtcagcaata ttatcgctat 300

ccgctcacgt tcggtgctgg gaccaaactg gagctgaaac 340

<210> 331
<211> 363
<212> DNA
<213> Artificial Sequence

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

<400> 331
caggtccaac tgcagcagcc tggggctgag cttgtgaagc ctggggcttc agtgatgctg 60

tcctgcaagg cttctggcta caccttcacc agctactggg tacactgggt gaagcagagg 120

cctggacaag gccttgagtg gattggagtg attaatccta gaaacggtcg taacaattac 180

aatgagaagt tcaagaccaa ggccacactg actgtagaca aatcatccag cacagcctac 240

atgcaactca gcagcccgac atctgaggac tctgcggtct attactgtgc acgagaggat 300

tacgacgggg gggactatgc tatggactac tggggtcaag gaacctcagt caccgtctcc 360

tca 363

<210> 332
<211> 322
<212> DNA
<213> Artificial Sequence

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

<400> 332
gatatccaga tgacacagac tacatcctcc ctgtcggcct ctctgggaga cagggtcacc 60

atcagttgca gtgcaagtca gggcattaac aattatttaa actggtatca gcagaaacca 120

gatggaactg ttacactcct gatctattac acatcaagtt tacactcagg agtcccatcc 180

aggttcagtg gcagtgggtc tgggacagat tattctctca ccatcagcaa cctggaacct 240

gaagatattg ccacttacta ttgtcagcag tatagtaagc ttccgtggac gttcggtgga 300

ggcaccaagc tggaaatcaa ac 322

<210> 333
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 333
gaggtcgagc tgcaacagtc tggacctgag ctggtgaagc cgggggcttc agtgaagata 60

tcctgcaaga cttccggaaa cacatacact gaatacacca tgcagtgggt gaagctgagc 120

catggaaaga gccttgagtg gattggaggt attaatccta acaatggtat tactagttac 180

aaccagaagt tcaagggcaa ggccacattg actgtagaca agtcctccag cacagcctac 240

atggagctcc gcagcctgaa atctgaggat tctgcagtct attactgtgc aagagcggga 300

cttggtaact acgtttgggc tatggactac tggggtcaag gagcctcagt caccgtctcc 360

tca 363

<210> 334
<211> 337
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 334
gatgttgtga tgacccaaac tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagccttgta cacaataatg gaaacaccta tttacattgg 120

tacctgcaga agccaggcca gtctccaaac ctcctgatct acaaagtttc caaccgattt 180

tctggggtcc cagacaggtt cagtggcagt ggatcaggga cagatttcac actcaagatc 240

agcatagtgg aggctgagga tctgggactt tatttctgct ctcaaagtac acatgttcct 300

cggacgttcg gtggaggcac caagctggaa atcaaac 337

<210> 335
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 335
caggtccagc ttccgcagtc tggggctgaa ctggcaaaac ctggggcctc agtgaaaatc 60

tcctgcaagg cttctggctt cacctttact tcctactgga tgcactgggt aaaacagagg 120

cctggacagg gtctggaatg gattggatac attaatccta gcactgatta tactgagtac 180

aatcagaagt tcaaggacaa ggccacattg actgcagaca aatcctccag cacagcctac 240

atgcaactgg gcagcctgac atctgaggac tctgcagtct attactgtgc aagatcttcc 300

tacggtagta gccccctttga ttattggggc caaggctcca ctctcacagt ctcctca 357

<210> 336
<211> 340
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 336
gacattgtga tgtcacagtc tccatcctcc ctagctgtgt ctgttggaga gaaggttact 60

atgaactgcg agtccagtca gagcctttta tatagtagca atcaaaagaa ctacttggcc 120

tggtaccagc agaaaccagg gcagtctcct aaactgctga tttactgggc atccactagg 180

gattctgggg tccctgatcg cttcacaggc agtggatctg ggacagattt cactctcacc 240

atcagcagtg tgagggctga agacccggca gtttattact gtcagcaata ttatagctat 300

ccgctcacgt tcggtgctgg gaccaagctg gagctgagac 340

<210> 337
<211> 348
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 337
gaagtgaagc ttgaggagtc tggaggaggc ttggtgcaac ctggaggatc catgaaactc 60

tcttgcgctg cctctggatt cacttttagt gacgcctgga tggactgggt ccgccagtct 120

ccagagaagg ggcttgagtg ggttgctgaa ataagaagca aagctaataa tcatgcaaca 180

tactatgctg agtctgtgaa agggaggttc accatctcaa gagatgattc caaaagtagt 240

gcctacctgc aaatgaacag cttaagagct gaagacactg gcatttatta ttgtgtttca 300

acagggactt cttactgggg ccaagggact ctggtcactg tctctgca 348

<210> 338
<211> 319
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 338
caaattgttc tcacccagtc tccagcaatc atgtctgcat ctccagggga gaaggtcacc 60

atgacctgca gtgccagctc aagtgtaagt tacatgcact ggtaccagca gaagtcaggc 120

acctccccca aaagatggat ttatgacaca tccaaactgg cttctggagt ccctcctcgc 180

ttcagtggcc gtgggtctgg gacctcttac tctctcacaa tcagcagcat ggaggctgaa 240

gatgctgcca cttattactg ccagcattgg agtagtaacc cacccacgtt cggtgctggg 300

accaagctgg agatgaaac 319

<210> 339
<211> 348
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 339
gaggtccagc tgcaacagtc tggacctgag ctaatgaagc ctggggcttc agtgaagatg 60

tcctgcaagg cttctggaga cacattcact gactacaaca tacactgggt gaagcagaac 120

caaggaaaga gcctagagtg gataggagaa gttaatccta acattggtgg tattggctat 180

aaccagaagt tcaaaggcaa ggccacattg actgtagaca agtcctccag cacagcctac 240

atggagctcc gcagcctgac atctgaggac tctgcagtct attactgtgc aatggggagg 300

tggtacttcg atgtctgggg cgcagggacc acggtcaccg tctcctca 348

<210> 340
<211> 337
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 340
gatattgtga tgacccagtc tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagccttgta cacagtaatg gaaacaccta tttacattgg 120

tacctgcaga agccaggcca gtctccaaag ctcctgatct acagagtttc caaccgattt 180

tctggggtcc cagacaggtt cagtggcagt ggatcaggga cagatttcac actcacgatc 240

agcagagtgg aggctgagga tctgggagtt tatttctgct ctcaaagtac acatcttcct 300

cggacgttcg gtggaggcac caagctggag atcaaac 337

<210> 341
<211> 345
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 341
gaggtccagc tgcagcagtc tggacctgag atggtgaagc ctggggcttc agtgaagata 60

tcctgcaagg cttctggata cacattcact gactactaca tgcactgggt gaaacagagc 120

catggaaaga gccttgagtg gattggacgt gttaatacta acaatggtgg aactagctac 180

gaccagaagt tcgagggcaa ggccacattg actgttgaca aatcttccag cacagcctac 240

atggagctca acagcctgac atctgaggac tctgcggtct attactgtgt aatccctgcc 300

tggtttgctt actggggcca agggactctg gtcactgtct ctgca 345

<210> 342
<211> 337
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 342
gatattgtga tgacccagtc tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagccttgta cacagtaatg gaaacaccta tttacattgg 120

tacctgcaga agccaggcca gtctccaaag ctcctgatct acagagtttc caaccgattt 180

tctggggtcc cagacaggtt cagtggcagt ggatcaggga cagatttcac actcacgatc 240

agcagagtgg aggctgagga tctgggagtt tatttctgct ctcaaagtac acatcttcct 300

cggacgttcg gtggaggcac caagctggag atcaaac 337

<210> 343
<211> 342
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 343
caggtgcaac tgcagcagtc tgggtctgtg ctggtgaggc ctggagcttc agtgaagctg 60

tcctgcaagg cttctggcta cacattcacc agctactgga tgcactgggt gaagcagagg 120

cctggacaag gccttgagtg gattggagag attcatccta atagtgggaa tactaattac 180

aatgagaagt tcaagggcaa ggccacactg actgtagaca catcctccag cacagcctac 240

gtggatctca gcagcctgac atctgaggac tctgcggtct attattgtgc aggtggtaac 300

tacgactact ggggccaagg caccactctc acagtctcct ca 342

<210> 344
<211> 335
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 344
gacattgtgc tgacccaatc tccagcttct ttggctgtat ctctagggca gagggccacc 60

atatcctgca gagccagtga aagtgttgat agttatggca atagttttat gcactggtac 120

cagcagaaac caggacagcc acccaaagtc ctcatctatc gtgcatccaa cctagaatct 180

gggatccctg ccaggttcag tggcagtggg tctaggacag acttcaccct caccattaat 240

cctgtggagg atgaagatgt tgcaacctat tactgtcagc aaagtaatga ggatccgtac 300

acgttcgggg gggggaccaa gctggaaata aaacg 335

<210> 345
<211> 351
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 345
gaggttcagc tcgagcagtc tgggactgtg ctggcaaggc ctggggcttc agtgaagatg 60

tcctgcaagg cttctggcta cacctttacc agctactgga tgcactgggt gaaacagagg 120

cctggacagg gtctggaatg gattggcgct ttttatcctg gaaacagtgg tacttattac 180

aaccaaaaat tcaaggacaa ggccaaactg actgcagtca catctgccag cactgcctac 240

atggagctca gcagcctgac aaatgaggac tctgcggtct attactgttc aagatcaggg 300

tcaggaaggt ttgcttactg gggccaaggg actctggtca ctgtctctgc a 351

<210> 346
<211> 319
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 346
caaattgttc tcacccagtc tccagcaatc atgtctgcat ctccagggga gaaggtcacc 60

atgacctgca gtgccagctc aagtgtgagt tacatgcact ggtaccagca gaagtcaggc 120

acctccccca aaagatggat ttatgacaca tccaaactgg cttctggagt ccctgctcgc 180

ttcagtggca gtgggtctgg gacctcttac tctctcacaa tcagcagcat ggagactgaa 240

gatgctgcca cttattactg ccagcagtgg agtaataccc cacccacgtt cggctcggtg 300

acaaagttgg aaataaaac 319

<210> 347
<211> 348
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 347
gaggtccagc tgcaacagtc tggacctgag ctaatgaagc ctggggcttc agtgaagatg 60

tcctgcaagg cttctggata cacattcact gaccacaaca tacactgggt gaaacagcac 120

caaggaaaga gcctagagtg gataggagaa attaatccta acactggtgg tactggctac 180

aaccagaagt tccaaggcaa ggccacaatg actgtagaca agtcctccag cacagcctac 240

atggaactcc gcagcctgac atctgaggac tctgcagtct attactgtgt tagaggactg 300

tacttctttg actactgggg ccaaggcacc actctcacag tctcctca 348

<210> 348
<211> 337
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 348
gatattgtga taacccagga tgatctctcc aatcctgtca cttctggaga atcagtttcc 60

atctcctgca ggtctagtaa gagtctccta tataaggatg ggaagacata cttgaattgg 120

tttctgcaga gaccaggaca atctcctcag ctcctgatct atttgatgtc cacccgtgca 180

tcaggagtct cagaccggtt tagtggcagt gggtcaggaa cagatttcac cctggaaatc 240

agtagagtga aggctgagga tgtgggtgtg tattactgtc aacaacttgt agagtatcct 300

cggacgttcg gtggaggcac caagctggaa atcaaac 337

<210> 349
<211> 339
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 349
gaggtgcacc tggtggagtc tgggggagac ttagtgaagc ctggagggtc cctgaaactc 60

tcctgtgcag cctctggatt cactttcagt agctatggca tgtcttgggt tcgccagact 120

ccagacaaga ggctggagtg ggtcgcaacc attagtagtg gtggtactta cacctactat 180

ccagacagtg tgaaggggcg attcaccatc tccagagaca atgccaagaa caccctgtat 240

ctgcaaatga gcagtctgaa gtctgaggac acagccatgt attactgttc aagacatggg 300

tggggctggg gccaagggac tctggtcact gtctctgca 339

<210> 350
<211> 319
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 350
caaattgttc tcacccagtc tccagcaatc atgtctgcat ctccagggga gaaggtcacc 60

atgacctgca gtgccagctc aagtgttagt tacatgcact ggtaccagca gaagtcaggc 120

acctccccca aaagatggat ttatgacaca tccaaactgg cttctggagt ccctgctcgc 180

ttcagtggca gtgggtctgg gacctcttac tctctcacaa tcagcagcat ggaggctgaa 240

gatgctgcca cttattactg ccagcagtgg agtagtaccc cacccacgtt cggctcgggg 300

acaaagttgg aaataaaac 319

<210> 351
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 351
gaggtccagc tgcaacagtc tggacctgag ctaatgaagc ctggggcttc agtgaagatg 60

tcctgcaagg cttctggata cacattcact gactacaaca tgcactgggt gaagcagaac 120

caaggaaaga gcctagagtg gataggagaa attaatccca acactggtgg tactggctac 180

aaccagaagt tcaaaggcaa ggccacattg actgtagaca agttttccag cacagccttc 240

attgagctcc gcagcctgac atctgaggac tctgcaatct attactgtac aagaggggt 300

tacgaccact attggtactt cgatgtctgg ggcgcaggga ccacggtcac cgtctcctca 360

<210> 352
<211> 335
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 352
gacattgtgc tgacccaatt tccagcttct ttggctgtgt ctctagggca gagggccacc 60

ataccctgca gagccagtga aagtgttgat agttatggca atagttttat gcactggttc 120

cagcagaaac caggacagcc acccaaactc ctcatctatc gtgcatccaa cctagaatct 180

gagatccctg ccaggttcag tggcagtggg tctgggacag acttcaccct caccattaat 240

cctgtggagg ctgatgatgt tgcaacctat tactgtcagc aaagtcatga ggatccgtac 300

acgttcggag gggggaccaa gatggaaata aaacg 335

<210> 353
<211> 351
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 353
gaggttcagc tgcagcagtc tgggactgtg ctggcaaggc ctggggcttc agtgaagatg 60

tcctgcaagg cttctggcta tacctttacc agctactgga tgcactgggt aaaacagagg 120

cctggacagg gtctggaatg gattggcgct atttatcctg gaaagaatga tactacctac 180

aaccagaagt tcaagggcaa ggccaaactg actgcagtca catctgccag cactttatac 240

atggagctca gcagcctgac aaatgaggac tctgcggtct attactgtac aagatctgga 300

aagggttact ttgcttactg gggccaaggg actctggtca ctgtctctgc a 351

<210> 354
<211> 337
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 354
gatgttgtga tgacccagtc tccactctcc ctgcctgtca gtcttggaga tcaagcctcc 60

atctcttgca gatctagtca gagcattgta catagtaatg gaaacaccta tttagaatgg 120

tacctgcaga aaccaggcca gtctccaaag ctcctgatct acaaagtttc caaccgattt 180

tctggggtcc cagacaggtt cagtggcagt ggatcaggga cagatttcac actcaagatc 240

agcagagtgg aggctgagga tctgggagtt tattactgct ttcaaggttc acatgttcct 300

ccgacgttcg gtggaggcac caaactggaa atcaaac 337

<210> 355
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 355
caggttactc tgaaagagtc tggccctggg atattgcagc cctcccagac cctcagtctg 60

acttgttctt tctctgggtt ttcactgagc acttctggta tgggtgtgag ctggattcgt 120

aagacttcag gaaagggtct ggaatggctg gcacacattt tctgggatga tgacaagtgg 180

tataatccat ccctgaagag ccggctcaca atctccaagg ctacctccag caaccaggta 240

ttcctcatac tcaccagtgt ggatactgcc gatactgcca catactactg tgctaccttc 300

tatggtctct actttgccta ctggggccaa ggcaccactc tcacagtctc ctca 354

<210> 356
<211> 340
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 356
gacattgtga tgtcacagtc tccatcctcc ctagctgtgt ctgttggaga gaaggttact 60

atgaactgcg agtccagtca gagcctttta tataatagca atcaaaagaa ctacttggcc 120

tggtaccagc agaaaccagg gcagtctcct aaactgctga tttactgggc atccactagg 180

gattctgggg tccctgatcg cttcacaggc agtggatctg ggacagattt cactctcacc 240

atcagcagtg tgagggctga tgacccggca gtttattact gtcagcaata ttttaactat 300

ccgctcacgt tcggtgctgg gaccaagctg gagctgaaac 340

<210> 357
<211> 348
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 357
gaagtgaagc ttgaggagtc tggaggaggc ttggtgcaac ctggaggatc catgaaactc 60

tcttgcgctg cctctggatt cacttttagt gacgcctgga tggactgggt ccgccagtct 120

ccagagaagg ggcttgagtg ggttgctgaa ataagaagca aacctaataa tcatgcaaca 180

tactatgctg agtctgtgaa agggaggttc accatctcaa gagatgattc caaaagtagt 240

gcctacctgc aaatgaacag cttaagagct gaagacactg gcatttatta ctgtgtttca 300

acagggactt cttactgggg ccaagggact ctggtcactg tctctgca 348

<210> 358
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 358
caaattgttc tcacccagtc tccagcaatc atgtctgcat ctccagggga gaaggtcacc 60

atgacctgca gtgccagctc aagtataagt tacatgcact ggtaccagca gaagtcaggc 120

acctccccca aaagatggat ttatgacaca tccaaactgg cttctggagt ccctgctcgc 180

ttcagtggca gtgggtctgg gacctcttac tctctcacaa tcagcaacat ggaggctgaa 240

gatgctgcca cttattactg ccagcagtgg agtagtaccc cacccacgtt cggaggggg 300

accaagctgg aaataaaacg g 321

<210> 359
<211> 351
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 359
gaggtccagt tgcaacagtc tggacctgag ctaatgaagc ctggggcttc agtgaagatg 60

tcctgcaagg cttctggata tatatttact gactacaaca tgcactgggt gaagcagaac 120

caaggaaaga gcctagagtg gataggagaa gttaatccta acactggtgg tattggctac 180

aatcagaaat tcaaaggcaa ggccacattg actgtagaca agtcctccag cacagcctac 240

atggacctcc gcagcctgac atctgaggac tctgcagtct attactgtgc aagagatggc 300

aattattgct ttgactactg gggccaaggc accactctca cagtctcctc a 351

<210> 360
<211> 322
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 360
gacatcaaga tgacccagtc tccatcttcc atgtatgcat ctctaggaga gagagtcact 60

ctcacttgca aggcgagtca ggacattaat agctatttaa gctggttcca gcagaaacca 120

gggaaatctc ctgagaccct gatctatcgt gcaaacagat tgatagatgg ggtcccatca 180

aggttcagtg gcagtggatc tgggcaagat tattctctca ccatcagcag cctggagtat 240

gaagatatgg ggatttatta ttgtctacag tatgatgagt ttcctccgac gttcggtgga 300

ggcaccaagc tggaaatcaa ac 322

<210> 361
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 361
gaggtccacc tacaacagtc tggacctgaa ctggtgaacc ctgggtcttc agtgaagata 60

tcctgcaagg ctgctggata cacattcact gactacaaca tggactgggt gaagcagagc 120

catggaaaga gacttgagtg gattggaaat atttatccta acaatggtgg tgctggatac 180

aaccagaact tcaaggacaa ggccacattg actgtagaca agtcctccag cacagcctac 240

atggagctcc gcagcctgac atctgaggac tctgcagtct attactgtgc aagatccatt 300

actgcggctt ggtttgctta ctggggccaa gggactctgg tcactgtctc tgca 354

<210> 362
<211> 319
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 362
caaattgttc tcacccagtc tccagcaatc atgtctgcat ctccagggga gaaggtcacc 60

atgacctgca gtgccagctc aagtgtaagt tacatgcact ggtaccagca gaagtcaggc 120

acctccccca aaagatggat ttatgacaca tccaaactgg cttctggagt ccctgctcgc 180

ttcactggca gtgggtctgg gacctcttac tctctcacaa tcagcagcat ggaggctgaa 240

gatgctgcca cttattactg ccagcagtgg agtagtagcc cacccacgtt cggtgctggg 300

accaagctgg aactgaaac 319

<210> 363
<211> 360
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 363
gaggtccagc tgcaacagtc tggacctgag ctaatgaagc ctggggcttc agtgaagatg 60

tcctgcaagg cttctggata cacattcact gactacaaca tgcactgggt gaagcagaac 120

caaggaaaga gcctagagtg gataggagaa attaatccta acactggtgg tactggctac 180

aaccagaagt tcaaagacaa ggccacattg actgtagaca agtcctccag cacagcctac 240

atggagctcc gcagcctgac atctgaggac tctgcagtct attactgtgc aagaattccc 300

tccctgagac gatactactt tgactactgg ggccaaggca ccactctcac agtctcctca 360

<210> 364
<211> 335
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 364
gaccttgtgc tgacacagtc tcctgcttcc ttagctgtat ctctggggca gagggccacc 60

atctcatgca gggccagcga aagtgtcagt acatctggct atagttatat gcactggtac 120

caacagaaac caggacagcc acccaaactc ctcatctatc ttgcatccaa cctcgaatct 180

ggggtccctg ccaggttcag tggcagtggg tctgggacag acttcaccct caacatccat 240

cctgtggagg aggaggatgc tacaacctat tactgtcagc acagtaggga gcttccgtac 300

acgttcggag gggggaccaa gctggaaata aaacg 335

<210> 365
<211> 366
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 365
caggttactc tgaaagagtc tggccctggg atattgcagc cctcccagac cctcagtctg 60

acttgttctt tctctgggtt ttcactgatc acttatggta taggagtagg ctggattcgt 120

cagccttcag ggaagggtct ggagtggctg gcacacattt ggtggaatga taataagtac 180

tataacacag ccctgaagag ccggctcaca atctccaagg atacctccaa caaccaggta 240

ttcctcaaga tcgccaatgt ggacactgca gatactgcca catactactg tgctcgaatg 300

gtctactatg attacgacgg ggggtttgct tactggggcc aagggactct ggtcactgtc 360

tctgca 366

<210> 366
<211> 335

<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 366
gacattgtgc tgacccaatc tccagcttct ttggctgtgt ctctagggca gagggccacc 60

atatcctgca gagccagtga aagtgttgat agttatggca atagttttat gcactggtac 120

cagcagaaac caggacagcc acccaaaccc ctcatttatc gtgcatccaa cctagaatct 180

gggatccctg ccagattcag tggcagtggg tctaggacag acttcaccct caccattaat 240

cctgtggagg ctgatgatgt tgcaacctat tactgtcagc aaagtaatga ggatccgtac 300

acgttcggag gggggaccaa gctggaaata aaacg 335

<210> 367
<211> 350
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 367
gaggtgcagc tgcagcagtc tgggactgtg ctggcaaggc ctggggcttc agtaaggatg 60

tcctgcaagg cttctggcta cacctttacc agctactgga tgcactgggt aaaacaaagg 120

cctggacagg gtctggaatg gattggcgct atttatcctg gaaatagtga tactagctac 180

aaccataagt tcaagggcaa ggccaaactg actgcagtca catctgccag cactgcctac 240

atggagctca gcagcctgac aaatgaggac tctgcggtct attactgtac aagatctggg 300

acgggctggt ttgcttactg gggccaaggg actctggtca ctgtctctgc 350

<210> 368
<211> 334
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 368
gacattgtgc tgacccaatc tccagcttct ttggctgtgt ctctaggaca gagagccact 60

atcttctgca gagccagcca gagtgtcgat tataatggaa ttagttatat gcactggttc 120

caacaaaaac caggacagcc acccaaactc ctcatctatg ctgcatccaa cgttcaatct 180

gggatccctg ccaggttcag tggcagtggg tctgggacag acttcaccct caacatccat 240

cctgtggagg aggaagatgc tgcaaccttt tactgtcagc aaagtattga ggatcctccg 300

acgttcggtg gaggcaccaa gctggaaatc aaac 334

<210> 369
<211> 345
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 369
caggtccagc tgcagcagtc tggacctgag ctggtgaaac ctggggcctc agtgaagatt 60

tcctgcaaag cttctggcta cgcattcagt agttcttgga ttaactgggt gaagcagagg 120

cctggacagg gtcttgagtg gattggacgg atttatcctg gagaaggtga tactaactac 180

agtgggaatt tcgagggcaa ggccacactg actgcagaca aatcctccac cacagcctac 240

atgcagctca gcagtctgac ctctgtggac tctgcggtct atttctgtac aagaggacta 300

gtcatggact actggggcca aggcaccgct ctcacagtct cctca 345

<210> 370
<211> 322
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 370
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60

atcacttgcc gggcaagtgc gaacattaac agcaatttag tttggtatca gcagaaacca 120

gggaaagccc ctaagctcct gatctatgct gcaaccaatt tggcagatgg ggtcccatca 180

aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240

gaagattttg caacttacta ctgtcaacat ttttggggta ctcctcggac gttcggtgga 300

ggcaccaagc tggaaatcaa ac 322

<210> 371
<211> 349
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 371
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60

tcctgcaagg cttctggata caccttcacc gactacaata tgtactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggagag atcaacccta acaatggtgg cacagcctat 180

aatcagaagt ttaggggcaa ggtcaccatg accagggaca cgtccatcag cacagcctac 240

atggagctga gcaggctgag atctgacgac acggccgtgt attactgtgc gagatatgat 300

aaggggtttg actactgggg ccaaggcacc actgtcacag tctcctcag 349

<210> 372
<211> 319
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 372
gaaattgtgt tgacacagtc tccagccacc ctgtctttgt ctccagggga aagagccacc 60

ctctcctgca gtgccagtag cagtgttagc tacatgcatt ggtaccaaca gaaacctggc 120

caggctccca ggctcctcat ctatgataca tccaaattgc ccagtggcat cccagccagg 180

ttcagtggca gtgggtctgg gacagacttc actctcacca tcagcagcct agagcctgaa 240

gattttgcag tttattactg tcagcagtgg agtagtaccc cacccacgtt cggtcagggg 300

accaagctgg agattaaac 319

<210> 373
<211> 361
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 373
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60

tcctgcaagg cttctggata caccttcacc gactacaata tgcactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggagag atcaacccta acattggtgg cacaggctat 180

aaccagaagt ttaagggcag ggtcaccatg accagggaca cgtccatcag cacagcctac 240

atggagctga gcaggctgag atctgacgac acggccgtgt attactgtgc gagaacctat 300

agttactata gttacgagtt tgcttactgg ggccaaggga ctctggtcac tgtctcttca 360

g 361

<210> 374
<211> 337
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 374
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60

atcaactgca agtccagcca gagtcttctc tacagctcca accagaagag ctacttagct 120

tggtaccagc agaaaccagg acagcctcct aagctgctca tttactgggc atctacccgg 180

gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240

atcagcagcc tgcaggctga agatgtggca gtttattact gtaagcaatc ttataatctt 300

cggacgttcg gtggaggcac caaggtggaa atcaaac 337

<210> 375
<211> 352
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 375
gaagtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggccac cgtgaagata 60

tcctgcaagg tgtctggata caccttcaca gaccacacta tacactgggt gcgacaggcc 120

cctggaaagg ggcttgagtg gatgggatac atctaccctc gtgatggtag cacaaaatac 180

aacgaggagt tcaaaggcag agtcaccatc accgccgaca cgtccacgga cacagcctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagatcatat 300

agtaactact ttgactactg gggccaaggc accactgtca cagtctcctc ag 352

<210> 376
<211> 322
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 376
gaaattgtgc tgactcagtc tccagacttt cagtctgtga ctccaaagga gaaagtcacc 60

atcacctgcc gggccagtca gagcattggt actagcatac actggtacca gcagaaacca 120

gatcagtctc caaagctcct catcaagtat gcttccgagt ccatctcagg ggtcccctcg 180

aggttcagtg gcagtggatc tgggacagat ttcaccctca ccatcaatag cctggaagct 240

gaagatgctg caacgtatta ctgtcagcaa agtaatagct ggccactcac gttcggtcaa 300

gggaccaagc tggagataaa ac 322

<210> 377
<211> 352
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 377
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60

tcctgcaagg cttctggata caccttcacc agaagctata tccactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggatac atcagcagtg gcagtggtgg cacaacctat 180

aaccagaagt ttaagggcag ggtcaccagt accagggaca cgtccatcag cacagcctac 240

atggagctga gcaggctgag atctgacgac acggccgtgt attactgtgc gagaggggg 300

gtacggtact tcgatgtctg gggccaaggg accacggtca ccgtctcctc ag 352

<210> 378
<211> 322
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 378
gacatccaga tgacccagtc tccatcctca ctgtctgcat ctgtaggaga cagagtcacc 60

atcacttgta aggcgagtca ggacattaat agttatttat cctggtttca gcagaaacca 120

gggaaagccc ctaagtccct gatctataga gcaaacagat tggtagatgg ggtcccatca 180

aggttcagcg gcagtggatc tgggacagat tacactctca ccatcagcag cctgcagcct 240

gaagattttg caacttatta ctgcctacag tatgatgagt ttcctccgac gttcggtcag 300

ggcaccaagc tggaaatcaa ac 322

<210> 379
<211> 355
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic

polynucleotide"

<400> 379
caggtccagc ttgtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtt 60

tcctgcaagg cttctggata caccttcact gactataata tggattgggt gcgccaggcc 120

cccggacaaa ggcttgagtg gattggatac atctaccctg acaatggtgg cgcaggatat 180

aatcagaagt tcaagggcag agtcaccatt accgtggaca catccgcgag cacagcctac 240

atggagctga gcagcctgag atctgaagac acggctgtgt attactgttc aagatccatt 300

actacggctt ggtttgctta ctggggccaa gggactctgg tcactgtctc ttcag 355

<210> 380
<211> 322
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 380
gccatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60

atcacttgca aggcaagtca gagcgttaat aatgatgtag cctggtatca gcagaaacca 120

gggaaagccc ctaagctcct gatctattat gcatccaatc gatatactgg ggtcccatca 180

aggttcagcg gcagtggatc tggcacagat ttcactctca ccatcagcag cctgcagcct 240

gaagattttg caacttattt ctgtcagcag gattatagct ctcctcggac gttcggtcag 300

gggaccaagc tggaaataaa gc 322

<210> 381
<211> 364
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 381
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60

tcctgcaagg cttctggata caccttcacc agctactgga tcaactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gattggaaac atcttccctg acactactac cacaaactat 180

aacgagaagt ttaagggcag ggtcaccctg accagggaca cgtccatcag cacagcctac 240

atggagctga gcaggctgag atctgacgac acggccgtgt attactgtgc gagagagtac 300

tacgatggta cctacgatgc tatggattac tggggtcaag gaaccctagt caccgtctcc 360

tcag 364

<210> 382
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 382
gagatcgtgc tgacccagag ccctgctaca ctgtccctgt cccctggaga gagggccaca 60

ctctcctgca gggcttccga gtccgtggat tcctacggca actccttcat gcactggtac 120

cagcagaaac ccggccaggc ccctaggctg ctgatctaca gggcctccaa cctggagtcc 180

ggcatccctg ctaggttctc cggatccggc tccggcaccg actttaccct gaccatctcc 240

tccctggagc ccgaggactt cgccgtgtac tactgccagc agtcccacga ggacccctac 300

accttcggcc agggcaccaa gctggagatc aagagg 336

<210> 383
<211> 351
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 383
caggtccagc tggtgcagag cggcgctgag gtgaagaagc ctggcgccag cgtgaaggtg 60

tcctgcaaag ccagcggcta caccttcacc tcctactgga tgcattgggt gaggcaggct 120

cctggccaag gactggagtg gatgggcgcc atctaccccg gcaagtccga caccacctac 180

aaccagaagt tcaagggcag ggtgaccatg acacgggaca cctccacctc caccgtgtac 240

atggagctgt cctccctgag gtccgaggac accgccgtgt actactgcgc caggtccggc 300

aagggctatt tcgcctactg gggccagggc acactggtga ccgtgtcctc c 351

<210> 384
<211> 340
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 384
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60

atcaactgca agtccagcca gagtttatta tacagctcca accaaaagaa ctacttagct 120

tggtaccagc agaaaccagg acagcctcct aagctgctca tttactgggc atctacccgg 180

aaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240

atcagcagcc tgcaggctga agatgtggca gtttattact gtcatcaata ttatagctat 300

ccgctcacgt tcggtcaagg caccaagctg gaaatcaaac 340

<210> 385
<211> 341
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 385
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtt 60

tcctgcaagg catctggata caccttcaac agctactgga tgcactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggagaa atccacccta ataatggtag cacaaactac 180

aacgagaagt tcaagggcag agtcaccatg accagggaca cgtccacgag cacagtctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagatggact 300

ttgtttactt actggggcca agggactctg gtcactgtct c 341

<210> 386
<211> 339
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 386
gacatcgtga tgacccagac ccctctgtcc ctgcctgtga cccctggaga acccgccagc 60

atctcctgca ggtcctccca gtccatcgtg cactccaacg gcaacaccta cctggagtgg 120

tacctgcaga agcccggaca gtccccccag ctgctgatct acaaggtgtc caataggttt 180

tccggagtgc ccgacaggtt ctccggatcc ggatccggca ccgacttcac cctgaagatc 240

tccagggtgg aggccgagga cgtgggagtg tactactgct tccagggcag ccacgtgccc 300

cctacattcg gaggcggcac caagctggag atcaagagg 339

<210> 387
<211> 354
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 387
caggtcaccc tgaaggagtc cggccccgtg ctggtgaaac ccaccgagac cctcaccctg 60

acctgcaccg tctccggctt ctccctgtcc acctccggca tgggagtgtc ctggatcagg 120

cagccccctg gaaaggctct ggagtggctg gcccacatct tctgggacga cgacaagtgg 180

tacaacccct ccctgaagtc caggctgacc atctccaagg acacctccaa gtcccaggtg 240

gtgctgacca tgaccaacat ggaccccgtg gacaccgcca cctactactg cgctaccttc 300

tacggcctgt acttcgccta ctggggccag ggaaccctgg tgaccgtgtc ctcc 354

<210> 388
<211> 342
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 388
gacatcgtga tgacccagtc ccccgattcc ctggctgtga gcctgggaga gagggccacc 60

atcaactgcg agtcctccca gtccctgctg tacaactcca accagaagaa ctacctggcc 120

tggtaccagc agaagcccgg acagcccccc aagctgctga tctactgggc ttccacaagg 180

gagtccggag tgcccgatcg gttcagcgga tccggatccg gcaccgactt caccctcacc 240

atcagctccc tgcaagccga ggacgtggcc gtgtactact gccagcagta cttcaactac 300

cctctgacct tcggccaggg caccaagctg gagatcaaga gg 342

<210> 389
<211> 348
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 389
caggtgcagc tggtccagtc cggagctgag gtgaagaagc ccggcgcctc cgtgaaggtg 60

tcctgcaagg ccagcggctt caccttctcc gatgcctgga tggactgggt gaggcaggct 120

cctggccaaa ggctggagtg gatgggcgag atcaggtcca agcccaacaa ccacgccacc 180

tactacgccg agagcgtgaa gggcagggtg accatcacaa gggatacatc cgcctccacc 240

gcctacatgg agctgtcctc cctgaggtcc gaggacaccg ccgtgtacta ctgtgccagg 300

accggaacct cctactgggg ccagggcaca ctggtgaccg tgtcctcc 348

<210> 390
<211> 334
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 390
gaaattgtgt tgacacagtc tccagccacc ctgtctttgt ctccagggga aagagccacc 60

ctctcctgca gggccagtca gagtgttgac tataatggaa ttagctacat gcactggtac 120

caacagaaac ctggccaggc tcccaggctc ctcatctatg ctgcatccaa cgtgcagagt 180

ggcatcccag ccaggttcag tggcagtggg tctgggacag acttcactct caccatcagc 240

agcctagagc ctgaagattt tgcagtttat tactgtcagc agagtattga ggatcctccg 300

acgttcggtg gaggcaccaa ggtggaaatc aaac 334

<210> 391
<211> 341
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 391
gaggtgcagc tggtgcagtc tggagcagag gtgaaaaagc ccggggagtc tctgaagatc 60

tcctgtaagg gttctggata cagctttacc agctcctgga tcaactgggt gcgccagatg 120

cccgggaaag gcctggagtg gatggggaga atctatcctg gtgagggtga taccaactac 180

agcgggaact tcgaaggcca ggtcaccatc tcagccgaca agtccatcag caccgcctac 240

ctgcagtgga gcagcctgaa ggcctcggac accgccatgt attactgtac aagaggacta 300

gtcatggact actggggcca aggcaccctt gtcacagtct c 341

<210> 392
<211> 334
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 392
gaaattgtgt tgacacagtc tccagccacc ctgtctttgt ctccagggga aagagccacc 60

ctctcctgca gggccagtca gagtgttgac tatgatggaa ttagctacat gcactggtac 120

caacagaaac ctggccaggc tcccaggctc ctcatctatg ctgcatccaa cgtgcagagt 180

ggcatcccag ccaggttcag tggcagtggg tctgggacag acttcactct caccatcagc 240

agcctagagc ctgaagattt tgcagtttat tactgtcagc agagtattga ggatcctccg 300

acgttcggtg gaggcaccaa ggtggaaatc aaac 334

<210> 393
<211> 341
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 393
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtt 60

tcctgcaagg catctggata caccttcgac agctactgga tgcactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggagaa atccacccta ataatggtag cacaaactac 180

aacgagaagt tcaagggcag agtcaccatg accagggaca cgtccacgag cacagtctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagatggact 300

ttgtttactt actggggcca agggactctg gtcactgtct c 341

<210> 394
<211> 341
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic polynucleotide"

<400> 394
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtt 60

tcctgcaagg catctggata caccttcacc agctactgga tgcactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggagaa atccacccta ataatggtag cacaaactac 180

aacgagaagt tcaagggcag agtcaccatg accagggaca cgtccacgag cacagtctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagatggact 300

ttgtttactt actggggcca agggactctg gtcactgtct c 341

<210> 395
<211> 341
<212> DNA
<213> Artificial Sequence

<220>

<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 395
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtt 60

tcctgcaagg catctggata caccttcaac tactactgga tgcactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggagaa atccacccta ataatggtag cacaaactac 180

aacgagaagt tcaagggcag agtcaccatg accagggaca cgtccacgag cacagtctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagatggact 300

ttgtttactt actggggcca agggactctg gtcactgtct c 341

<210> 396
<211> 341
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 396
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtt 60

tcctgcaagg catctggata caccttcaac agctactgga tgcactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggagaa atccacccta atgatggtag cacaaactac 180

aacgagaagt tcaagggcag agtcaccatg accagggaca cgtccacgag cacagtctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagatggact 300

ttgtttactt actggggcca agggactctg gtcactgtct c 341

<210> 397
<211> 341
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 397
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtt 60

tcctgcaagg catctggata caccttcaac agctactgga tgcactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggagaa atccacccta atggtggtag cacaaactac 180

aacgagaagt tcaagggcag agtcaccatg accagggaca cgtccacgag cacagtctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagatggact 300

ttgtttactt actggggcca agggactctg gtcactgtct c 341

<210> 398
<211> 341
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 398
caggtgcagc tggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtt 60

tcctgcaagg catctggata caccttcaac agctactgga tgcactgggt gcgacaggcc 120

cctggacaag ggcttgagtg gatgggagaa atccacccta atagtggtag cacaaactac 180

aacgagaagt tcaagggcag agtcaccatg accagggaca cgtccacgag cacagtctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc gagatggact 300

ttgtttactt actggggcca agggactctg gtcactgtct c 341

<210> 399
<211> 348
<212> DNA
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
polynucleotide"

<400> 399
gaggtgcagc tggtggaatc cggaggcggc ctggtgcaac ctggaggatc cctcaggctg 60

tcctgtgccg cttccggatt caccttctcc gatgcctgga tggactgggt gaggcaggcc 120

cctggcaaag gactggaatg ggtgggcgag atcaggtcca aacccaacaa ccacgccacc 180

tactacgccg agtccgtgaa gggcaggttc accatctcca gggacgactc caagaactcc 240

ctgtacctgc agatgaactc cctgaagacc gaggacaccg ccgtgtacta ctgcgctagg 300

accggcacct cctattgggg acagggcacc ctggtgaccg tgtcctcc 348

<210> 400
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<221> source
<223> /note="Description of Artificial Sequence: Synthetic
9xHis tag"

<400> 400
His His His His His His His His His
1 5

<210> 401
<211> 7
<212> PRT
<213> Unknown

<220>
<221> source
<223> /note="Description of Unknown: Antibody
epitope peptide"

<220>
<221> MOD_RES
<222> (2)..(2)
<223> Any amino acid

<220>
<221> MOD_RES
<222> (4)..(4)
<223> Any amino acid

<400> 401
Gln Xaa Pro Xaa Ile Glu Glu
1 5

<210> 402
<211> 7
<212> PRT
<213> Unknown

<220>
<221> source
<223> /note="Description of Unknown: Antibody
epitope peptide"

<400> 402
Leu Pro Phe Gln Pro Asp Pro
1 5

<210> 403
<211> 4
<212> PRT
<213> Unknown

<220>
<221> source
<223> /note="Description of Unknown: SEZ6 C-terminal
cytoplasmic domain motif peptide"

<400> 403
Asn Pro Thr Tyr
1