9250A-WO SEQUENCE LISTING

<110> REGENERON PHARMACEUTICALS, INC.

<120> Anti-CD3 Antibodies, Bispecific Antigen-Binding Molecules That Bind CD3 and CD20, and Uses Thereof

<130> 9250A-WO

<140> To be assigned
<141> Filed herewith

<150> 61/704,029
<151> 2012-09-21

<150> 61/753,461
<151> 2013-01-17

<150> 61/763,110
<151> 2013-02-11

<150> 61/827,098
<151> 2013-05-24

<160> 1375

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ccagggaagg gcctggagtg ggtctcaggt atcagttgga atagtggtag cataggctat 180
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ctgcaaatga acagtctgag agctgaggac acggccttgt actactgtgc aaaagataat 300
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Ser Leu Arg Leu Ser Cys Ala Ala Thr Gly Phe Thr Phe Asp Asp Phe
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Val Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Asn Ser Gly Tyr Gly Tyr Tyr Tyr Tyr Gly Met Asp Val

100 105 110
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115 120

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aggttcagtg gcagtgggtc tgggacagaa ttcactctca ccatcagcag cctgcagtct 240
gaagattttg caatttatta ctgtcagcag tataataatt ggcctctcac tttcggcgga 300
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            20   25   30
Ser Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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<400> 14
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ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtggtag cataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agctggggac acggccttgt actactgtgc aaaagataat 300

agtggctacg gctattacta ctactacggt atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 18
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Gly Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Asn Ser Gly Tyr Gly Tyr Tyr Tyr Tyr Tyr Gly Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

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<210> 20
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<210> 22
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<400> 22
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<210> 23
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<400> 23
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<210> 24
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 1   5   10   15
Val

<210> 25
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ggccaggctc ccagactcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagaa ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcag tattataact ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa a   321

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Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly

50 55 60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65 70 75 80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Asn Trp Pro Leu
85 90 95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

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<400> 28
Gln Ser Val Ser Ser Asn
1 5

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<400> 29
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<210> 30
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<400> 30
Gly Ala Ser
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<210> 32
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<400> 32
Gln Gln Tyr Tyr Asn Trp Pro Leu Thr
 1   5

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ccagggaagg gcctggagtg ggtctcagat attagttgga atagtggtag caaaggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca atgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag aactgaggac acggccttct attactgtgc aaaagatatg 300
agtggctacg cccactactt ctactacggt atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca   372

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Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Pro Phe Ala Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Lys Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Phe Tyr Tyr Cys
                85   90   95
Ala Lys Asp Met Ser Gly Tyr Ala His Tyr Phe Tyr Tyr Gly Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

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<400> 35
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<210> 36
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Gly Phe Pro Phe Ala Asp Tyr Thr
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<400> 38
Ile Ser Trp Asn Ser Gly Ser Lys
 1   5

<210> 39
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<210> 40
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<400> 40
Ala Lys Asp Met Ser Gly Tyr Ala His Tyr Phe Tyr Tyr Gly Met Asp
 1   5   10   15
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<210> 41
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atcacttgcc ggccaagtca gagcattagc agctatttaa attggtttca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta cccctccgat caccttcggc 300
caagggacac gactggagat taaa 324

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
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Asp Arg Val Thr Ile Thr Cys Arg Pro Ser Gln Ser Ile Ser Ser Tyr
20 25 30
Leu Asn Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45
Tyr Ala Ala Ser Ser Leu Gln Ser 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 Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro
85 90 95
Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
100 105

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<400> 44
Gln Ser Ile Ser Ser Tyr
1 5

<210> 45
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<400> 46
Ala Ala Ser
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<210> 47
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<400> 48
Gln Gln Ser Tyr Ser Thr Pro Pro Ile Thr
1 5 10

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ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtggcag cttggcctac 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ttccctgtat 240
ctgcaaatga acagtcttca ccctgaggac acggccctct attactgtgt aaaagatggt 300
agtggctacg gccactactc ctactacggt ttggacgtct ggggccaggg gaccacggtc 360
accgtctcct ca 372

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30
Thr Met His Trp Val Arg Gln Val Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Leu Ala Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu His Pro Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95
Val Lys Asp Gly Ser Gly Tyr Gly His Tyr Ser Tyr Tyr Gly Leu Asp
100 105 110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

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<400> 52
Gly Phe Thr Phe Asp Asp Tyr Thr
1 5

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attagttgga atagtggcag cttg 24

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<400> 54
Ile Ser Trp Asn Ser Gly Ser Leu
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<400> 56
Val Lys Asp Gly Ser Gly Tyr Gly His Tyr Ser Tyr Tyr Gly Leu Asp
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Val

<210> 57
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<212> DNA
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cctggccagg ctcccaggct cctcatctat ggtgcatcca gcagggccac tggcatccca 180
gacaggttca gtggcagtgg gtctgggaca gacttcactc tcaccatcag cagactggag 240
cctgaagatt ttgcagtgta ttactgtcag cagtatggta gttcaccttg gacgttcggc 300
caagggacca aggtggaaat caaa 324

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

<210> 59
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<212> DNA
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<400> 60
Gln Ser Val Ser Ser Ser Tyr
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<210> 61
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<400> 61
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<400> 62
Gly Ala Ser
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<210> 63
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<400> 63
cagcagtatg gtagttcacc ttggacg 27

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<400> 64
Gln Gln Tyr Gly Ser Ser Pro Trp Thr
1 5

<210> 65

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<400> 65
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ccagggaagg gcctggagtg ggtctcagat attagttgga atagtggtag cataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca atgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag aactgaggac acggccttgt attactgtgc aaaagatatg 300
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Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Pro Phe Ala Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Met Ser Gly Tyr Ala His Tyr Phe Tyr Tyr Gly Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 67
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Gly Phe Pro Phe Ala Asp Tyr Thr
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<210> 69

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attagttgga atagtggtag cata 24

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Ile Ser Trp Asn Ser Gly Ser Ile
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gcaaaagata tgagtggcta cgcccactac ttctactacg gtatggacgt c 51

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<400> 72
Ala Lys Asp Met Ser Gly Tyr Ala His Tyr Phe Tyr Tyr Gly Met Asp
 1 5 10 15
Val

<210> 73
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<400> 73
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctttgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta cccctccgat caccttcggc 300
caagggacac gactggagat taaa 324

<210> 74
<211> 108
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 74
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Phe Ala Ala Ser Ser Leu Gln Ser 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 Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro
                85   90   95
Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
            100   105

<210> 75
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 75
cagagcatta gcagctat   18

<210> 76
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 76
Gln Ser Ile Ser Ser Tyr
 1   5

<210> 77
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 77
gctgcatcc   9

<210> 78
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 78
Ala Ala Ser
 1

<210> 79
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 79
caacagagtt acagtacccc tccgatcacc 30

<210> 80
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 80
Gln Gln Ser Tyr Ser Thr Pro Pro Ile Thr
1 5 10

<210> 81
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 81
gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgaaactc 60
tcctgtacag cctctggatt cacctttgct gattatacca tgcactgggt ccgacaaggt 120
ccagggaagg gcctggagtg ggtctcagat attagttgga atagtggtag taaaggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag aactgaggac acggccttgt attactgtgc aaaagatatg 300
agtggctacg cccactacta ctactacgct ttggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 82
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 82
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Lys Leu Ser Cys Thr Ala Ser Gly Phe Thr Phe Ala Asp Tyr
20 25 30
Thr Met His Trp Val Arg Gln Gly Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Lys Gly Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95
Ala Lys Asp Met Ser Gly Tyr Ala His Tyr Tyr Tyr Tyr Ala Leu Asp
100 105 110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 83
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 83
ggattcacct ttgctgatta tacc 24

<210> 84
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 84
Gly Phe Thr Phe Ala Asp Tyr Thr
1 5

<210> 85
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 85
attagttgga atagtggtag taaa 24

<210> 86
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 86
Ile Ser Trp Asn Ser Gly Ser Lys
1 5

<210> 87
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 87
gcaaaagata tgagtggcta cgcccactac tactactacg ctttggacgt c 51

<210> 88
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 88
Ala Lys Asp Met Ser Gly Tyr Ala His Tyr Tyr Tyr Tyr Ala Leu Asp
 1   5   10   15
Val

<210> 89
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 89
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagc aactatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta acccccccgat caccttcggc 300
caagggacac gactggagat taaa   324

<210> 90
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 90
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Asn Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser 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 Tyr Cys Gln Gln Ser Tyr Ser Asn Pro Pro
                85   90   95
Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
            100   105

<210> 91
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 91
cagagcatta gcaactat   18

<210> 92
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 92
Gln Ser Ile Ser Asn Tyr
 1   5

<210> 93
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 93
gctgcatcc   9

<210> 94
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 94
Ala Ala Ser
 1

<210> 95
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 95
caacagagtt acagtaaccc cccgatcacc   30

<210> 96
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 96
Gln Gln Ser Tyr Ser Asn Pro Pro Ile Thr
 1   5   10

<210> 97
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 97
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agaaaaggca tgcactgggt ccgccaggct 120
ccagtcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgac agctgaggac acggctgtgt attactgtgc gaaagaaggg 300
gggcatgact atggtggtac ctttgactac tggggccagg gaaccctggt caccgtctcc 360

tca 363

<210> 98
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 98
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Arg Lys
20 25 30
Gly Met His Trp Val Arg Gln Ala Pro Val Lys Gly Leu Glu Trp Val
35 40 45
Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Thr Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Lys Glu Gly Gly His Asp Tyr Gly Gly Thr Phe Asp Tyr Trp Gly
100 105 110
Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 99
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 99
ggattcacct tcagtagaaa aggc 24

<210> 100
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 100
Gly Phe Thr Phe Ser Arg Lys Gly
1 5

<210> 101
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 101
atatcatatg atggaagtaa taaa 24

<210> 102
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 102
Ile Ser Tyr Asp Gly Ser Asn Lys
 1   5

<210> 103
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 103
gcgaaagaag gggggcatga ctatggtggt acctttgact ac   42

<210> 104
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 104
Ala Lys Glu Gly Gly His Asp Tyr Gly Gly Thr Phe Asp Tyr
 1   5   10

<210> 105
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 105
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc aggcgagtca ggacattaac aactatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagttcct gatctacgat gcatccaatt tggaaacagg ggtcccatca 180
aggttcagtg gaagtggatc tgggacagat tttactttca ccatcagcag cctgcagcct 240
gaagatattg caacatatta ctgtcaacag tatgatgatc tcccattcac tttcggccct 300
gggaccaaag tggatatcaa a   321

<210> 106
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 106
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 Gln Ala Ser Gln Asp Ile Asn Asn Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Phe Leu Ile
        35   40   45
Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Asp Leu Pro Phe
85 90 95
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
100 105

<210> 107
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 107
caggacatta acaactat 18

<210> 108
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 108
Gln Asp Ile Asn Asn Tyr
1 5

<210> 109
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 109
gatgcatcc 9

<210> 110
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 110
Asp Ala Ser
1

<210> 111
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 111
caacagtatg atgatctccc attcact 27

<210> 112
<211> 9
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 112
Gln Gln Tyr Asp Asp Leu Pro Phe Thr
 1   5

<210> 113
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 113
gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtggtag tataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa gtccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgc aaaagataat 300
agtggctacg gtcactacta ctacggaatg gacgtctggg gccaagggac cacggtcacc 360
gtcgcctca   369

<210> 114
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 114
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Asn Ser Gly Tyr Gly His Tyr Tyr Tyr Gly Met Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ala Ser
        115   120

<210> 115
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 115
ggattcacct ttgatgatta tacc   24

<210> 116
<211> 8
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 116
Gly Phe Thr Phe Asp Asp Tyr Thr
 1   5

<210> 117
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 117
attagttgga atagtggtag tata   24

<210> 118
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 118
Ile Ser Trp Asn Ser Gly Ser Ile
 1   5

<210> 119
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 119
gcaaaagata atagtggcta cggtcactac tactacggaa tggacgtc   48

<210> 120
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 120
Ala Lys Asp Asn Ser Gly Tyr Gly His Tyr Tyr Tyr Gly Met Asp Val
 1   5   10   15

<210> 121
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 121
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60

ctctcctgca gggccagtca gagtgttagc agcaacttag cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcac tatattaact ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa a 321

<210> 122
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 122
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Ile Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 123
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 123
cagagtgtta gcagcaac 18

<210> 124
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 124
Gln Ser Val Ser Ser Asn
 1   5

<210> 125
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 125
ggtgcatcc 9

<210> 126
<211> 3

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 126
Gly Ala Ser
 1

<210> 127
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 127
cagcactata ttaactggcc tctcact 27

<210> 128
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 128
Gln His Tyr Ile Asn Trp Pro Leu Thr
 1   5

<210> 129
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 129
gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtggtag tataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa gtccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgc aaaagataat 300
agtggctacg gtcactacta ctacggaatg gacgtctggg gccaagggac cacggtcacc 360
gtcgcctca 369

<210> 130
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 130
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val

50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95
Ala Lys Asp Asn Ser Gly Tyr Gly His Tyr Tyr Tyr Gly Met Asp Val
100 105 110
Trp Gly Gln Gly Thr Thr Val Thr Val Ala Ser
115 120

<210> 131
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 131
ggattcacct ttgatgatta tacc 24

<210> 132
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 132
Gly Phe Thr Phe Asp Asp Tyr Thr
1 5

<210> 133
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 133
attagttgga atagtggtag tata 24

<210> 134
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 134
Ile Ser Trp Asn Ser Gly Ser Ile
1 5

<210> 135
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 135

gcaaaagata atagtggcta cggtcactac tactacggaa tggacgtc 48

<210> 136
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 136
Ala Lys Asp Asn Ser Gly Tyr Gly His Tyr Tyr Tyr Gly Met Asp Val
 1   5   10   15

<210> 137
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 137
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttagc agcaacttag cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcac tatattaact ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa a 321

<210> 138
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 138
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Ile Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 139
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 139
cagagtgtta gcagcaac 18

<210> 140

<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 140
Gln Ser Val Ser Ser Asn
 1   5

<210> 141
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 141
ggtgcatcc   9

<210> 142
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 142
Gly Ala Ser
 1

<210> 143
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 143
cagcactata ttaactggcc tctcact   27

<210> 144
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 144
Gln His Tyr Ile Asn Trp Pro Leu Thr
 1   5

<210> 145
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 145
caggtgcagt tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtggtg cgtctggatt caccttcaga agttatggca tgcactgggt ccgccagact 120
ccaggcaggg ggctggagtg ggtggcaatg atatattatg atggaaataa taaatactat 180
gcagactccg tgaggggccg attcaccgtt tccagagaca attccaagaa caccctgtat 240
ctgcaaatga gcagcctgag agccgaggac acggctctat atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 146
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 146
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Gly Ala Ser Gly Phe Thr Phe Arg Ser Tyr
20 25 30
Gly Met His Trp Val Arg Gln Thr Pro Gly Arg Gly Leu Glu Trp Val
35 40 45
Ala Met Ile Tyr Tyr Asp Gly Asn Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60
Arg Gly Arg Phe Thr Val Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80
Leu Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Phe Cys
85 90 95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser
115

<210> 147
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 147
ggattcacct tcagaagtta tggc 24

<210> 148
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 148
Gly Phe Thr Phe Arg Ser Tyr Gly
1 5

<210> 149
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 149

atatattatg atggaaataa taaa 24

<210> 150
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 150
Ile Tyr Tyr Asp Gly Asn Asn Lys
1 5

<210> 151
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 151
gcgcgagggc ctgggtacaa ctggctcgac ccc 33

<210> 152
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 152
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
1 5 10

<210> 153
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 153
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtattagc aggaacttgg cctggtacca gcaraaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcag tataataacc ggcctctcac tttcggcgga 300
gggaccgagg tggagatcaa a 321

<210> 154
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<221> VARIANT
<222> 38
<223> Xaa = any amino acid

<220>
<221> VARIANT
<222> 38
<223> Xaa = Any Amino Acid

<400> 154
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Arg Asn
            20   25   30
Leu Ala Trp Tyr Gln Xaa Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Arg Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Glu Val Glu Ile Lys
            100   105

<210> 155
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 155
cagagtatta gcaggaac   18

<210> 156
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 156
Gln Ser Ile Ser Arg Asn
 1   5

<210> 157
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 157
ggtgcatcc   9

<210> 158
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 158
Gly Ala Ser
 1

<210> 159
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 159
cagcagtata ataaccggcc tctcact 27

<210> 160
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 160
Gln Gln Tyr Asn Asn Arg Pro Leu Thr
1 5

<210> 161
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 161
caggtgcagt tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
gcctgtgttg cgtctggatt caccttcaga agttatggca tgcactgggt ccgccaggct 120
ccaggcaagg gactgcagtg ggtggcaatg atttactatg atggtaagaa taaatattat 180
gcagactccg tgaggggccg attcaccatc tccagagaca attccaagaa cacactgtat 240
ctgcaaatga acaatctgag agtcgaggac acggctatgt atttctgtgc gcgagggcct 300
gggtacaatt ggctcgaccc ctggggccag ggaaccctgg tcactgtttc ctca 354

<210> 162
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 162
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ala Cys Val Ala Ser Gly Phe Thr Phe Arg Ser Tyr
20 25 30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Gln Trp Val
35 40 45
Ala Met Ile Tyr Tyr Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80
Leu Gln Met Asn Asn Leu Arg Val Glu Asp Thr Ala Met Tyr Phe Cys
85 90 95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser
115

<210> 163
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 163
ggattcacct tcagaagtta tggc 24

<210> 164
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 164
Gly Phe Thr Phe Arg Ser Tyr Gly
 1 5

<210> 165
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 165
atttactatg atggtaagaa taaa 24

<210> 166
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 166
Ile Tyr Tyr Asp Gly Lys Asn Lys
 1 5

<210> 167
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 167
gcgcgagggc ctgggtacaa ttggctcgac ccc 33

<210> 168
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 168
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 169
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 169
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagaattagc agcaacttgg cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tagcccagcc 180
aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctgcagtct 240
gaggatgttg cagtttatta ctgtcagcaa catcataact ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa a   321

<210> 170
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 170
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Ile Ser Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ser Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His His Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 171
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 171
cagagaatta gcagcaac   18

<210> 172
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 172
Gln Arg Ile Ser Ser Asn
 1   5

<210> 173
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 173
ggtgcatcc 9

<210> 174
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 174
Gly Ala Ser
1

<210> 175
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 175
cagcaacatc ataactggcc tctcact 27

<210> 176
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 176
Gln Gln His His Asn Trp Pro Leu Thr
1 5

<210> 177
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 177
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgctg cgtctggatt taccttcaga agttatgcca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcaatg gtatactatg atggaaataa tcaatactat 180
gcagactccg tgaggggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgatgac acggctgtgt atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 178
<211> 118

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 178
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ala Met Val Tyr Tyr Asp Gly Asn Asn Gln Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 179
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 179
ggatttacct tcagaagtta tgcc   24

<210> 180
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 180
Gly Phe Thr Phe Arg Ser Tyr Ala
 1   5

<210> 181
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 181
gtatactatg atggaaataa tcaa   24

<210> 182
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 182
Val Tyr Tyr Asp Gly Asn Asn Gln
 1   5

<210> 183
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 183
gcgcgagggc ctgggtacaa ctggctcgac ccc   33

<210> 184
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 184
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 185
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 185
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttagc aggaacttgg cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccggcc 180
aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcag tataataact ggcctctcac tttcggcgga 300
gggaccaagg tggtgatcaa a   321

<210> 186
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 186
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Arg Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Val Ile Lys
            100   105

<210> 187
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 187
cagagtgtta gcaggaac 18

<210> 188
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 188
Gln Ser Val Ser Arg Asn
 1 5

<210> 189
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 189
ggtgcatcc 9

<210> 190
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 190
Gly Ala Ser
 1

<210> 191
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 191
cagcagtata ataactggcc tctcact 27

<210> 192
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 192
Gln Gln Tyr Asn Asn Trp Pro Leu Thr
 1   5

<210> 193
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 193
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtattg cgtctggatt taccttcaga agttatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcaatg atatattatg atggaaacaa taaatactat 180
gcagactccg tgaggggccg attcaccatc tccagagaca actccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgatgac acggctgtgt atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca   354

<210> 194
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 194
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ile Ala Ser Gly Phe Thr Phe Arg Ser Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ala Met Ile Tyr Tyr Asp Gly Asn Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 195
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 195
ggatttacct tcagaagtta tggc   24

<210> 196
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 196
Gly Phe Thr Phe Arg Ser Tyr Gly
 1   5

<210> 197
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 197
atatattatg atggaaacaa taaa   24

<210> 198
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 198
Ile Tyr Tyr Asp Gly Asn Asn Lys
 1   5

<210> 199
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 199
gcgcgagggc ctgggtacaa ctggctcgac ccc   33

<210> 200
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 200
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 201
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 201
gaaatagtga tgacgcagtc tccagccaca ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttagc agcaacttgg cctggtacca gcagaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcag tataataaca ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa a   321

<210> 202
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 202
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Arg Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 203
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 203
cagagtgtta gcagcaac   18

<210> 204
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 204
Gln Ser Val Ser Ser Asn
 1   5

<210> 205
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 205
ggtgcatcc   9

<210> 206
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 206
Gly Ala Ser
 1

<210> 207
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 207
cagcagtata ataacaggcc tctcact 27

<210> 208
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 208
Gln Gln Tyr Asn Asn Arg Pro Leu Thr
 1   5

<210> 209
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 209
caggtgcagc tggtggagtc tgggggaggc gtggtccagc cggggaggtc cctgagactc 60
tcctgtgctg cgtctggatt caccttcaga agttttggca tgcactgggt ccgccaggct 120
ccaggcaggg gactggagtg ggtggcaatg atatattttg atggaaaaaa taaatactat 180
gcagactccg tgaggggccg attcaccatt tccagagaca attccaagaa caccctgtat 240
ctggaaatga gtagcctgag agccgaggac acggctgtat atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca 354

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

<220>
<223> Synthetic

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

100 105 110
Leu Val Thr Val Ser Ser
115

<210> 211
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 211
ggattcacct tcagaagttt tggc 24

<210> 212
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 212
Gly Phe Thr Phe Arg Ser Phe Gly
1 5

<210> 213
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 213
atatattttg atggaaaaaa taaa 24

<210> 214
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 214
Ile Tyr Phe Asp Gly Lys Asn Lys
1 5

<210> 215
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 215
gcgcgagggc ctgggtacaa ctggctcgac ccc 33

<210> 216
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 216
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 217
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 217
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagtcacc 60
ctctcctgta gggccagtca gagtattagc aggaacttgg cctggtacca gcagaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tgtcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctacagtct 240
gaagattttg cagttttca ctgtcagcag tataataata ggcctctcac tttcggcgga 300
gggaccgagg tggagatcaa a   321

<210> 218
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 218
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Val Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Arg Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Val Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Phe His Cys Gln Gln Tyr Asn Asn Arg Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Glu Val Glu Ile Lys
            100   105

<210> 219
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 219
cagagtatta gcaggaac   18

<210> 220
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 220
Gln Ser Ile Ser Arg Asn
 1   5

<210> 221
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 221
ggtgcatcc   9

<210> 222
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 222
Gly Ala Ser
 1

<210> 223
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 223
cagcagtata ataataggcc tctcact   27

<210> 224
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 224
Gln Gln Tyr Asn Asn Arg Pro Leu Thr
 1   5

<210> 225
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 225
caggtgcaat tggtggagtc tgggggaggc gtggtccagc cggggaggtc cctgagactc 60
tcctgtgctg cgtctggatt caccttcaga agttttggca tgcactgggt ccgccaggct 120
ccaggcaggg gactggagtg ggtggcaatg atatattttg atggaaaaaa taaatactat 180
gcagactccg tgaggggccg attcaccatt tccagagaca attccaagaa caccctgtat 240
ctggaaatga gtagcctgag agccgaggac acggctgtat atttctgtgc gcgagggcct 300

gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 226
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 226
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Phe
20 25 30
Gly Met His Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Val
35 40 45
Ala Met Ile Tyr Phe Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
50 55 60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80
Leu Glu Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Phe Cys
85 90 95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser
115

<210> 227
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 227
ggattcacct tcagaagttt tggc 24

<210> 228
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 228
Gly Phe Thr Phe Arg Ser Phe Gly
1 5

<210> 229
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 229
atatattttg atggaaaaaa taaa 24

<210> 230
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 230
Ile Tyr Phe Asp Gly Lys Asn Lys
 1   5

<210> 231
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 231
gcgcgagggc ctgggtacaa ctggctcgac ccc   33

<210> 232
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 232
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 233
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 233
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagtcacc 60
ctctcctgta gggccagtca gagtattagc aggaacttgg cctggtacca gcaraaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tgtcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctacagtct 240
gaagattttg cagtttttca ctgtcagcag tataataata ggcctctcac tttcggcgga 300
gggaccgagg tggagatcaa a   321

<210> 234
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<221> VARIANT
<222> 38
<223> Xaa = Any amino acid

<220>
<221> VARIANT
<222> 38
<223> Xaa = Any Amino Acid

<400> 234

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

<210> 235
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 235
cagagtatta gcaggaac 18

<210> 236
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 236
Gln Ser Ile Ser Arg Asn
 1   5

<210> 237
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 237
ggtgcatcc 9

<210> 238
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 238
Gly Ala Ser
 1

<210> 239
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 239
cagcagtata ataataggcc tctcact 27

<210> 240
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 240
Gln Gln Tyr Asn Asn Arg Pro Leu Thr
 1   5

<210> 241
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 241
caggtgcaat tggtggagtc tgggggaggc gtggtccagc cggggaggtc cctgagactc 60
tcctgtgctg cgtctggatt caccttcaga agttttggca tgcactgggt ccgccaggct 120
ccaggcaggg gactggagtg ggtggcaatg atatattttg atggaaaaaa taaatactat 180
gcagactccg tgaggggccg attcaccatt tccagagaca attccaagaa caccctgtat 240
ctggaaatga gcagcctgag agccgaggac acggctgtat atttctgtgc gcgagggcct 300
gggtacaatt ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 242
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 242
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Phe
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Val
        35   40   45
Ala Met Ile Tyr Phe Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Glu Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 243
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 243
ggattcacct tcagaagttt tggc 24

<210> 244
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 244
Gly Phe Thr Phe Arg Ser Phe Gly
 1 5

<210> 245
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 245
atatattttg atggaaaaaa taaa 24

<210> 246
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 246
Ile Tyr Phe Asp Gly Lys Asn Lys
 1 5

<210> 247
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 247
gcgcgagggc ctgggtacaa ttggctcgac ccc 33

<210> 248
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 248
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1 5 10

<210> 249

<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 249
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgta gggccagtca gagtgttagc aggaacttgg cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tgtcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctacagtct 240
gaagattttg cagtttttca ctgtcagcag tataataata ggcctctcac tttcggcgga 300
gggaccgagg tggagatcaa a 321

<210> 250
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 250
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Arg Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Val Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Phe His Cys Gln Gln Tyr Asn Asn Arg Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Glu Val Glu Ile Lys
            100   105

<210> 251
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 251
cagagtgtta gcaggaac 18

<210> 252
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 252
Gln Ser Val Ser Arg Asn
 1   5

<210> 253
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 253
ggtgcatcc 9

<210> 254
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 254
Gly Ala Ser
1

<210> 255
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 255
cagcagtata ataataggcc tctcact 27

<210> 256
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 256
Gln Gln Tyr Asn Asn Arg Pro Leu Thr
1 5

<210> 257
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 257
caggtgcaat tggtggagtc tgggggaggc gtggtccagc cggggaggtc cctgagactc 60
tcctgtgctg cgtctggatt caccttcaga agttttggca tgcactgggt ccgccaggct 120
ccaggcaggg gactggagtg ggtggcaatg atatattttg atggaaaaaa taaatactat 180
gcagactccg tgaggggccg attcaccatt tccagagaca attccaagaa caccctgtat 240
ctggaaatga gcagcctgag agccgaggac acggctgtat atttctgtgc gcgagggcct 300
gggtacaatt ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 258
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 258
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Phe
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Val
        35   40   45
Ala Met Ile Tyr Phe Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Glu Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 259
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 259
ggattcacct tcagaagttt tggc   24

<210> 260
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 260
Gly Phe Thr Phe Arg Ser Phe Gly
 1   5

<210> 261
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 261
atatattttg atggaaaaaa taaa   24

<210> 262
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 262
Ile Tyr Phe Asp Gly Lys Asn Lys
 1   5

<210> 263

<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 263
gcgcgagggc ctgggtacaa ttggctcgac ccc 33

<210> 264
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 264
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1 5 10

<210> 265
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 265
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgta gggccagtca gagtgttagc aggaacttgg cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tgtcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctacagtct 240
gaagattttg cagttttca ctgtcagcag tataataata ggcctctcac tttcggcgga 300
gggaccgagg tggagatcaa a 321

<210> 266
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 266
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1 5 10 15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Arg Asn
            20 25 30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35 40 45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Val Pro Ala Arg Phe Ser Gly
    50 55 60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65 70 75 80
Glu Asp Phe Ala Val Phe His Cys Gln Gln Tyr Asn Asn Arg Pro Leu
                85 90 95
Thr Phe Gly Gly Gly Thr Glu Val Glu Ile Lys
            100 105

<210> 267
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 267
cagagtgtta gcaggaac 18

<210> 268
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 268
Gln Ser Val Ser Arg Asn
 1 5

<210> 269
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 269
ggtgcatcc 9

<210> 270
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 270
Gly Ala Ser
 1

<210> 271
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 271
cagcagtata ataataggcc tctcact 27

<210> 272
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 272
Gln Gln Tyr Asn Asn Arg Pro Leu Thr
 1 5

<210> 273
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 273
caggtgcagt tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgttg cgtctggatt caccttcaga agttatggca tgcactgggt ccgccaggct 120
ccaggcaagg gactgcagtg ggtggcaatg atttactatg atggtaagaa taaatattat 180
gcagactccg tgaggggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagtctgag agccgaagac acggctatgt atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcactgtctc ctca 354

<210> 274
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 274
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe Arg Ser Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Gln Trp Val
        35   40   45
Ala Met Ile Tyr Tyr Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Met Tyr Phe Cys
                85   90   95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 275
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 275
ggattcacct tcagaagtta tggc 24

<210> 276
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 276
Gly Phe Thr Phe Arg Ser Tyr Gly
 1   5

<210> 277

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 277
atttactatg atggtaagaa taaa 24

<210> 278
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 278
Ile Tyr Tyr Asp Gly Lys Asn Lys
 1 5

<210> 279
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 279
gcgcgagggc ctgggtacaa ctggctcgac ccc 33

<210> 280
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 280
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1 5 10

<210> 281
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 281
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagaattagc agcaacttgg cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tagcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagatgttg cagtttatta ctgtcagcaa cataataact ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa a 321

<210> 282
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 282
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Ile Ser Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ser Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His Asn Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 283
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 283
cagagaatta gcagcaac   18

<210> 284
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 284
Gln Arg Ile Ser Ser Asn
 1   5

<210> 285
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 285
ggtgcatcc   9

<210> 286
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 286
Gly Ala Ser
 1

<210> 287
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 287
cagcaacata ataactggcc tctcact 27

<210> 288
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 288
Gln Gln His Asn Asn Trp Pro Leu Thr
 1   5

<210> 289
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 289
caggtgcaat tggtggagtc tgggggaggc gtggtccagc cggggaggtc cctgagactc 60
tcctgtgctg cgtctggttt caccttcaga agttttggca tgcactgggt ccgccaggct 120
ccaggcaggg gactggagtg ggtggcaatg atatattttg atggaaaaaa taaatactat 180
gcagactccg tgaggggccg attcaccatt tccagagaca attccaagaa caccctgtat 240
ctggaaatga gtagcctgag agccgaggac acggctgtat atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 290
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 290
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Phe
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Val
        35   40   45
Ala Met Ile Tyr Phe Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Glu Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 291

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 291
ggtttcacct tcagaagttt tggc 24

<210> 292
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 292
Gly Phe Thr Phe Arg Ser Phe Gly
 1 5

<210> 293
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 293
atatattttg atggaaaaaa taaa 24

<210> 294
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 294
Ile Tyr Phe Asp Gly Lys Asn Lys
 1 5

<210> 295
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 295
gcgcgagggc ctgggtacaa ctggctcgac ccc 33

<210> 296
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 296
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro

1 5 10

<210> 297
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 297
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagtcatc 60
ctctcctgta gggccagtca gagtattagc aggaacttgg cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcaaccacca gggccactgg tgtcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctacagtct 240
gaagattttg cagttttta ctgtcagcag tataataata ggcctctcac tttcggcgga 300
gggaccgagg tggagatcaa a 321

<210> 298
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 298
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
1 5 10 15
Glu Arg Val Ile Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Arg Asn
20 25 30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
35 40 45
Tyr Gly Ala Thr Thr Arg Ala Thr Gly Val Pro Ala Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65 70 75 80
Glu Asp Phe Ala Val Phe Tyr Cys Gln Gln Tyr Asn Asn Arg Pro Leu
85 90 95
Thr Phe Gly Gly Gly Thr Glu Val Glu Ile Lys
100 105

<210> 299
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 299
cagagtatta gcaggaac 18

<210> 300
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 300
Gln Ser Ile Ser Arg Asn
1 5

<210> 301
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 301
ggtgcaacc 9

<210> 302
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 302
Gly Ala Thr
1

<210> 303
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 303
cagcagtata ataataggcc tctcact 27

<210> 304
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 304
Gln Gln Tyr Asn Asn Arg Pro Leu Thr
1 5

<210> 305
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 305
caggtgcaat tggtggagtc tgggggaggc gtggtccagc cggggaggtc cctgagactc 60
tcctgtgctg cgtctggttt caccttcaga agttttggca tgcactgggt ccgccaggct 120
ccaggcaggg gactggagtg ggtggcaatg atatattttg atggaaaaaa taaatactat 180
gcagactccg tgaggggccg attcaccatt tccagagaca attccaagaa caccctgtat 240
ctggaaatga gtagcctgag agccgaggac acggctgtat atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 306
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 306
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Phe
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Val
        35   40   45
Ala Met Ile Tyr Phe Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Glu Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 307
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 307
ggtttcacct tcagaagttt tggc   24

<210> 308
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 308
Gly Phe Thr Phe Arg Ser Phe Gly
 1   5

<210> 309
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 309
atatattttg atggaaaaaa taaa   24

<210> 310
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 310
Ile Tyr Phe Asp Gly Lys Asn Lys

 1   5

<210> 311
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 311
gcgcgagggc ctgggtacaa ctggctcgac ccc   33

<210> 312
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 312
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 313
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 313
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagtcatc 60
ctctcctgta gggccagtca gagtattagc aggaacttgg cctggtacca gcaraaacct 120
ggccaggctc ccaggctcct catctatggt gcaaccacca gggccactgg tgtcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctacagtct 240
gaagattttg cagtttttta ctgtcagcag tataataata ggcctctcac tttcggcgga 300
gggaccgagg tggagatcaa a   321

<210> 314
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<220>
<221> VARIANT
<222> 38
<223> Xaa = Any amino acid

<220>
<221> VARIANT
<222> 38
<223> Xaa = Any Amino Acid

<400> 314
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Val Ile Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Arg Asn
            20   25   30
Leu Ala Trp Tyr Gln Xaa Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45

Tyr Gly Ala Thr Thr Arg Ala Thr Gly Val Pro Ala Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65 70 75 80
Glu Asp Phe Ala Val Phe Tyr Cys Gln Gln Tyr Asn Asn Arg Pro Leu
85 90 95
Thr Phe Gly Gly Gly Thr Glu Val Glu Ile Lys
100 105

<210> 315
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 315
cagagtatta gcaggaac 18

<210> 316
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 316
Gln Ser Ile Ser Arg Asn
1 5

<210> 317
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 317
ggtgcaacc 9

<210> 318
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 318
Gly Ala Thr
1

<210> 319
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 319
cagcagtata ataataggcc tctcact 27

<210> 320
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 320
Gln Gln Tyr Asn Asn Arg Pro Leu Thr
 1   5

<210> 321
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 321
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtattg cgtctggatt taccttcaga agttatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcaatg atatattatg atggaaacaa taaatactat 180
gcagactccg tgaggggccg attcaccatc tccagagaca actccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgatgac acggctgtgt atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca   354

<210> 322
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 322
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ile Ala Ser Gly Phe Thr Phe Arg Ser Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ala Met Ile Tyr Tyr Asp Gly Asn Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 323
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 323
ggatttacct tcagaagtta tggc   24

<210> 324
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 324
Gly Phe Thr Phe Arg Ser Tyr Gly
 1   5

<210> 325
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 325
atatattatg atggaaacaa taaa   24

<210> 326
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 326
Ile Tyr Tyr Asp Gly Asn Asn Lys
 1   5

<210> 327
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 327
gcgcgagggc ctgggtacaa ctggctcgac ccc   33

<210> 328
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 328
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 329
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 329
gaaatagtga tgacgcagtc tccagccaca ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttagc agcaacttgg cctggtacca gcagaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcag tataataaca ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa a 321

<210> 330
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 330
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Arg Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 331
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 331
cagagtgtta gcagcaac 18

<210> 332
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 332
Gln Ser Val Ser Ser Asn
 1   5

<210> 333
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 333
ggtgcatcc 9

<210> 334
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 334
Gly Ala Ser
 1

<210> 335
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 335
cagcagtata ataacaggcc tctcact 27

<210> 336
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 336
Gln Gln Tyr Asn Asn Arg Pro Leu Thr
 1   5

<210> 337
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 337
gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattattcca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtcgtag catagactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgt aaaagataat 300
agtggctatg gccgctatta ctactacggg atggacgtct ggggccaagg gaccacggtc 360
tccgtctcct ca 372

<210> 338
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 338
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30

Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Gly Ile Ser Trp Asn Ser Arg Ser Ile Asp Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95
Val Lys Asp Asn Ser Gly Tyr Gly Arg Tyr Tyr Tyr Tyr Gly Met Asp
100 105 110
Val Trp Gly Gln Gly Thr Thr Val Ser Val Ser Ser
115 120

<210> 339
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 339
ggattcacct ttgatgatta ttcc 24

<210> 340
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 340
Gly Phe Thr Phe Asp Asp Tyr Ser
1 5

<210> 341
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 341
attagttgga atagtcgtag cata 24

<210> 342
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 342
Ile Ser Trp Asn Ser Arg Ser Ile
1 5

<210> 343
<211> 51
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 343
gtaaaagata atagtggcta tggccgctat tactactacg ggatggacgt c 51

<210> 344
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 344
Val Lys Asp Asn Ser Gly Tyr Gly Arg Tyr Tyr Tyr Tyr Gly Met Asp
 1   5   10   15
Val

<210> 345
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 345
aaaatagtga tgacgcagtc tcccgccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttagc ggcaacttag cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactag tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttattt ctgtcagcac tattataact ggcctctcac tttcggcgga 300
gggaccaagg tggagatcag a 321

<210> 346
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 346
Lys Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Gly Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Ser Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr Phe Cys Gln His Tyr Tyr Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Arg
            100   105

<210> 347
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 347
cagagtgtta gcggcaac 18

<210> 348
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 348
Gln Ser Val Ser Gly Asn
 1 5

<210> 349
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 349
ggtgcatcc 9

<210> 350
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 350
Gly Ala Ser
 1

<210> 351
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 351
cagcactatt ataactggcc tctcact 27

<210> 352
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 352
Gln His Tyr Tyr Asn Trp Pro Leu Thr
 1 5

<210> 353
<211> 369
<212> DNA

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 353
gaagtgcaac tggtggagtc tgggggaggc ttagtacagc ctggcgggtc cctgagactc 60
tcctgtgcag ccactggatt cacctttgat gattttacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt atcagttgga atagtggtag cataggctat 180
gtggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttgt actactgtgc aaaagataat 300
agtggctacg gctattatta ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 354
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 354
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 Thr Gly Phe Thr Phe Asp Asp Phe
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Val Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Asn Ser Gly Tyr Gly Tyr Tyr Tyr Tyr Gly Met Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 355
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 355
ggattcacct ttgatgattt tacc 24

<210> 356
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 356
Gly Phe Thr Phe Asp Asp Phe Thr
 1   5

<210> 357
<211> 24
<212> DNA

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 357
atcagttgga atagtggtag cata 24

<210> 358
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 358
Ile Ser Trp Asn Ser Gly Ser Ile
 1 5

<210> 359
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 359
gcaaaagata atagtggcta cggctattat tactacggta tggacgtc 48

<210> 360
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 360
Ala Lys Asp Asn Ser Gly Tyr Gly Tyr Tyr Tyr Tyr Gly Met Asp Val
 1 5 10 15

<210> 361
<211> 339
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 361
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagcca gagtgtttta tacagctcca acaataagaa ctacttagct 120
tggtaccagc agaaaccagg acagcctcct aagctgctca tttactgggc atctacccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtact 300
ccgtacactt ttggccaggg gaccaagctg gagatcaaa 339

<210> 362
<211> 113
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 362
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 Val Leu Tyr Ser
            20   25   30
Ser Asn Asn 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 Tyr Ser Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
            100   105   110
Lys

<210> 363
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 363
cagagtgttt tatacagctc caacaataag aactac 36

<210> 364
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 364
Gln Ser Val Leu Tyr Ser Ser Asn Asn Lys Asn Tyr
 1   5   10

<210> 365
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 365
tgggcatct 9

<210> 366
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 366
Trp Ala Ser
 1

<210> 367
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 367
cagcaatatt atagtactcc gtacact 27

<210> 368
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 368
Gln Gln Tyr Tyr Ser Thr Pro Tyr Thr
1 5

<210> 369
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 369
caggtcacct tgaaggagtc tggtcctgcg ctggtgaaac ccacacagac cctcacactg 60
acctgcacct tctctgggtt ctcactcagc actagtggaa tgtgtgtgag ctggatccgt 120
cagcccccag ggaaggccct ggagtggctt gcacgcattg attgggatga tgataaatac 180
tacagcacat ctctgaagac caggctcacc atctccaagg acacctccaa aaaccaggtg 240
gtccttacaa tgaccaacat ggaccctgtg gacacagcca cgtattactg tgcacggatg 300
gatatagtgg gagctagagg ggggtggttc gacccctggg gccagggaac cctggtcacc 360
gtctcctca 369

<210> 370
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 370
Gln Val Thr Leu Lys Glu Ser Gly Pro Ala Leu Val Lys Pro Thr Gln
1 5 10 15
Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu Ser Thr Ser
20 25 30
Gly Met Cys Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu
35 40 45
Trp Leu Ala Arg Ile Asp Trp Asp Asp Asp Lys Tyr Tyr Ser Thr Ser
50 55 60
Leu Lys Thr Arg Leu Thr Ile Ser Lys Asp Thr Ser Lys Asn 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 Arg Met Asp Ile Val Gly Ala Arg Gly Gly Trp Phe Asp Pro
100 105 110
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 371
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 371
gggttctcac tcagcactag tggaatgtgt 30

<210> 372
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 372
Gly Phe Ser Leu Ser Thr Ser Gly Met Cys
1 5 10

<210> 373
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 373
attgattggg atgatgataa a 21

<210> 374
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 374
Ile Asp Trp Asp Asp Asp Lys
1 5

<210> 375
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 375
gcacggatgg atatagtggg agctagaggg gggtggttcg acccc 45

<210> 376
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 376

Ala Arg Met Asp Ile Val Gly Ala Arg Gly Gly Trp Phe Asp Pro
 1   5   10   15

<210> 377
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 377
gacatccaga tgacccagtc tccatcctca ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgtc gggcgagtca gggcattagc aattatttag cctggtttca gcagaaacca 120
gggaaagccc ctaagtccct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aagttcagcg gcagtggatc tgggacagat ttcactctca ccatcagcag cctgcagcct 240
gaagattttg caacttatta ctgccaacag tataatagtt acccgctcac tttcggcgga 300
gggaccaagg tggagatcaa a   321

<210> 378
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 378
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
            20   25   30
Leu Ala Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Ser Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Lys 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 Tyr Cys Gln Gln Tyr Asn Ser Tyr Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 379
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 379
cagggcatta gcaattat   18

<210> 380
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 380
Gln Gly Ile Ser Asn Tyr
 1   5

<210> 381
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 381
gctgcatcc 9

<210> 382
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 382
Ala Ala Ser
 1

<210> 383
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 383
caacagtata atagttaccc gctcact 27

<210> 384
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 384
Gln Gln Tyr Asn Ser Tyr Pro Leu Thr
 1   5

<210> 385
<211> 404
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 385
caggtgcagt tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgctg cgtctggatt caccttcaga agttatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcaatg atatattatg atggaaataa taaaaagtat 180
gcagactccg tgaggggccg attcaccatt tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agtcgaggac acggctgtgt atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctcagccaaa 360
acaacagccc cacccgttta tccactggcc cctggaagct tggg 404

<210> 386
<211> 134

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 386
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ala Met Ile Tyr Tyr Asp Gly Asn Asn Lys Lys Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser Ala Lys Thr Thr Ala Pro Pro Val Tyr Pro
        115   120   125
Leu Ala Pro Gly Ser Leu
    130

<210> 387
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 387
ggattcacct tcagaagtta tggc   24

<210> 388
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 388
Gly Phe Thr Phe Arg Ser Tyr Gly
 1   5

<210> 389
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 389
atatattatg atggaaataa taaa   24

<210> 390
<211> 8
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 390
Ile Tyr Tyr Asp Gly Asn Asn Lys
 1   5

<210> 391
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 391
gcgcgagggc ctgggtacaa ctggctcgac ccc   33

<210> 392
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 392
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 393
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 393
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttagc aggaacttgg cctggtacca gcagaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactga tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcattctca acatcagcag cctgcagtct 240
gaagattttg cactttatta ctgtcaacaa tatagtaact ggcctctcac tttcggcgga 300
gggaccgagg tggagatcaa a   321

<210> 394
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 394
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Arg Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Asp Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Ile Leu Asn Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Leu Tyr Tyr Cys Gln Gln Tyr Ser Asn Trp Pro Leu
                85   90   95

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

<210> 395
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 395
cagagtgtta gcaggaac 18

<210> 396
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 396
Gln Ser Val Ser Arg Asn
1 5

<210> 397
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 397
ggtgcatcc 9

<210> 398
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 398
Gly Ala Ser
1

<210> 399
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 399
caacaatata gtaactggcc tctcact 27

<210> 400
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 400
Gln Gln Tyr Ser Asn Trp Pro Leu Thr
 1   5

<210> 401
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 401
caggtgcaat tggtggagtc tgggggaggc gtggtccagc cggggaggtc cctgagactc 60
tcctgtgctg cgtctggttt caccttcaga agttttggca tgcactgggt ccgccaggct 120
ccaggcaggg gactggagtg ggtggcaatg atatattttg atggaaaaaa taaatactat 180
gcagactccg tgaggggccg attcaccatt tccagagaca attccaagaa caccctgtat 240
ctggaaatga gtagcctgag agccgaggac acggctgtat atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca   354

<210> 402
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 402
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Phe
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Val
        35   40   45
Ala Met Ile Tyr Phe Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Glu Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 403
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 403
ggtttcacct tcagaagttt tggc   24

<210> 404
<211> 8
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 404
Gly Phe Thr Phe Arg Ser Phe Gly
 1   5

<210> 405
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 405
atatattttg atggaaaaaa taaa   24

<210> 406
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 406
Ile Tyr Phe Asp Gly Lys Asn Lys
 1   5

<210> 407
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 407
gcgcgagggc ctgggtacaa ctggctcgac ccc   33

<210> 408
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 408
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 409
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 409
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagtcatc 60
ctctcctgta gggccagtca gagtattagc aggaacttgg cctggtacca gcagaaacct 120
ggccaggctc ccaggctcct catctatggt gcaaccacca gggccactgg tgtcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctacagtct 240

gaagattttg cagtttttta ctgtcagcag tataataata ggcctctcac tttcggcgga 300
gggaccgagg tggagatcaa a 321

<210> 410
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 410
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Val Ile Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Arg Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Thr Thr Arg Ala Thr Gly Val Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Phe Tyr Cys Gln Gln Tyr Asn Asn Arg Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Glu Val Glu Ile Lys
            100   105

<210> 411
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 411
cagagtatta gcaggaac 18

<210> 412
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 412
Gln Ser Ile Ser Arg Asn
 1   5

<210> 413
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 413
ggtgcaacc 9

<210> 414
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 414
Gly Ala Thr
 1

<210> 415
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 415
cagcagtata ataataggcc tctcact 27

<210> 416
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 416
Gln Gln Tyr Asn Asn Arg Pro Leu Thr
 1   5

<210> 417
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 417
caggtgcaat tggtggagtc tgggggaggc gtggtccagc cggggaggtc cctgagactc 60
tcctgtgctg cgtctggttt caccttcaga agttttggca tgcactgggt ccgccaggct 120
ccaggcaggg gactggagtg ggtggcaatg atatattttg atggaaaaaa taaatactat 180
gcagactccg tgaggggccg attcaccatt tccagagaca attccaagaa caccctgtat 240
ctggaaatga gtagcctgag agccgaggac acggctgtat atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 418
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 418
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Phe
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Val
        35   40   45
Ala Met Ile Tyr Phe Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Glu Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Phe Cys

85 90 95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser
115

<210> 419
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 419
ggtttcacct tcagaagttt tggc 24

<210> 420
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 420
Gly Phe Thr Phe Arg Ser Phe Gly
1 5

<210> 421
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 421
atatattttg atggaaaaaa taaa 24

<210> 422
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 422
Ile Tyr Phe Asp Gly Lys Asn Lys
1 5

<210> 423
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 423
gcgcgagggc ctgggtacaa ctggctcgac ccc 33

<210> 424
<211> 11

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 424
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 425
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 425
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagtcatc 60
ctctcctgta gggccagtca gagtattagc aggaacttgg cctggtacca gcagaaacct 120
ggccaggctc ccaggctcct catctatggt gcaaccacca gggccactgg tgtcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctacagtct 240
gaagattttg cagtttttta ctgtcagcag tataataata ggcctctcac tttcggcgga 300
gggaccgagg tggagatcaa a   321

<210> 426
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 426
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Val Ile Leu Ser Cys Arg Ala Ser Gln Ser Ile Ser Arg Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Thr Thr Arg Ala Thr Gly Val Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Phe Tyr Cys Gln Gln Tyr Asn Asn Arg Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Glu Val Glu Ile Lys
            100   105

<210> 427
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 427
cagagtatta gcaggaac   18

<210> 428
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 428
Gln Ser Ile Ser Arg Asn
 1   5

<210> 429
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 429
ggtgcaacc   9

<210> 430
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 430
Gly Ala Thr
 1

<210> 431
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 431
cagcagtata ataataggcc tctcact   27

<210> 432
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 432
Gln Gln Tyr Asn Asn Arg Pro Leu Thr
 1   5

<210> 433
<211> 351
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 433
caggtgcacc tggaagagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgttcag cgtctggttt caccttcagt agttatgcca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatggtatg atggaactaa taaatattat 180

ttagattccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgttt 240
ctgcaaatga acagcctgag agccgaagac acggctgtgt attactgtgc gagagatcgg 300
ggaagtataa taacccactg gggccaggga accctggtca ccgtctcctc a 351

<210> 434
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 434
Gln Val His Leu Glu Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ser Ala Ser Gly Phe Thr Phe Ser Ser Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ala Val Ile Trp Tyr Asp Gly Thr Asn Lys Tyr Tyr Leu Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Phe
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Asp Arg Gly Ser Ile Ile Thr His Trp Gly Gln Gly Thr Leu
            100   105   110
Val Thr Val Ser Ser
        115

<210> 435
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 435
ggtttcacct tcagtagtta tgcc 24

<210> 436
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 436
Gly Phe Thr Phe Ser Ser Tyr Ala
 1   5

<210> 437
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 437
atatggtatg atggaactaa taaa 24

<210> 438
<211> 8

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 438
Ile Trp Tyr Asp Gly Thr Asn Lys
 1   5

<210> 439
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 439
gcgagagatc ggggaagtat aataacccac   30

<210> 440
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 440
Ala Arg Asp Arg Gly Ser Ile Ile Thr His
 1   5   10

<210> 441
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 441
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctataggaga cagagtcacc 60
atcacttgcc gggcaagtca gaacattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag acttacagta cccctccgat caccttcggc 300
caagggacac gactggagat taaa   324

<210> 442
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 442
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ile Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asn Ile Ser Ser Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser 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 Tyr Cys Gln Gln Thr Tyr Ser Thr Pro Pro
85 90 95
Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
100 105

<210> 443
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 443
cagaacatta gcagctat 18

<210> 444
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 444
Gln Asn Ile Ser Ser Tyr
1 5

<210> 445
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 445
gctgcatcc 9

<210> 446
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 446
Ala Ala Ser
1

<210> 447
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 447
caacagactt acagtacccc tccgatcacc 30

<210> 448

<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 448
Gln Gln Thr Tyr Ser Thr Pro Pro Ile Thr
 1   5   10

<210> 449
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 449
gaagtacagc tggtggagtc tgggggaggc ttggtacggc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccgccaagct 120
ccagggaagg gcctggagtg ggtctcagat attagttgga atagtgggac cataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag acctgaggac acggccttgt attactgtgc aaaagatatg 300
agtggctacg cccactacta ctactacggt atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca   372

<210> 450
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 450
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Arg Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Thr Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Met Ser Gly Tyr Ala His Tyr Tyr Tyr Tyr Gly Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 451
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 451
ggattcacct ttgatgatta tacc   24

<210> 452

<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 452
Gly Phe Thr Phe Asp Asp Tyr Thr
 1   5

<210> 453
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 453
attagttgga atagtgggac cata   24

<210> 454
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 454
Ile Ser Trp Asn Ser Gly Thr Ile
 1   5

<210> 455
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 455
gcaaaagata tgagtggcta cgcccactac tactactacg gtatggacgt c   51

<210> 456
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 456
Ala Lys Asp Met Ser Gly Tyr Ala His Tyr Tyr Tyr Tyr Gly Met Asp
 1   5   10   15
Val

<210> 457
<211> 324
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 457
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta cccctccgat caccttcggc 300
caagggacac gactggagat taaa 324

<210> 458
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 458
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser 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 Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro
                85   90   95
Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
            100   105

<210> 459
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 459
cagagcatta gcagctat 18

<210> 460
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 460
Gln Ser Ile Ser Ser Tyr
 1   5

<210> 461
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 461

gctgcatcc 9

<210> 462
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 462
Ala Ala Ser
 1

<210> 463
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 463
caacagagtt acagtacccc tccgatcacc 30

<210> 464
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 464
Gln Gln Ser Tyr Ser Thr Pro Pro Ile Thr
 1 5 10

<210> 465
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 465
gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctccgat attagttgga atagtggtag cataggctat 180
gcggactctg tgaagggccg attcaccgtc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag aggtgaggac acggccctgt attactgtgc aaaagatatg 300
agtggctacg cccactacgg ctactacggt atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 466
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 466
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr

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            20                  25                  30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
    50                  55                  60
Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65                  70                  75                  80
Leu Gln Met Asn Ser Leu Arg Gly Glu Asp Thr Ala Leu Tyr Tyr Cys
                85                  90                  95
Ala Lys Asp Met Ser Gly Tyr Ala His Tyr Gly Tyr Tyr Gly Met Asp
            100                 105                 110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115                 120


<210> 467
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 467
ggattcacct ttgatgatta tacc                                          24

<210> 468
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 468
Gly Phe Thr Phe Asp Asp Tyr Thr
 1               5


<210> 469
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 469
attagttgga atagtggtag cata                                          24

<210> 470
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 470
Ile Ser Trp Asn Ser Gly Ser Ile
 1               5


<210> 471
<211> 51
<212> DNA
<213> Artificial Sequence
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<220>
<223> Synthetic

<400> 471
gcaaaagata tgagtggcta cgcccactac ggctactacg gtatggacgt c 51

<210> 472
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 472
Ala Lys Asp Met Ser Gly Tyr Ala His Tyr Gly Tyr Tyr Gly Met Asp
 1 5 10 15
Val

<210> 473
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 473
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagg aactatttaa attggtatca gcagaaacca 120
gggaaagtcc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta accctccgat caccttcggc 300
caagggacac gactggagat taaa 324

<210> 474
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 474
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Arg Asn Tyr
 20 25 30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
 35 40 45
Tyr Ala Ala Ser Ser Leu Gln Ser 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 Tyr Cys Gln Gln Ser Tyr Ser Asn Pro Pro
 85 90 95
Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
 100 105

<210> 475
<211> 18
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 475
cagagcatta ggaactat 18

<210> 476
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 476
Gln Ser Ile Arg Asn Tyr
 1   5

<210> 477
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 477
gctgcatcc 9

<210> 478
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 478
Ala Ala Ser
 1

<210> 479
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 479
caacagagtt acagtaaccc tccgatcacc 30

<210> 480
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 480
Gln Gln Ser Tyr Ser Asn Pro Pro Ile Thr
 1   5   10

<210> 481
<211> 369

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 481
gaagcgcagc tggtggaatc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtacaa cctctggatt cacctttgat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg gatctctgat attagttgga atggtggaac caaaggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaaaaa ctccctgtat 240
ctgcaaatgg acagtctgag aggtgaggac acggccttat attactgtgt aaaagataaa 300
agtggctacg ggcacttcta cttcggtttg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 482
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 482
Glu Ala Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Thr Thr Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Ile
        35   40   45
Ser Asp Ile Ser Trp Asn Gly Gly Thr Lys Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asp Ser Leu Arg Gly Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Val Lys Asp Lys Ser Gly Tyr Gly His Phe Tyr Phe Gly Leu Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 483
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 483
ggattcacct ttgatgatta tacc 24

<210> 484
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 484
Gly Phe Thr Phe Asp Asp Tyr Thr
 1   5

<210> 485
<211> 24

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 485
attagttgga atggtggaac caaa 24

<210> 486
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 486
Ile Ser Trp Asn Gly Gly Thr Lys
 1 5

<210> 487
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 487
gtaaaagata aaagtggcta cgggcacttc tacttcggtt tggacgtc 48

<210> 488
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 488
Val Lys Asp Lys Ser Gly Tyr Gly His Phe Tyr Phe Gly Leu Asp Val
 1 5 10 15

<210> 489
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 489
gacatccaga tgacccagtc tccatcctcc ctgactgcgt ctgtaggaga cagagtcacc 60
ttcacttgcc gggcaagtca gagcattagc aggcatttaa gttggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tggaaagtgg ggtcccttca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaccct 240
gaagattttg caacttacta ctgtcaacag agctacagta accctccgat caccttcggc 300
caagggacac gactggagat taaa 324

<210> 490
<211> 108
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 490
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Thr Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Phe Thr Cys Arg Ala Ser Gln Ser Ile Ser Arg His
            20   25   30
Leu Ser Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Glu Ser 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 His Pro
65   70   75   80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Asn Pro Pro
                85   90   95
Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
            100   105

<210> 491
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 491
cagagcatta gcaggcat 18

<210> 492
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 492
Gln Ser Ile Ser Arg His
 1   5

<210> 493
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 493
gctgcatcc 9

<210> 494
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 494
Ala Ala Ser
 1

<210> 495

<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 495
caacagagct acagtaaccc tccgatcacc 30

<210> 496
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 496
Gln Gln Ser Tyr Ser Asn Pro Pro Ile Thr
 1   5   10

<210> 497
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 497
gaagtgcagt tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt caagtttgct gattatgcca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcagag attagttgga atagtggtag cataggttat 180
gtggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgt aaaagataaa 300
agtggctacg ggcactacta tatcggtatg gacgtctggg gccaagggac cacggtcatc 360
gtctcctcc 369

<210> 498
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 498
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Lys Phe Ala Asp Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Glu Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Val Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Val Lys Asp Lys Ser Gly Tyr Gly His Tyr Tyr Ile Gly Met Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Ile Val Ser Ser
        115   120

<210> 499

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 499
ggattcaagt ttgctgatta tgcc 24

<210> 500
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 500
Gly Phe Lys Phe Ala Asp Tyr Ala
 1 5

<210> 501
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 501
attagttgga atagtggtag cata 24

<210> 502
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 502
Ile Ser Trp Asn Ser Gly Ser Ile
 1 5

<210> 503
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 503
gtaaaagata aaagtggcta cgggcactac tatatcggta tggacgtc 48

<210> 504
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 504
Val Lys Asp Lys Ser Gly Tyr Gly His Tyr Tyr Ile Gly Met Asp Val

 1   5   10   15

<210> 505
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 505
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagtattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta cccctccgat caccttcggc 300
caagggacac gactggagat taaa   324

<210> 506
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 506
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser 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 Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro
                85   90   95
Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
            100   105

<210> 507
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 507
cagagtatta gcagctat   18

<210> 508
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 508
Gln Ser Ile Ser Ser Tyr
 1   5

<210> 509
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 509
gctgcatcc 9

<210> 510
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 510
Ala Ala Ser
 1

<210> 511
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 511
caacagagtt acagtacccc tccgatcacc 30

<210> 512
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 512
Gln Gln Ser Tyr Ser Thr Pro Pro Ile Thr
 1   5   10

<210> 513
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 513
gaagtgcacc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctccgat attagttgga atagtggtag cataggctat 180
gcggactctg tgaagggccg attcaccgtc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag aggtgaggac acggccttgt attactgtgc aaaagatatg 300
agtggctacg gccactacgg caagtacggt atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 514
<211> 124
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 514
Glu Val His Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Val Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Gly Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Met Ser Gly Tyr Gly His Tyr Gly Lys Tyr Gly Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 515
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 515
ggattcacct ttgatgatta tacc   24

<210> 516
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 516
Gly Phe Thr Phe Asp Asp Tyr Thr
 1   5

<210> 517
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 517
attagttgga atagtggtag cata   24

<210> 518
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 518

Ile Ser Trp Asn Ser Gly Ser Ile
 1   5

<210> 519
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 519
gcaaaagata tgagtggcta cggccactac ggcaagtacg gtatggacgt c   51

<210> 520
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 520
Ala Lys Asp Met Ser Gly Tyr Gly His Tyr Gly Lys Tyr Gly Met Asp
 1   5   10   15
Val

<210> 521
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 521
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagg agctatttaa attggtatca gcagaaacca 120
gggaaagtcc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcaacag tctgcaacct 240
gacgattttg caacttacta ctgtcaacag acttacagta accctccgat caccttcggc 300
caagggacac gactggagat taaa   324

<210> 522
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 522
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Arg Ser Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln 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 Gln Pro
65   70   75   80
Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Thr Tyr Ser Asn Pro Pro
                85   90   95
Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys

100 105

<210> 523
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 523
cagagcatta ggagctat 18

<210> 524
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 524
Gln Ser Ile Arg Ser Tyr
1 5

<210> 525
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 525
gctgcatcc 9

<210> 526
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 526
Ala Ala Ser
1

<210> 527
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 527
caacagactt acagtaaccc tccgatcacc 30

<210> 528
<211> 10
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 528
Gln Gln Thr Tyr Ser Asn Pro Pro Ile Thr
 1   5   10

<210> 529
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 529
gaggtgcagc tggtggagtc tgggggagac ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaatt attagttgga atggtaatac cattgactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
cttcaaatga acagtctgag agctgaggac acggccttgt attactgtgc aaaagataag 300
agtggctacg gacacttcta ctattacgtt ttggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca   372

<210> 530
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 530
Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Ile Ile Ser Trp Asn Gly Asn Thr Ile Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Lys Ser Gly Tyr Gly His Phe Tyr Tyr Tyr Val Leu Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 531
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 531
ggattcacct ttgatgatta tacc   24

<210> 532
<211> 8
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 532
Gly Phe Thr Phe Asp Asp Tyr Thr
 1   5

<210> 533
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 533
attagttgga atggtaatac catt   24

<210> 534
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 534
Ile Ser Trp Asn Gly Asn Thr Ile
 1   5

<210> 535
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 535
gcaaaagata agagtggcta cggacacttc tactattacg ttttggacgt c   51

<210> 536
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 536
Ala Lys Asp Lys Ser Gly Tyr Gly His Phe Tyr Tyr Tyr Val Leu Asp
 1   5   10   15
Val

<210> 537
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 537
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattaac aactatttaa attggtatca gcagaaacca 120

gggaaagccc ctaaactcct gatctatgct gcttccagtt tgcaaagtgg ggtcccgtca 180
aggttcagtg gcagtggttc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctctcaacag agttacagtt tcccgtggac gttcggccaa 300
gggaccaagg tggaaatcaa a 321

<210> 538
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 538
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Asn Asn Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser 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 Tyr Ser Gln Gln Ser Tyr Ser Phe Pro Trp
                85   90   95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 539
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 539
cagagcatta acaactat 18

<210> 540
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 540
Gln Ser Ile Asn Asn Tyr
 1   5

<210> 541
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 541
gctgcttcc 9

<210> 542
<211> 3
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 542
Ala Ala Ser
 1

<210> 543
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 543
caacagagtt acagtttccc gtggacg 27

<210> 544
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 544
Gln Gln Ser Tyr Ser Phe Pro Trp Thr
 1   5

<210> 545
<211> 363
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 545
caggtgcagc tggtggagtc ggggggaggc gtggtccagc ctgggaggtc cctgagaccc 60
tcctgtgcag cgtctggatt tagtttcagg gactatggca tgcactgggt ccgccaggct 120
ccaggtaagg gactagagtg gatggcacac atatggtata atggaaagaa taaatattat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctatat 240
ctgcaaatga acagcctgag acccgaggac acggctgtat attattgtgc gagagatggt 300
gtatcagcac gtggtactcc atttgactac tggggccagg gaaccctggt caccgtctcc 360
tca 363

<210> 546
<211> 121
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 546
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Pro Ser Cys Ala Ala Ser Gly Phe Ser Phe Arg Asp Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
        35   40   45
Ala His Ile Trp Tyr Asn Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Arg Asp Gly Val Ser Ala Arg Gly Thr Pro Phe Asp Tyr Trp Gly
100 105 110
Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 547
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 547
ggatttagtt tcagggacta tggc 24

<210> 548
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 548
Gly Phe Ser Phe Arg Asp Tyr Gly
1 5

<210> 549
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 549
atatggtata atggaaagaa taaa 24

<210> 550
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 550
Ile Trp Tyr Asn Gly Lys Asn Lys
1 5

<210> 551
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 551
gcgagagatg gtgtatcagc acgtggtact ccatttgact ac 42

<210> 552
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 552
Ala Arg Asp Gly Val Ser Ala Arg Gly Thr Pro Phe Asp Tyr
 1   5   10

<210> 553
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 553
gaaacgacac tcacgcagtc tccagcattc atgtcagcgg ctccaggaga caaagtcagc 60
atctcctgca ttgccagcca gtacattgat gatgatgtga actggtacca acagaaacca 120
ggagaaactg ctattttcat tattcaagaa gcttctactc tcgttcctgg aatctcacct 180
cgattcagtg gcagcgggta tggaacacat tttaccctca caattaataa catagattct 240
gaggatgctg cattttactt ctgtctccaa catgataatt tcccgtacac ttttggccag 300
gggaccaagc tggagatcaa a   321

<210> 554
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 554
Glu Thr Thr Leu Thr Gln Ser Pro Ala Phe Met Ser Ala Ala Pro Gly
 1   5   10   15
Asp Lys Val Ser Ile Ser Cys Ile Ala Ser Gln Tyr Ile Asp Asp Asp
            20   25   30
Val Asn Trp Tyr Gln Gln Lys Pro Gly Glu Thr Ala Ile Phe Ile Ile
        35   40   45
Gln Glu Ala Ser Thr Leu Val Pro Gly Ile Ser Pro Arg Phe Ser Gly
    50   55   60
Ser Gly Tyr Gly Thr His Phe Thr Leu Thr Ile Asn Asn Ile Asp Ser
65   70   75   80
Glu Asp Ala Ala Phe Tyr Phe Cys Leu Gln His Asp Asn Phe Pro Tyr
                85   90   95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 555
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 555
cagtacattg atgatgat   18

<210> 556
<211> 6

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 556
Gln Tyr Ile Asp Asp Asp
 1   5

<210> 557
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 557
gaagcttct   9

<210> 558
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 558
Glu Ala Ser
 1

<210> 559
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 559
ctccaacatg ataatttccc gtacact   27

<210> 560
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 560
Leu Gln His Asp Asn Phe Pro Tyr Thr
 1   5

<210> 561
<211> 384
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 561

caggtgcagc tggtggagtc tgggggaggc ttggtacagc ctgggggtc cctgagactc 60
tcctgtgcag cctcttattt cacctttagc agttttgcca tgaactgggt ccgccaggct 120
ccagggcagg gcctggagtg ggtctcagct attagtggta gggtctcagc tattagtggt 180
agtggtggta tcacatacta cgcagactcc gtgaagggcc ggttcatcat ctccagagac 240
aattccaaga acacgctgta tctgcaaatg agcggcctga gagccgagga cacggccgta 300
tattactgtg cgaaaggccc ctatttgact acagtcaccc cctttgacta ctggggccag 360
ggaaccctgg tcaccgtctc ctca 384

<210> 562
<211> 128
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 562
Gln 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 Tyr Phe Thr Phe Ser Ser Phe
            20   25   30
Ala Met Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
        35   40   45
Ser Ala Ile Ser Gly Arg Val Ser Ala Ile Ser Gly Ser Gly Gly Ile
    50   55   60
Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Ile Ile Ser Arg Asp
65   70   75   80
Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Ser Gly Leu Arg Ala Glu
                85   90   95
Asp Thr Ala Val Tyr Tyr Cys Ala Lys Gly Pro Tyr Leu Thr Thr Val
            100   105   110
Thr Pro Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120   125

<210> 563
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 563
tatttcacct ttagcagttt tgcc 24

<210> 564
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 564
Tyr Phe Thr Phe Ser Ser Phe Ala
 1   5

<210> 565
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 565

attagtggta gtggtggtat caca 24

<210> 566
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 566
Ile Ser Gly Ser Gly Gly Ile Thr
 1 5

<210> 567
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 567
gcgaaaggcc cctatttgac tacagtcacc ccctttgact ac 42

<210> 568
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 568
Ala Lys Gly Pro Tyr Leu Thr Thr Val Thr Pro Phe Asp Tyr
 1 5 10

<210> 569
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 569
gacatccagt tgacccagtc tccatcttcc gtgtctgcat ctgtcggaga cagagtcacc 60
atcacttgtc gggcgagtca ggggattagc agctggttag cctggtatca gcagaaacca 120
gggaaagccc ctaaactcct gatctatgct gtatccagtt tgcaaaatgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagat ttcaccctca ccatcagcag cctgcagcct 240
gaagactttg caacttacta ttgtcaacag gctaacagtt tcccattcac tttcggccct 300
gggaccaagc tggagatcaa acga 324

<210> 570
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 570
Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
 1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp
 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45
Tyr Ala Val Ser Ser Leu Gln Asn 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 Tyr Cys Gln Gln Ala Asn Ser Phe Pro Phe
85 90 95
Thr Phe Gly Pro Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 571
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 571
caggggatta gcagctgg 18

<210> 572
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 572
Gln Gly Ile Ser Ser Trp
1 5

<210> 573
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 573
gctgtatcc 9

<210> 574
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 574
Ala Val Ser
1

<210> 575
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 575
caacaggcta acagtttccc attcact 27

<210> 576
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 576
Gln Gln Ala Asn Ser Phe Pro Phe Thr
1 5

<210> 577
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 577
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgct gattatgcca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtggtag tataggttat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttat attactgtgt aaaagataat 300
agtggctacg catcctacta ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 578
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 578
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ala Asp Tyr
20 25 30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95
Val Lys Asp Asn Ser Gly Tyr Ala Ser Tyr Tyr Tyr Gly Met Asp Val
100 105 110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 579
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 579
ggattcacct ttgctgatta tgcc 24

<210> 580
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 580
Gly Phe Thr Phe Ala Asp Tyr Ala
 1 5

<210> 581
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 581
attagttgga atagtggtag tata 24

<210> 582
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 582
Ile Ser Trp Asn Ser Gly Ser Ile
 1 5

<210> 583
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 583
gtaaaagata atagtggcta cgcatcctac tactacggta tggacgtc 48

<210> 584
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 584
Val Lys Asp Asn Ser Gly Tyr Ala Ser Tyr Tyr Tyr Gly Met Asp Val
 1 5 10 15

<210> 585
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 585
gacatccagt tgacccagtc cccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctacgat gcatccaatt tggaaacagg ggtcccatca 180
aggttcagtg gaagtggatc tgggacagat tttactttca ccatcagcag cctgcagcct 240
gaagatattg caacatatta ctgtcaacag tatgataatc tcccattcac tttcggccct 300
gggaccaaag tggatatcaa acga 324

<210> 586
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 586
Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro
65   70   75   80
Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Asn Leu Pro Phe
                85   90   95
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg
            100   105

<210> 587
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 587
cagagcatta gcagctat 18

<210> 588
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 588
Gln Ser Ile Ser Ser Tyr
 1   5

<210> 589
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 589
gatgcatcc 9

<210> 590
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 590
Asp Ala Ser
 1

<210> 591
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 591
caacagtatg ataatctccc attcact 27

<210> 592
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 592
Gln Gln Tyr Asp Asn Leu Pro Phe Thr
 1   5

<210> 593
<211> 378
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 593
gaggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt aactatggca tgcactgggt ccgccaggct 120
ccaggcaaag ggctggagtg ggtgacagtt atattacatg atggaagtta taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctacat 240
ctgcaaatga acagcctgag aactgaggac acggctgtat attactgtgc gaaagggcct 300
atgtttcggg gagtccctta caaccactac tatggtatgg acgtctgggg ccaagggacc 360
acggtcaccg tctcctca 378

<210> 594
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 594
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg

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 1               5                  10                  15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
            20                  25                  30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45
Thr Val Ile Leu His Asp Gly Ser Tyr Lys Tyr Tyr Ala Asp Ser Val
    50                  55                  60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu His
65                  70                  75                  80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95
Ala Lys Gly Pro Met Phe Arg Gly Val Pro Tyr Asn His Tyr Tyr Gly
            100                 105                 110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115                 120                 125


<210> 595
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
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<400> 595
ggattcacct tcagtaacta tggc                                          24

<210> 596
<211> 8
<212> PRT
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<220>
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<400> 596
Gly Phe Thr Phe Ser Asn Tyr Gly
 1               5


<210> 597
<211> 24
<212> DNA
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<220>
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<400> 597
atattacatg atggaagtta taaa                                          24

<210> 598
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 598
Ile Leu His Asp Gly Ser Tyr Lys
 1               5


<210> 599
<211> 57
<212> DNA
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<213> Artificial Sequence

<220>
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<400> 599
gcgaaagggc ctatgtttcg gggagtccct tacaaccact actatggtat ggacgtc 57

<210> 600
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 600
Ala Lys Gly Pro Met Phe Arg Gly Val Pro Tyr Asn His Tyr Tyr Gly
 1   5   10   15
Met Asp Val

<210> 601
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
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<400> 601
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gggcatcaga aatgatttag gctggtatca gcagaaacca 120
gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtctcatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acccgtacac ttttggccag 300
gggaccaagg tggaaatcaa acga 324

<210> 602
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 602
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
            20   25   30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Ser Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Tyr
                85   90   95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
            100   105

<210> 603
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 603
cagggcatca gaaatgat 18

<210> 604
<211> 6
<212> PRT
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<220>
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<400> 604
Gln Gly Ile Arg Asn Asp
 1   5

<210> 605
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 605
gctgcatcc 9

<210> 606
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 606
Ala Ala Ser
 1

<210> 607
<211> 27
<212> DNA
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<220>
<223> Synthetic

<400> 607
ctacagcata atagttaccc gtacact 27

<210> 608
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 608
Leu Gln His Asn Ser Tyr Pro Tyr Thr
 1   5

<210> 609
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 609
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tcctgtacag cgtcaggttt ccccttcagt cgctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggaatg ggtgacattt atatggtatg atggaagtaa taaatactat 180
gcagactccg cgaagggccg attcaccatc accagagaca attccaagaa cacggtgtat 240
ctgcaaatgg acagcctgag agccgatgac acggctgttt attattgtgt gagagatcag 300
gcagctctct actattttga ctcttggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 610
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 610
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Pro Phe Ser Arg Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Thr Phe Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Ala
    50   55   60
Lys Gly Arg Phe Thr Ile Thr Arg Asp Asn Ser Lys Asn Thr Val Tyr
65   70   75   80
Leu Gln Met Asp Ser Leu Arg Ala Asp Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Val Arg Asp Gln Ala Ala Leu Tyr Tyr Phe Asp Ser Trp Gly Gln Gly
            100   105   110
Thr Leu Val Thr Val Ser Ser
        115

<210> 611
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 611
ggtttcccct tcagtcgcta tggc 24

<210> 612
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 612
Gly Phe Pro Phe Ser Arg Tyr Gly
 1   5

<210> 613

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 613
atatggtatg atggaagtaa taaa 24

<210> 614
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 614
Ile Trp Tyr Asp Gly Ser Asn Lys
 1 5

<210> 615
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 615
gtgagagatc aggcagctct ctactatttt gactct 36

<210> 616
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 616
Val Arg Asp Gln Ala Ala Leu Tyr Tyr Phe Asp Ser
 1 5 10

<210> 617
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 617
gacatccaga tgacccagtc tccatcttcc gtgtctgcat ctgtaggaga cagagtcacc 60
atcacttgtc gggcgagtca gggtattagc aggtggttag cctggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctctgct gcatccagtt tgcaaagtgg agtcccatca 180
aggttcagcg gcagtggatc tgggacagat ttcactctca ccatcagcgg cctgcagcct 240
gaagattttg caacttacta ttgtcaaaag gctaacagtt tccctttcac tttcggccct 300
gggaccaagc tggagatcaa acga 324

<210> 618
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 618
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Arg Trp
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Ser Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Gly Leu Gln Pro
65   70   75   80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Lys Ala Asn Ser Phe Pro Phe
                85   90   95
Thr Phe Gly Pro Gly Thr Lys Leu Glu Ile Lys Arg
            100   105

<210> 619
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 619
cagggtatta gcaggtgg   18

<210> 620
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 620
Gln Gly Ile Ser Arg Trp
 1   5

<210> 621
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 621
gctgcatcc   9

<210> 622
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 622
Ala Ala Ser
 1

<210> 623
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 623
caaaaggcta acagtttccc tttcact 27

<210> 624
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 624
Gln Lys Ala Asn Ser Phe Pro Phe Thr
 1   5

<210> 625
<211> 378
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 625
gaggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agttatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtgacagtt atattacatg atggaagtaa tagatactct 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctttat 240
ctgcaaatga acatcctgag agttgaggac acggctgtgt attactgtac gaaaggggct 300
atggttcggg gagtccctta caatcactac tacggcatgg acgtctgggg ccaagggacc 360
acggtcaccg tctcctca 378

<210> 626
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 626
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg 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 Gly Lys Gly Leu Glu Trp Val
        35   40   45
Thr Val Ile Leu His Asp Gly Ser Asn Arg Tyr Ser Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ile Leu Arg Val Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Thr Lys Gly Ala Met Val Arg Gly Val Pro Tyr Asn His Tyr Tyr Gly
            100   105   110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120   125

<210> 627
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 627
ggattcacct tcagtagtta tggc 24

<210> 628
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 628
Gly Phe Thr Phe Ser Ser Tyr Gly
 1 5

<210> 629
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 629
atattacatg atggaagtaa taga 24

<210> 630
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 630
Ile Leu His Asp Gly Ser Asn Arg
 1 5

<210> 631
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 631
acgaaagggg ctatggttcg gggagtccct tacaatcact actacggcat ggacgtc 57

<210> 632
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 632

Thr Lys Gly Ala Met Val Arg Gly Val Pro Tyr Asn His Tyr Tyr Gly
 1   5   10   15
Met Asp Val

<210> 633
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 633
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120
gggaaagccc ctaagcgcct aatctatgct gcatccattt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acccgtacac ttttggccag 300
gggaccaagc tggagatcaa acga   324

<210> 634
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 634
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
            20   25   30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
        35   40   45
Tyr Ala Ala Ser Ile Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Tyr
                85   90   95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg
            100   105

<210> 635
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 635
cagggcatta gaaatgat   18

<210> 636
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 636
Gln Gly Ile Arg Asn Asp

1 5

<210> 637
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 637
gctgcatcc 9

<210> 638
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 638
Ala Ala Ser
1

<210> 639
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 639
ctacagcata atagttaccc gtacact 27

<210> 640
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 640
Leu Gln His Asn Ser Tyr Pro Tyr Thr
1 5

<210> 641
<211> 378
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 641
gaggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtgacagtt atattacatg atggaagtaa tagatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctttat 240
ctgcaaatga acatcctgag agctgaggac acggctgtgt attactgtac gaaaggggct 300
atggttcggg gagtccctta caatcactac tacggcatgg acgtctgggg ccaagggacc 360
acggtcaccg tctcctca 378

<210> 642
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 642
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg 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 Gly Lys Gly Leu Glu Trp Val
        35   40   45
Thr Val Ile Leu His Asp Gly Ser Asn Arg Tyr Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ile Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Thr Lys Gly Ala Met Val Arg Gly Val Pro Tyr Asn His Tyr Tyr Gly
            100   105   110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120   125

<210> 643
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 643
ggattcacct tcagtagcta tggc   24

<210> 644
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 644
Gly Phe Thr Phe Ser Ser Tyr Gly
 1   5

<210> 645
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 645
atattacatg atggaagtaa taga   24

<210> 646
<211> 8
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 646
Ile Leu His Asp Gly Ser Asn Arg
 1   5

<210> 647
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 647
acgaaagggg ctatggttcg gggagtccct tacaatcact actacggcat ggacgtc   57

<210> 648
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 648
Thr Lys Gly Ala Met Val Arg Gly Val Pro Tyr Asn His Tyr Tyr Gly
 1   5   10   15
Met Asp Val

<210> 649
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 649
gacatcgtga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120
gggaaagccc ctaagcgcct gatctatgct gcatccaatt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acccgtacac ttttggccag 300
gggaccaagc tggagatcaa acga   324

<210> 650
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 650
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
            20   25   30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
        35   40   45
Tyr Ala Ala Ser Asn Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Tyr
85 90 95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> 651
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 651
cagggcatta gaaatgat 18

<210> 652
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 652
Gln Gly Ile Arg Asn Asp
1 5

<210> 653
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 653
gctgcatcc 9

<210> 654
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 654
Ala Ala Ser
1

<210> 655
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 655
ctacagcata atagttaccc gtacact 27

<210> 656
<211> 9
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 656
Leu Gln His Asn Ser Tyr Pro Tyr Thr
 1   5

<210> 657
<211> 378
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 657
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagact attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agctgaggac acggctgtgt tttactgtgc gaaaggggct 300
atggttcggg gagtccctta caactactac tacggtatgg acgtctgggg ccaagggacc 360
acggtcaccg tctcctca   378

<210> 658
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 658
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg 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 Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Tyr Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Phe Tyr Cys
                85   90   95
Ala Lys Gly Ala Met Val Arg Gly Val Pro Tyr Asn Tyr Tyr Tyr Gly
            100   105   110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120   125

<210> 659
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 659
ggattcacct tcagtagcta tggc   24

<210> 660
<211> 8
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 660
Gly Phe Thr Phe Ser Ser Tyr Gly
 1   5

<210> 661
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 661
atatcatatg atggaagtaa taaa   24

<210> 662
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 662
Ile Ser Tyr Asp Gly Ser Asn Lys
 1   5

<210> 663
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 663
gcgaaagggg ctatggttcg gggagtccct tacaactact actacggtat ggacgtc   57

<210> 664
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 664
Ala Lys Gly Ala Met Val Arg Gly Val Pro Tyr Asn Tyr Tyr Tyr Gly
 1   5   10   15
Met Asp Val

<210> 665
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 665
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtttca gcagaaacca 120
gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acccgtacac ttttggccag 300
gggaccaagc tggagatcaa a 321

<210> 666
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 666
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
            20   25   30
Leu Gly Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Tyr
                85   90   95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 667
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 667
cagggcatta gaaatgat 18

<210> 668
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 668
Gln Gly Ile Arg Asn Asp
 1   5

<210> 669
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 669
gctgcatcc 9

<210> 670
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 670
Ala Ala Ser
 1

<210> 671
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 671
ctacagcata atagttaccc gtacact 27

<210> 672
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 672
Leu Gln His Asn Ser Tyr Pro Tyr Thr
 1   5

<210> 673
<211> 378
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 673
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggact caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatatg atggaagtaa taaatactat 180
acagactccg tgaagggccg attcaccatc tccagagaca attctaagaa cacgctgtat 240
ctgcaaatga acagcctgag agctgaggac acggctgtgt attactgtgc gaaaggggcc 300
atggttcggg gagtccctta caactactac tacggtatgg acgtctgggg ccaagggacc 360
acggtcaccg tctcctca 378

<210> 674
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 674
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Leu Thr Phe Ser Ser Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35 40 45
Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Thr Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Lys Gly Ala Met Val Arg Gly Val Pro Tyr Asn Tyr Tyr Tyr Gly
100 105 110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120 125

<210> 675
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 675
ggactcacct tcagtagcta tggc 24

<210> 676
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 676
Gly Leu Thr Phe Ser Ser Tyr Gly
1 5

<210> 677
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 677
atatcatatg atggaagtaa taaa 24

<210> 678
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 678
Ile Ser Tyr Asp Gly Ser Asn Lys
1 5

<210> 679
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 679
gcgaaagggg ccatggttcg gggagtccct tacaactact actacggtat ggacgtc 57

<210> 680
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 680
Ala Lys Gly Ala Met Val Arg Gly Val Pro Tyr Asn Tyr Tyr Tyr Gly
 1   5   10   15
Met Asp Val

<210> 681
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 681
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120
gggaaagccc ctaagcgcct gatctatgct gcgtccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acccgtacac ttttggccag 300
gggaccaagc tggagatcaa a 321

<210> 682
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 682
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
            20   25   30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Tyr
                85   90   95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 683
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 683
cagggcatta gaaatgat 18

<210> 684
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 684
Gln Gly Ile Arg Asn Asp
 1   5

<210> 685
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 685
gctgcgtcc 9

<210> 686
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 686
Ala Ala Ser
 1

<210> 687
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 687
ctacagcata atagttaccc gtacact 27

<210> 688
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 688
Leu Gln His Asn Ser Tyr Pro Tyr Thr
 1   5

<210> 689
<211> 378
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 689
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagg agctttggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atttcatatg atggaaatta taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agctgaggac acggctgtac attactgtgc gaaaggggct 300
atggttcggg gagtccctta caacttctac tacggtatgg acgtctgggg ccaagggacc 360
acggtcaccg tctcctca 378

<210> 690
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 690
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Phe
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ala Val Ile Ser Tyr Asp Gly Asn Tyr Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val His Tyr Cys
                85   90   95
Ala Lys Gly Ala Met Val Arg Gly Val Pro Tyr Asn Phe Tyr Tyr Gly
            100   105   110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120   125

<210> 691
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 691
ggattcacct tcaggagctt tggc 24

<210> 692
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 692
Gly Phe Thr Phe Arg Ser Phe Gly
 1   5

<210> 693
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 693
atttcatatg atggaaatta taaa 24

<210> 694
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 694
Ile Ser Tyr Asp Gly Asn Tyr Lys
 1 5

<210> 695
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 695
gcgaaagggg ctatggttcg gggagtccct tacaacttct actacggtat ggacgtc 57

<210> 696
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 696
Ala Lys Gly Ala Met Val Arg Gly Val Pro Tyr Asn Phe Tyr Tyr Gly
 1 5 10 15
Met Asp Val

<210> 697
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 697
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca ggtcattaga aatgatttag gctggtatca gcagaaacca 120
gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg gatcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacag cataatagtt acccgtacac ttttggccag 300
gggaccaagc tggagatcaa a 321

<210> 698
<211> 107
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 698
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Val Ile Arg Asn Asp
            20   25   30
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Ile Pro Ser Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Tyr
                85   90   95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 699
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 699
caggtcatta gaaatgat 18

<210> 700
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 700
Gln Val Ile Arg Asn Asp
 1   5

<210> 701
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 701
gctgcatcc 9

<210> 702
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 702
Ala Ala Ser
 1

<210> 703

<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 703
ctacagcata atagttaccc gtacact 27

<210> 704
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 704
Leu Gln His Asn Ser Tyr Pro Tyr Thr
1 5

<210> 705
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 705
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccggcaagtt 120
ccaggaaagg gcctggagtg gatctcaggt attagttgga atagtggtag catggactat 180
gcggactctg tgaagggccg attcaccatc tctagagaca acgccaggaa ctccctgttt 240
ctgcaaatga acagtgtgag aactgaggac acggccttgt attactgtgc aaaagataag 300
agtggctacg gctccttcta ctacggtatg gacgtctggg gccaggggac cacggtcacc 360
gtctcctca 369

<210> 706
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 706
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30
Thr Met His Trp Val Arg Gln Val Pro Gly Lys Gly Leu Glu Trp Ile
35 40 45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Met Asp Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ser Leu Phe
65 70 75 80
Leu Gln Met Asn Ser Val Arg Thr Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95
Ala Lys Asp Lys Ser Gly Tyr Gly Ser Phe Tyr Tyr Gly Met Asp Val
100 105 110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 707

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 707
ggattcacct ttgatgatta tacc 24

<210> 708
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 708
Gly Phe Thr Phe Asp Asp Tyr Thr
 1 5

<210> 709
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 709
attagttgga atagtggtag catg 24

<210> 710
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 710
Ile Ser Trp Asn Ser Gly Ser Met
 1 5

<210> 711
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 711
gcaaaagata agagtggcta cggctccttc tactacggta tggacgtc 48

<210> 712
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 712
Ala Lys Asp Lys Ser Gly Tyr Gly Ser Phe Tyr Tyr Gly Met Asp Val

 1   5   10   15

<210> 713
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 713
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga cagagccacc 60
ctctcctgca gggccagtca gagtgtcagc agcatctact tagcctggta ccagcagaaa 120
cctggccagg ctcccaggct cctcatccat ggtgcgtcca ccagggccac tggcatccca 180
gacaggttca gtggcagtgg gtcagggaca gacttcactc tcaccatcag cagactggag 240
cctgaagatt ttgcagttta ttactgtcag cagcgtgctc actcaccgta cacttttggc 300
caggggacca agctggagat caaa   324

<210> 714
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 714
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Asp Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ile
            20   25   30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
        35   40   45
Ile His Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
    50   55   60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65   70   75   80
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Ala His Ser Pro
                85   90   95
Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 715
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 715
cagagtgtca gcagcatcta c   21

<210> 716
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 716
Gln Ser Val Ser Ser Ile Tyr
 1   5

<210> 717
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 717
ggtgcgtcc 9

<210> 718
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 718
Gly Ala Ser
 1

<210> 719
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 719
cagcagcgtg ctcactcacc gtacact 27

<210> 720
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 720
Gln Gln Arg Ala His Ser Pro Tyr Thr
 1   5

<210> 721
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 721
gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggctt cagctttgat aattatgcca tgcactgggt ccggcaagct 120
ccaggacagg gcctggagtg ggtctcaggt attagttgga atagtggtag cagagactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca atgccaggaa ctccctgttt 240
ctgcaaatga acagtctgag taatgaggac acggccatgt attactgcgc aaaagataag 300
agtggctacg gctcctactt ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 722
<211> 123
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 722
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Asp Asn Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Arg Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ser Leu Phe
65   70   75   80
Leu Gln Met Asn Ser Leu Ser Asn Glu Asp Thr Ala Met Tyr Tyr Cys
                85   90   95
Ala Lys Asp Lys Ser Gly Tyr Gly Ser Tyr Phe Tyr Gly Met Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 723
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 723
ggcttcagct ttgataatta tgcc   24

<210> 724
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 724
Gly Phe Ser Phe Asp Asn Tyr Ala
 1   5

<210> 725
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 725
attagttgga atagtggtag caga   24

<210> 726
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 726

Ile Ser Trp Asn Ser Gly Ser Arg
 1   5

<210> 727
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 727
gcaaaagata agagtggcta cggctcctac ttctacggta tggacgtc 48

<210> 728
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 728
Ala Lys Asp Lys Ser Gly Tyr Gly Ser Tyr Phe Tyr Gly Met Asp Val
 1   5   10   15

<210> 729
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 729
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga cagagccacc 60
ctctcctgca gggccagtca gagtattaga aacatctatt tagcctggta ccagcagaaa 120
cctggccagg ctcccaggct cctcatccat ggtgcgtcca ccagggccac tggcatccca 180
gacaggttca gtggcagtgg gtcagggaca gacttcactc tcaccatcag cagactggag 240
cctgaagatt ttgcagttta ttactgtcag cagcgtgtta gtttaccgta cacttttggc 300
caggggacca agctggagat caaa 324

<210> 730
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 730
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Asp Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Arg Asn Ile
            20   25   30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
        35   40   45
Ile His Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
    50   55   60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65   70   75   80
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Val Ser Leu Pro
                85   90   95
Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 731
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 731
cagagtatta gaaacatcta t 21

<210> 732
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 732
Gln Ser Ile Arg Asn Ile Tyr
 1 5

<210> 733
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 733
ggtgcgtcc 9

<210> 734
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 734
Gly Ala Ser
 1

<210> 735
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 735
cagcagcgtg ttagtttacc gtacact 27

<210> 736
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 736
Gln Gln Arg Val Ser Leu Pro Tyr Thr
 1   5

<210> 737
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 737
caggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggctt cagctttgat gattatgcca tgcactgggt ccggcaagct 120
ccaggacagg gcctggagtg ggtctcaggt attagttgga atggtggtag cagagactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaggaa ctccctgttt 240
ctgcaaatga acagtctgtt tactgaggac acggccttgt attactgtgc aaaagataag 300
agtggctacg gctcctactt ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca   369

<210> 738
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 738
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Asp Asp Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Gly Gly Ser Arg Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ser Leu Phe
65   70   75   80
Leu Gln Met Asn Ser Leu Phe Thr Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Lys Ser Gly Tyr Gly Ser Tyr Phe Tyr Gly Met Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 739
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 739
ggcttcagct ttgatgatta tgcc   24

<210> 740
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 740
Gly Phe Ser Phe Asp Asp Tyr Ala
 1   5

<210> 741
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 741
attagttgga atggtggtag caga   24

<210> 742
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 742
Ile Ser Trp Asn Gly Gly Ser Arg
 1   5

<210> 743
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 743
gcaaaagata agagtggcta cggctcctac ttctacggta tggacgtc   48

<210> 744
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 744
Ala Lys Asp Lys Ser Gly Tyr Gly Ser Tyr Phe Tyr Gly Met Asp Val
 1   5   10   15

<210> 745
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 745
gaaattgtgt tgacgcagtc tccaggcatt ctgtctttgt ctccagggga cagagccacc 60
ctctcctgca gggccagtca gagtattaga aacatctatt tagcctggta ccagcagaaa 120
cctggccagg ctcccaggct cctcatccat ggtgcgtcca ccagggccac tggcatccca 180
gacaggttca gtggcagtgg gtcagggaca gacttcactc tcaccatcag cagactggag 240
cctgaagatt ttgcagttta ttactgtcag cagcgtgtta gttcaccgta cacttttggc 300
caggggacca agctggagat caaa   324

<210> 746
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 746
Glu Ile Val Leu Thr Gln Ser Pro Gly Ile Leu Ser Leu Ser Pro Gly
 1   5   10   15
Asp Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Arg Asn Ile
            20   25   30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
        35   40   45
Ile His Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
    50   55   60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65   70   75   80
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Val Ser Ser Pro
                85   90   95
Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 747
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 747
cagagtatta gaaacatcta t   21

<210> 748
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 748
Gln Ser Ile Arg Asn Ile Tyr
 1   5

<210> 749
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 749
ggtgcgtcc   9

<210> 750
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 750
Gly Ala Ser
 1

<210> 751
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 751
cagcagcgtg ttagttcacc gtacact 27

<210> 752
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 752
Gln Gln Arg Val Ser Ser Pro Tyr Thr
 1   5

<210> 753
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 753
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatgcca tgcactgggt ccggcaagct 120
ccaggaaagg gcctggagtg ggtctcaggt attagttgga atagtggtag cagagactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaggaa ctccctgttt 240
ctgcaaatga acagtctgag tactgaggac acggccttgt attactgtgc aaaagataag 300
agtggctacg gctcctacta ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 754
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 754
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Arg Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ser Leu Phe
65   70   75   80
Leu Gln Met Asn Ser Leu Ser Thr Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95

Ala Lys Asp Lys Ser Gly Tyr Gly Ser Tyr Tyr Tyr Gly Met Asp Val
100 105 110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 755
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 755
ggattcacct ttgatgatta tgcc 24

<210> 756
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 756
Gly Phe Thr Phe Asp Asp Tyr Ala
1 5

<210> 757
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 757
attagttgga atagtggtag caga 24

<210> 758
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 758
Ile Ser Trp Asn Ser Gly Ser Arg
1 5

<210> 759
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 759
gcaaaagata gagtggcta cggctcctac tactacggta tggacgtc 48

<210> 760
<211> 16
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 760
Ala Lys Asp Lys Ser Gly Tyr Gly Ser Tyr Tyr Tyr Gly Met Asp Val
 1   5   10   15

<210> 761
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 761
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga cagagccacc 60
ctctcctgca gggccagtca gagtattaga agcatctact tagcctggta ccagcagaaa 120
cctggccagg ctcccaggct cctcatccat ggtgcgtcca ccagggccac tggcatccca 180
gacaggttca gtggcagtgg gtcagggaca gacttcactc tcaccatcag cagactggag 240
cctgaagatt ttgcagttta ttactgtcag cagcgtgtta gctcaccgta cacttttggc 300
caggggacca agctggagat caaa   324

<210> 762
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 762
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Asp Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Arg Ser Ile
            20   25   30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
        35   40   45
Ile His Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
    50   55   60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65   70   75   80
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Val Ser Ser Pro
                85   90   95
Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 763
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 763
cagagtatta gaagcatcta c   21

<210> 764
<211> 7
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 764
Gln Ser Ile Arg Ser Ile Tyr
 1   5

<210> 765
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 765
ggtgcgtcc   9

<210> 766
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 766
Gly Ala Ser
 1

<210> 767
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 767
cagcagcgtg ttagctcacc gtacact   27

<210> 768
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 768
Gln Gln Arg Val Ser Ser Pro Tyr Thr
 1   5

<210> 769
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 769
gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgtag cctctggatt cacctttgct gattttacca tgcactgggt ccggcaagcg 120
ccagggaagg gccttgagtg ggtctcaggt attagttgga atagtaatag tatagactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa atccctgttt 240

ctgcaaatgt ccagtctgag agctgaggac acggccttat attactgtgt caaagacaga 300
agcggatata gcagattcta ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 770
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 770
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe Ala Asp Phe
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Asn Ser Ile Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Phe
65   70   75   80
Leu Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Val Lys Asp Arg Ser Gly Tyr Ser Arg Phe Tyr Tyr Gly Met Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 771
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 771
ggattcacct ttgctgattt tacc 24

<210> 772
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 772
Gly Phe Thr Phe Ala Asp Phe Thr
 1   5

<210> 773
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 773
attagttgga atagtaatag tata 24

<210> 774
<211> 8

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 774
Ile Ser Trp Asn Ser Asn Ser Ile
 1   5

<210> 775
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 775
gtcaaagaca gaagcggata tagcagattc tactacggta tggacgtc   48

<210> 776
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 776
Val Lys Asp Arg Ser Gly Tyr Ser Arg Phe Tyr Tyr Gly Met Asp Val
 1   5   10   15

<210> 777
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 777
gaaattgtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccatc 60
ctctcctgca gggccagtca gaatattaat agcaacttgg cctggtacca gcagaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tgtcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatccgcag cctgcaatct 240
gaagattttg cagtttatta ctgtcaacaa tattataatt ggccgatcac tttcggccac 300
gggacacgac tggagattaa a   321

<210> 778
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 778
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Ile Leu Ser Cys Arg Ala Ser Gln Asn Ile Asn Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Val Pro Ala Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Arg Ser Leu Gln Ser
65 70 75 80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Asn Trp Pro Ile
85 90 95
Thr Phe Gly His Gly Thr Arg Leu Glu Ile Lys
100 105

<210> 779
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 779
cagaatatta atagcaac 18

<210> 780
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 780
Gln Asn Ile Asn Ser Asn
1 5

<210> 781
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 781
ggtgcatcc 9

<210> 782
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 782
Gly Ala Ser
1

<210> 783
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 783
caacaatatt ataattggcc gatcact 27

<210> 784

<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 784
Gln Gln Tyr Tyr Asn Trp Pro Ile Thr
 1   5

<210> 785
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 785
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatgcca tgcactgggt ccggcaagct 120
ccaggaaagg gcctggagtg ggtctcaggt attagttgga atggtggtag taaagactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acaccaggaa ctccctgtct 240
ctgcaaatga acagtctgag aattgaagac acggccttat attactgtgc aaaagataag 300
agtggctacg gctccttcta ctacggtttg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca   369

<210> 786
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 786
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Gly Gly Ser Lys Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Arg Asn Ser Leu Ser
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ile Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Lys Ser Gly Tyr Gly Ser Phe Tyr Tyr Gly Leu Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 787
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 787
ggattcacct ttgatgatta tgcc   24

<210> 788

<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 788
Gly Phe Thr Phe Asp Asp Tyr Ala
 1   5

<210> 789
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 789
attagttgga atggtggtag taaa   24

<210> 790
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 790
Ile Ser Trp Asn Gly Gly Ser Lys
 1   5

<210> 791
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 791
gcaaaagata agagtggcta cggctccttc tactacggtt tggacgtc   48

<210> 792
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 792
Ala Lys Asp Lys Ser Gly Tyr Gly Ser Phe Tyr Tyr Gly Leu Asp Val
 1   5   10   15

<210> 793
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 793
gaaatagtgt tgacacagtc tccaggcacc ctgtctttgt ctccagggga cagagccacc 60
ctctcctgca gggccagtca gagtattaga agcatctact tagcctggta ccagcagaaa 120
cctggccagg ctcccaggct cctcatccat ggtgcgtcca ccagggccac tggcatccca 180
gacaggttca gtggcagtgg gtcagggaca gacttcactc tcaccatcag cagactggag 240
cctgaagatt ttgcagttta ttactgtcag cagcgtgtta gctcaccgta cacttttggc 300
caggggacca agctggagat caaa 324

<210> 794
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 794
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Asp Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Arg Ser Ile
            20   25   30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
        35   40   45
Ile His Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
    50   55   60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65   70   75   80
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Val Ser Ser Pro
                85   90   95
Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 795
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 795
cagagtatta gaagcatcta c 21

<210> 796
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 796
Gln Ser Ile Arg Ser Ile Tyr
 1   5

<210> 797
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 797
ggtgcgtcc 9

<210> 798
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 798
Gly Ala Ser
 1

<210> 799
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 799
cagcagcgtg ttagctcacc gtacact 27

<210> 800
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 800
Gln Gln Arg Val Ser Ser Pro Tyr Thr
 1   5

<210> 801
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 801
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gatttcacca tgcactgggt ccggcaagct 120
ccaggaaagg gcctggagtg ggtctcagat attagttgga atagtggtag catagactat 180
gcggactctg tgaagggccg attcaccatt tccagagaca atgccaggaa ctccctgttt 240
ctacaaatga gcagtctgag aactgaggac acggcctcgt attactgtat aaaagataag 300
agtggctacg gctcctacaa ctacggtctg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 802
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 802
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Phe
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35 40 45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Ile Asp Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ser Leu Phe
65 70 75 80
Leu Gln Met Ser Ser Leu Arg Thr Glu Asp Thr Ala Ser Tyr Tyr Cys
85 90 95
Ile Lys Asp Lys Ser Gly Tyr Gly Ser Tyr Asn Tyr Gly Leu Asp Val
100 105 110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 803
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 803
ggattcacct ttgatgattt cacc 24

<210> 804
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 804
Gly Phe Thr Phe Asp Asp Phe Thr
1 5

<210> 805
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 805
attagttgga atagtggtag cata 24

<210> 806
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 806
Ile Ser Trp Asn Ser Gly Ser Ile
1 5

<210> 807
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 807
ataaaagata agagtggcta cggctcctac aactacggtc tggacgtc 48

<210> 808
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 808
Ile Lys Asp Lys Ser Gly Tyr Gly Ser Tyr Asn Tyr Gly Leu Asp Val
 1   5   10   15

<210> 809
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 809
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga cagagccacc 60
ctctcctgca gggccagtca gagtgttagc agcatctact tagcctggta ccagcagaaa 120
cctggccagg ctcccaggct cctcatccat ggtgcgtcca ccagggccac tggcatccca 180
gacaggttca gtggcagtgg gtcggggaca gacttcactc tcaccatcag cagactggag 240
cctgaagatt ttgcacttta ttactgtcac cagcgtgtta gttcaccgta cacttttggc 300
caggggacca agctggagat caaa 324

<210> 810
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 810
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1   5   10   15
Asp Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ile
            20   25   30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
        35   40   45
Ile His Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
    50   55   60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65   70   75   80
Pro Glu Asp Phe Ala Leu Tyr Tyr Cys His Gln Arg Val Ser Ser Pro
                85   90   95
Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 811
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 811
cagagtgtta gcagcatcta c 21

<210> 812
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 812
Gln Ser Val Ser Ser Ile Tyr
 1   5

<210> 813
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 813
ggtgcgtcc   9

<210> 814
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 814
Gly Ala Ser
 1

<210> 815
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 815
caccagcgtg ttagttcacc gtacact   27

<210> 816
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 816
His Gln Arg Val Ser Ser Pro Tyr Thr
 1   5

<210> 817
<211> 369
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 817
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatgcca tgcactgggt ccggcaagct 120
ccaggaaagg gcctggagtg ggtctcaggt attagttgga atagtggtag taaagactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acaccaggaa ctccctgttt 240
ctgcaaatga acagtctgag aactgaagac acggccttat attactgtgc aaaagataag 300
agtggctacg gctccttcta ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 818
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 818
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Lys Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Arg Asn Ser Leu Phe
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Lys Ser Gly Tyr Gly Ser Phe Tyr Tyr Gly Met Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 819
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 819
ggattcacct ttgatgatta tgcc 24

<210> 820
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 820
Gly Phe Thr Phe Asp Asp Tyr Ala
 1   5

<210> 821
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 821
attagttgga atagtggtag taaa 24

<210> 822
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 822
Ile Ser Trp Asn Ser Gly Ser Lys
 1 5

<210> 823
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 823
gcaaaagata agagtggcta cggctccttc tactacggta tggacgtc 48

<210> 824
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 824
Ala Lys Asp Lys Ser Gly Tyr Gly Ser Phe Tyr Tyr Gly Met Asp Val
 1 5 10 15

<210> 825
<211> 318
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 825
gacatccaga tgacccagtc tccttccacc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggccagtca gagtattagt agctggttgg cctggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctataag gcgtctagtt tagaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca ccatcagcag cctgcagcct 240
gatgattttg caacttatta ctgccaacag tataatagtt attctccgtt cggccaaggg 300
accaaggtgg aaatcaaa 318

<210> 826
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 826
Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly

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 1               5                  10                  15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Trp
            20                  25                  30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35                  40                  45
Tyr Lys Ala Ser Ser Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80
Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Asn Ser Tyr Ser Pro
                85                  90                  95
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100                 105
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<210> 827
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 827
cagagtatta gtagctgg 18

<210> 828
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 828
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Gln Ser Ile Ser Ser Trp
 1               5
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<210> 829
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 829
aaggcgtct 9

<210> 830
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 830
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Lys Ala Ser
 1
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<210> 831
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 831
caacagtata atagttattc tccg 24

<210> 832
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 832
Gln Gln Tyr Asn Ser Tyr Ser Pro
 1   5

<210> 833
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 833
caggtgcaac tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggact caccttcagt acctatgtca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggcgtg ggtggcagtt atagcaaatg atggaagtaa taaatattat 180
gcagactccg tgaagggccg attcaccatc tccagagaca actccaagaa cacgctgtat 240
ctgcaaatga atagcctgag acctgaggac acggctgtgt atttttgtgc gaaagagggg 300
ggtaccagtg ggtcctacta ttactatgga atggacgtct ggggtcaagg gactacggtc 360
accgtctcct ca 372

<210> 834
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 834
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Leu Thr Phe Ser Thr Tyr
            20   25   30
Val Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Ala Trp Val
        35   40   45
Ala Val Ile Ala Asn Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Lys Glu Gly Gly Thr Ser Gly Ser Tyr Tyr Tyr Tyr Gly Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 835
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 835
ggactcacct tcagtaccta tgtc 24

<210> 836
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 836
Gly Leu Thr Phe Ser Thr Tyr Val
1 5

<210> 837
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 837
atagcaaatg atggaagtaa taaa 24

<210> 838
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 838
Ile Ala Asn Asp Gly Ser Asn Lys
1 5

<210> 839
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 839
gcgaaagagg ggggtaccag tgggtcctac tattactatg gaatggacgt c 51

<210> 840
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 840
Ala Lys Glu Gly Gly Thr Ser Gly Ser Tyr Tyr Tyr Tyr Gly Met Asp
1 5 10 15
Val

<210> 841
<211> 342
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 841
gacatccaga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
atcaactgca agtccagcca gagtctttta ttcaactcca tcaataagaa ctacttagct 120
tggtaccagc agaaaccagg acagcctcct aagcttctcc tttactgggc atctacccgg 180
gaatccggga tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcaccagcc tgcaggctga agatgtggca ctttattact gtcagcaata ttatagtatt 300
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac ga 342

<210> 842
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 842
Asp Ile Gln 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 Phe Asn
            20   25   30
Ser Ile Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
        35   40   45
Pro Pro Lys Leu Leu Leu Tyr Trp Ala Ser Thr Arg Glu Ser Gly Ile
    50   55   60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65   70   75   80
Ile Thr Ser Leu Gln Ala Glu Asp Val Ala Leu Tyr Tyr Cys Gln Gln
                85   90   95
Tyr Tyr Ser Ile Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
            100   105   110
Lys Arg

<210> 843
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 843
cagagtcttt tattcaactc catcaataag aactac 36

<210> 844
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 844
Gln Ser Leu Leu Phe Asn Ser Ile Asn Lys Asn Tyr
 1   5   10

<210> 845
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 845
tgggcatct 9

<210> 846
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 846
Trp Ala Ser
 1

<210> 847
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 847
cagcaatatt atagtattcc gtggacg 27

<210> 848
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 848
Gln Gln Tyr Tyr Ser Ile Pro Trp Thr
 1   5

<210> 849
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 849
caggtgcagc tggtggagtc tggggctgaa gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaaga cttctggata caccttcacc ggctactata tgcactggat acgacaggcc 120
cctggacaag ggcttgagtg gatgggatgg atcaacccta aaagtggtgg cacaaattat 180
gcacagaagt ttcagggcag ggtcaccatg accagggaca cgtccatcag cacagcctac 240
atggaactga gcaggctgag atccgacgac atggccgtgt attattgtgc gagaatgggg 300
gacggtgcag tgtttgactt ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 850
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 850
Gln Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Gly Tyr
            20   25   30
Tyr Met His Trp Ile Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Trp Ile Asn Pro Lys Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
    50   55   60
Gln 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 Met Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Met Gly Asp Gly Ala Val Phe Asp Phe Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 851
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 851
ggatacacct tcaccggcta ctat   24

<210> 852
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 852
Gly Tyr Thr Phe Thr Gly Tyr Tyr
 1   5

<210> 853
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 853
atcaacccta aaagtggtgg caca   24

<210> 854
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 854
Ile Asn Pro Lys Ser Gly Gly Thr

 1   5

<210> 855
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 855
gcgagaatgg gggacggtgc agtgtttgac ttc   33

<210> 856
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 856
Ala Arg Met Gly Asp Gly Ala Val Phe Asp Phe
 1   5   10

<210> 857
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 857
gccatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gaggattagc agcttttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatact gcatccaatt tacaaaatgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ctatcagcag tctgcaacct 240
gaagattttg ctacttacta ctgtcaacag agttacagga ccccgctcac tttcggcgga 300
gggaccaagg tggaaatcaa acga   324

<210> 858
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 858
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 Arg Ala Ser Gln Arg Ile Ser Ser Phe
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Thr Ala Ser Asn Leu Gln Asn 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 Tyr Cys Gln Gln Ser Tyr Arg Thr Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
            100   105

<210> 859
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 859
cagaggatta gcagcttt 18

<210> 860
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 860
Gln Arg Ile Ser Ser Phe
 1   5

<210> 861
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 861
actgcatcc 9

<210> 862
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 862
Thr Ala Ser
 1

<210> 863
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 863
caacagagtt acaggacccc gctcact 27

<210> 864
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 864

Gln Gln Ser Tyr Arg Thr Pro Leu Thr
 1   5

<210> 865
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 865
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga acagtggtag cataggctat 180
gcggactctg tgaagggccg attcaccatt tccagagaca acgccaagaa ctccctgtat 240
ttgcaaatga acagtctgag agctgaggac acggccttgt tttactgtgc aaaagatcaa 300
agtggttacg gccactacta ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca   369

<210> 866
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 866
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Phe Tyr Cys
                85   90   95
Ala Lys Asp Gln Ser Gly Tyr Gly His Tyr Tyr Tyr Gly Met Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 867
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 867
ggattcacct ttgatgatta tacc   24

<210> 868
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 868

Gly Phe Thr Phe Asp Asp Tyr Thr
 1   5

<210> 869
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 869
attagttgga acagtggtag cata   24

<210> 870
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 870
Ile Ser Trp Asn Ser Gly Ser Ile
 1   5

<210> 871
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 871
gcaaaagatc aaagtggtta cggccactac tactacggta tggacgtc   48

<210> 872
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 872
Ala Lys Asp Gln Ser Gly Tyr Gly His Tyr Tyr Tyr Gly Met Asp Val
 1   5   10   15

<210> 873
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 873
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgta gggccagtca gagtgttagc agcaacttag cctggtacca gcagaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactga tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatca ctgtcagcag tataataact ggccgctcac tttcggcgga 300
gggaccaagg tggagatcaa a   321

<210> 874
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 874
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Asp Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr His Cys Gln Gln Tyr Asn Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 875
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 875
cagagtgtta gcagcaac   18

<210> 876
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 876
Gln Ser Val Ser Ser Asn
 1   5

<210> 877
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 877
ggtgcatcc   9

<210> 878
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 878
Gly Ala Ser
 1

<210> 879
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 879
cagcagtata ataactggcc gctcact 27

<210> 880
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 880
Gln Gln Tyr Asn Asn Trp Pro Leu Thr
 1   5

<210> 881
<211> 387
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 881
gaggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt tactatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcagtt atatcatttg atggaaagaa taaatattat 180
gcagactccg tgatgggccg attcaccatc tccagagaca attccaagaa tacactgtat 240
ctgcaaatga acagcctgag agctgaggac tcggctgtgt ttttctgtgc gaggtcttac 300
gacattttga ctggttatgg agccggttac agctaccact acggtatgga cgtctggggc 360
caagggacca cggtcaccgt ctcctca 387

<210> 882
<211> 129
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 882
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Tyr Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ala Val Ile Ser Phe Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Met Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Ser Ala Val Phe Phe Cys
                85   90   95
Ala Arg Ser Tyr Asp Ile Leu Thr Gly Tyr Gly Ala Gly Tyr Ser Tyr

100 105 110
His Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser
115 120 125
Ser

<210> 883
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 883
ggattcacct tcagttacta tggc 24

<210> 884
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 884
Gly Phe Thr Phe Ser Tyr Tyr Gly
1 5

<210> 885
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 885
atatcatttg atggaaagaa taaa 24

<210> 886
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 886
Ile Ser Phe Asp Gly Lys Asn Lys
1 5

<210> 887
<211> 66
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 887
gcgaggtctt acgacatttt gactggttat ggagccggtt acagctacca ctacggtatg 60
gacgtc 66

<210> 888

<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 888
Ala Arg Ser Tyr Asp Ile Leu Thr Gly Tyr Gly Ala Gly Tyr Ser Tyr
 1   5   10   15
His Tyr Gly Met Asp Val
            20

<210> 889
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 889
gccatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gaggattagc agcttttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct aatctatact gcatccaatt tacaaaatgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagga ccccgctcac tttcggcgga 300
gggaccaagg tggagatcaa acga   324

<210> 890
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 890
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 Arg Ala Ser Gln Arg Ile Ser Ser Phe
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Thr Ala Ser Asn Leu Gln Asn 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 Tyr Cys Gln Gln Ser Tyr Arg Thr Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
            100   105

<210> 891
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 891
cagaggatta gcagcttt   18

<210> 892
<211> 6

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 892
Gln Arg Ile Ser Ser Phe
 1   5

<210> 893
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 893
actgcatcc   9

<210> 894
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 894
Thr Ala Ser
 1

<210> 895
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 895
caacagagtt acaggacccc gctcact   27

<210> 896
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 896
Gln Gln Ser Tyr Arg Thr Pro Leu Thr
 1   5

<210> 897
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 897

caggtgcagc tggtggagtc tggggctgaa gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaaga cttctggata caccctctcc ggctattata tgcactggat gcgacaggcc 120
cctggacaag ggcttgagtg gatgggatgg attaacccta aaagtggtgt cacaaattat 180
gcacagaagt ttcaggacag agtcgccatg accagggaca cgtccatcag cacagcctac 240
atggaactga gcaggctgag atctgacgac acggccgtgt attactgtgc gagaatgggg 300
gacggtgcag tgtttgactt ctgggcccag ggaaccctgg tcaccgtctc ctca 354

<210> 898
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 898
Gln Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Leu Ser Gly Tyr
            20   25   30
Tyr Met His Trp Met Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Trp Ile Asn Pro Lys Ser Gly Val Thr Asn Tyr Ala Gln Lys Phe
    50   55   60
Gln Asp Arg Val Ala 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 Met Gly Asp Gly Ala Val Phe Asp Phe Trp Ala Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 899
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 899
ggatacaccc tctccggcta ttat 24

<210> 900
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 900
Gly Tyr Thr Leu Ser Gly Tyr Tyr
 1   5

<210> 901
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 901
attaacccta aaagtggtgt caca 24

<210> 902
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 902
Ile Asn Pro Lys Ser Gly Val Thr
 1   5

<210> 903
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 903
gcgagaatgg gggacggtgc agtgtttgac ttc   33

<210> 904
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 904
Ala Arg Met Gly Asp Gly Ala Val Phe Asp Phe
 1   5   10

<210> 905
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 905
gacatccagt tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gaggattagc agcttttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct aatctatact gcatccaatt tacaaaatgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagga ccccgctcac tttcggcgga 300
gggaccaagc tggagatcaa acga   324

<210> 906
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 906
Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Ile Ser Ser Phe
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile

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        35                  40                  45
Tyr Thr Ala Ser Asn Leu Gln Asn 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 Tyr Cys Gln Gln Ser Tyr Arg Thr Pro Leu
                85                  90                  95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100                 105


<210> 907
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 907
cagaggatta gcagcttt                                                  18

<210> 908
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 908
Gln Arg Ile Ser Ser Phe
 1               5


<210> 909
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 909
actgcatcc                                                            9

<210> 910
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 910
Thr Ala Ser
 1


<210> 911
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 911
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caacagagtt acaggacccc gctcact 27

<210> 912
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 912
Gln Gln Ser Tyr Arg Thr Pro Leu Thr
 1   5

<210> 913
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 913
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agctatggca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtgtcaact atatcatttg atggaagtaa caaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag acctgaggac acggctgtgt attactgtgc gaaaggggag 300
ggtaccagtg ggtcctactt ttactacggt atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 914
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 914
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg 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 Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Thr Ile Ser Phe Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Lys Gly Gly Gly Thr Ser Gly Ser Tyr Phe Tyr Tyr Gly Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 915
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 915

ggattcacct tcagtagcta tggc 24

<210> 916
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 916
Gly Phe Thr Phe Ser Ser Tyr Gly
 1 5

<210> 917
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 917
atatcatttg atggaagtaa caaa 24

<210> 918
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 918
Ile Ser Phe Asp Gly Ser Asn Lys
 1 5

<210> 919
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 919
gcgaaagggg ggggtaccag tgggtcctac ttttactacg gtatggacgt c 51

<210> 920
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 920
Ala Lys Gly Gly Gly Thr Ser Gly Ser Tyr Phe Tyr Tyr Gly Met Asp
 1 5 10 15
Val

<210> 921
<211> 324
<212> DNA

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 921
gccatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gaggattagc agcttttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct aatctatact gcatccaatt tacaaaatgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagga ccccgctcac tttcggcgga 300
gggaccaagc tggagatcaa acga 324

<210> 922
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 922
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 Arg Ala Ser Gln Arg Ile Ser Ser Phe
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Thr Ala Ser Asn Leu Gln Asn 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 Tyr Cys Gln Gln Ser Tyr Arg Thr Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100   105

<210> 923
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 923
cagaggatta gcagcttt 18

<210> 924
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 924
Gln Arg Ile Ser Ser Phe
 1   5

<210> 925
<211> 9
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 925
actgcatcc 9

<210> 926
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 926
Thr Ala Ser
 1

<210> 927
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 927
caacagagtt acaggacccc gctcact 27

<210> 928
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 928
Gln Gln Ser Tyr Arg Thr Pro Leu Thr
 1   5

<210> 929
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 929
caggttcagc tggtgcagtc tgggactgag gtgaagaagc ctggggcctc aatgaaggtc 60
tcctgcaagg cttctggata caccttcacc ggctactata ttcactgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggatgg atcaacccta acagtgatgt cacaaagtat 180
gcacagaagt ttcagggcag ggtcaccttg accagggaca cgtccatcag tgcagcctat 240
attgacctga gcaggctgag atctgacgac acggccattt attactgtgc gagaatgggg 300
gacggtgcag tgtttgacta ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 930
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 930
Gln Val Gln Leu Val Gln Ser Gly Thr Glu Val Lys Lys Pro Gly Ala

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


<210> 931
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 931
ggatacacct tcaccggcta ctat                                          24

<210> 932
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 932
Gly Tyr Thr Phe Thr Gly Tyr Tyr
 1               5


<210> 933
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 933
atcaacccta acagtgatgt caca                                          24

<210> 934
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 934
Ile Asn Pro Asn Ser Asp Val Thr
 1               5


<210> 935
<211> 33
<212> DNA
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<213> Artificial Sequence

<220>
<223> Synthetic

<400> 935
gcgagaatgg gggacggtgc agtgtttgac tac 33

<210> 936
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 936
Ala Arg Met Gly Asp Gly Ala Val Phe Asp Tyr
 1 5 10

<210> 937
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 937
gacatccagt tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca acgcattagc agctatttaa attggtatca acagaaacca 120
gggaaagccc ctaaggtgct gatctctgtt gcatccagtt tacaaagtgg ggtcccatca 180
aggttcagtg gcagtggatt tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaggattctg catcttacta ctgtcaacag agttacaata ccccgctcac tttcggcggc 300
gggaccaagc tggagatcaa acga 324

<210> 938
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 938
Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Ile Ser Ser Tyr
            20 25 30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile
        35 40 45
Ser Val Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50 55 60
Ser Gly Phe Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Ser Ala Ser Tyr Tyr Cys Gln Gln Ser Tyr Asn Thr Pro Leu
                85 90 95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
            100 105

<210> 939
<211> 18
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 939
caacgcatta gcagctat 18

<210> 940
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 940
Gln Arg Ile Ser Ser Tyr
 1   5

<210> 941
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 941
gttgcatcc 9

<210> 942
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 942
Val Ala Ser
 1

<210> 943
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 943
caacagagtt acaatacccc gctcact 27

<210> 944
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 944
Gln Gln Ser Tyr Asn Thr Pro Leu Thr
 1   5

<210> 945
<211> 354

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 945
gaggtgcagc tggtggagtc tggggctgaa gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaaga cttctggata cagtttcatt ggctattata tacactggat gcgacaggcc 120
cctggacaag ggcttgaatg gatgggatgg atcaacccta agagtggtgt cacaaattat 180
gcacagaggt ttcagggcag ggtcaccatg accagggaca cgtccatcag tactgcctac 240
atggaactga gcaggctgaa atctgacgac acggccgtgt atttctgtgc gagaatgggg 300
gacggtgcag tgtttgactt ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 946
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 946
Glu Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Ser Phe Ile Gly Tyr
            20   25   30
Tyr Ile His Trp Met Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Trp Ile Asn Pro Lys Ser Gly Val Thr Asn Tyr Ala Gln Arg Phe
    50   55   60
Gln 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 Lys Ser Asp Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Arg Met Gly Asp Gly Ala Val Phe Asp Phe Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 947
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 947
ggatacagtt tcattggcta ttat 24

<210> 948
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 948
Gly Tyr Ser Phe Ile Gly Tyr Tyr
 1   5

<210> 949
<211> 24
<212> DNA

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 949
atcaacccta agagtggtgt caca 24

<210> 950
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 950
Ile Asn Pro Lys Ser Gly Val Thr
 1 5

<210> 951
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 951
gcgagaatgg gggacggtgc agtgtttgac ttc 33

<210> 952
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 952
Ala Arg Met Gly Asp Gly Ala Val Phe Asp Phe
 1 5 10

<210> 953
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 953
gacatccagt tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gaggattagc agcttttaa attggtatca gcagaaacca 120
gggaaagtcc ctaagctcct gatctatact gcatccaatt tacaaaatgg ggtcccatca 180
aggttcagtg gcactggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagga ccccgctcac tttcggcgga 300
gggaccaaag tggatatcaa acga 324

<210> 954
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 954
Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Ile Ser Ser Phe
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
        35   40   45
Tyr Thr Ala Ser Asn Leu Gln Asn Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60
Thr 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 Tyr Cys Gln Gln Ser Tyr Arg Thr Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys Arg
            100   105

<210> 955
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 955
cagaggatta gcagcttt   18

<210> 956
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 956
Gln Arg Ile Ser Ser Phe
 1   5

<210> 957
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 957
actgcatcc   9

<210> 958
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 958
Thr Ala Ser
 1

<210> 959
<211> 27

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 959
caacagagtt acaggacccc gctcact 27

<210> 960
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 960
Gln Gln Ser Tyr Arg Thr Pro Leu Thr
 1   5

<210> 961
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 961
gaggtgcagc tggtggagtc tggggctgaa gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaaga cttctggata caccttcacc ggctactata tgcactggat acgacaggcc 120
cctggacaag ggcttgagtg gatgggatgg atcaacccta aaagtggtgg cacaaattat 180
gcacagaagt ttcagggcag ggtcaccatg accagggaca cgtccatcag cacagcctac 240
atggaactga gcaggctgag atccgacgac atggccgtgt attattgtgc gagaatgggg 300
gacggtgcag tgtttgactt ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 962
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 962
Glu Val Gln Leu Val Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1   5   10   15
Ser Val Lys Val Ser Cys Lys Thr Ser Gly Tyr Thr Phe Thr Gly Tyr
            20   25   30
Tyr Met His Trp Ile Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Trp Ile Asn Pro Lys Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
    50   55   60
Gln 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 Met Ala Val Tyr Tyr Cys
                85   90   95
Ala Arg Met Gly Asp Gly Ala Val Phe Asp Phe Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 963
<211> 24
<212> DNA

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 963
ggatacacct tcaccggcta ctat 24

<210> 964
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 964
Gly Tyr Thr Phe Thr Gly Tyr Tyr
1 5

<210> 965
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 965
atcaacccta aaagtggtgg caca 24

<210> 966
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 966
Ile Asn Pro Lys Ser Gly Gly Thr
1 5

<210> 967
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 967
gcgagaatgg gggacggtgc agtgtttgac ttc 33

<210> 968
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 968
Ala Arg Met Gly Asp Gly Ala Val Phe Asp Phe
1 5 10

<210> 969
<211> 327
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 969
gacatcgtga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta cccctccgct cactttcggc 300
ggagggacca aagtggatat caaacga 327

<210> 970
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 970
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45
Tyr Ala Ala Ser Ser Leu Gln Ser 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 Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro
                85   90   95
Leu Thr Phe Gly Gly Gly Thr Lys Val Asp Ile Lys Arg
            100   105

<210> 971
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 971
cagagcatta gcagctat 18

<210> 972
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 972
Gln Ser Ile Ser Ser Tyr
 1   5

<210> 973
<211> 9

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 973
gctgcatcc 9

<210> 974
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 974
Ala Ala Ser
 1

<210> 975
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 975
caacagagtt acagtacccc tccgctcact 30

<210> 976
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 976
Gln Gln Ser Tyr Ser Thr Pro Pro Leu Thr
 1   5   10

<210> 977
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 977
caggttcagc tggtgcagtc tgggactgag gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaagg cttctggata caccttcacc ggctactata tgcactgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggatgg atcaacccta acagtgatgt cacaaactat 180
gcacagaagt ttcagggcag ggtcaccttg accagggaca cgtccatcag tacagcctac 240
attgacctga gcaggctgag atctgacgac acggccattt attactgtgc gagaatgggg 300
gacggtgcag tgtttgacta ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 978
<211> 118
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 978
Gln Val Gln Leu Val Gln Ser Gly Thr 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 Gly Tyr
            20   25   30
Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Trp Ile Asn Pro Asn Ser Asp Val Thr Asn Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Val Thr Leu Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr
65   70   75   80
Ile Asp Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Ile Tyr Tyr Cys
                85   90   95
Ala Arg Met Gly Asp Gly Ala Val Phe Asp Tyr Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 979
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 979
ggatacacct tcaccggcta ctat   24

<210> 980
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 980
Gly Tyr Thr Phe Thr Gly Tyr Tyr
 1   5

<210> 981
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 981
atcaacccta acagtgatgt caca   24

<210> 982
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 982
Ile Asn Pro Asn Ser Asp Val Thr
 1   5

<210> 983
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 983
gcgagaatgg gggacggtgc agtgtttgac tac 33

<210> 984
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 984
Ala Arg Met Gly Asp Gly Ala Val Phe Asp Tyr
 1 5 10

<210> 985
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 985
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gcgcattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaaggtgct gatctctgtt gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccattagtag tctgcaacct 240
gaggattttg catcttacta ctgtcaacag agttacaata ccccgctcac tttcggcgga 300
gggaccaagg tggagatcaa acga 324

<210> 986
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 986
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Ile Ser Ser Tyr
            20 25 30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile
        35 40 45
Ser Val Ala Ser Ser Leu Gln Ser 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 Ser Tyr Tyr Cys Gln Gln Ser Tyr Asn Thr Pro Leu
                85 90 95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
            100 105

<210> 987
<211> 18

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 987
cagcgcatta gcagctat 18

<210> 988
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 988
Gln Arg Ile Ser Ser Tyr
1 5

<210> 989
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 989
gttgcatcc 9

<210> 990
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 990
Val Ala Ser
1

<210> 991
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 991
caacagagtt acaatacccc gctcact 27

<210> 992
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 992
Gln Gln Ser Tyr Asn Thr Pro Leu Thr
1 5

<210> 993
<211> 381
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 993
caggtgcagc tggtgcagtc tgggggaggc ttggtcaagc ctgggggtc cctgagactc 60
tcctgtgcag cctctggatt caccttcagt agctatgaca tgagctgggt ccgccaggct 120
ccagggaagg ggctggagtg ggtttcatac attagtagta gtggtaatac catacattac 180
gcagactctg tgaagggccg attcaccatc tccagagaca attccaagaa ctcactttat 240
ctgcaaatga acagcctgag agccgaggac acggccgtgt attactgtgc gaaagccggt 300
cccgctacgg tgacacggag gtactactac tactacggtt tggacgtctg gggccaaggg 360
accacggtca ccgtctcctc a 381

<210> 994
<211> 127
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 994
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
            20   25   30
Asp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Tyr Ile Ser Ser Ser Gly Asn Thr Ile His Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95
Ala Lys Ala Gly Pro Ala Thr Val Thr Arg Arg Tyr Tyr Tyr Tyr Tyr
            100   105   110
Gly Leu Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120   125

<210> 995
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 995
ggattcacct tcagtagcta tgac 24

<210> 996
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 996
Gly Phe Thr Phe Ser Ser Tyr Asp
 1   5

<210> 997
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 997
attagtagta gtggtaatac cata 24

<210> 998
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 998
Ile Ser Ser Ser Gly Asn Thr Ile
 1 5

<210> 999
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 999
gcgaaagccg gtcccgctac ggtgacacgg aggtactact actactacgg tttggacgtc 60

<210> 1000
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1000
Ala Lys Ala Gly Pro Ala Thr Val Thr Arg Arg Tyr Tyr Tyr Tyr Tyr
 1 5 10 15
Gly Leu Asp Val
 20

<210> 1001
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1001
gacatcgtga tgacccagtc tccatcctcc ctgtctgcat ctgtacgaga cagagtcacc 60
atcacttgcc gggcaagtca gagaattagc agctatttaa attggtttca gcagaaacca 120
gggaaagccc ctaaggtcct gatctatact gcatccagtt tgcaaaatgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagactttg caacttacta ctgtcagcag agttacagga ccccgctcac tttcggcgga 300
gggaccaagg tggagatcaa acga 324

<210> 1002
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1002
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Arg
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Ile Ser Ser Tyr
            20   25   30
Leu Asn Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile
        35   40   45
Tyr Thr Ala Ser Ser Leu Gln Asn 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 Tyr Cys Gln Gln Ser Tyr Arg Thr Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
            100   105

<210> 1003
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1003
cagagaatta gcagctat   18

<210> 1004
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1004
Gln Arg Ile Ser Ser Tyr
 1   5

<210> 1005
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1005
actgcatcc   9

<210> 1006
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1006
Thr Ala Ser
 1

<210> 1007
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1007
cagcagagtt acaggacccc gctcact 27

<210> 1008
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1008
Gln Gln Ser Tyr Arg Thr Pro Leu Thr
 1   5

<210> 1009
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1009
caggtgcagc tggtacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggtc 60
tcctgcaagg cttctggata cacattcatc ggctactata tgcactgggt gcgacaggcc 120
cctggacaag ggcttgagtg gatgggatgg atcaacccta aaagtggtgg cacaaactat 180
gcacagaagt ttcagggcag ggtcaccatg accggggaca cgtccatcag cacagcctac 240
atggagctga gcaggctgag atctgacgac acggccgtgt tttactgtgc gagaatgggg 300
gacggtgcaa tgtttgacta ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 1010
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1010
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 Ile Gly Tyr
            20   25   30
Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
        35   40   45
Gly Trp Ile Asn Pro Lys Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe
    50   55   60
Gln Gly Arg Val Thr Met Thr Gly 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 Phe Tyr Cys
                85   90   95
Ala Arg Met Gly Asp Gly Ala Met Phe Asp Tyr Trp Gly Gln Gly Thr

100 105 110
Leu Val Thr Val Ser Ser
115

<210> 1011
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1011
ggatacacat tcatcggcta ctat 24

<210> 1012
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1012
Gly Tyr Thr Phe Ile Gly Tyr Tyr
1 5

<210> 1013
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1013
atcaacccta aaagtggtgg caca 24

<210> 1014
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1014
Ile Asn Pro Lys Ser Gly Gly Thr
1 5

<210> 1015
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1015
gcgagaatgg gggacggtgc aatgtttgac tac 33

<210> 1016
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1016
Ala Arg Met Gly Asp Gly Ala Met Phe Asp Tyr
 1   5   10

<210> 1017
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1017
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagaattagc agctatttaa attggtatca gcagaaagca 120
gggaaagccc ctaaggtcct gatctatact gcatccagtt tgcaaagtgg ggtcccatca 180
cgattcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta ccccgctcac tttcggcgga 300
gggaccaagg tggagatcaa a   321

<210> 1018
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1018
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Ile Ser Ser Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Ala Gly Lys Ala Pro Lys Val Leu Ile
        35   40   45
Tyr Thr Ala Ser Ser Leu Gln Ser 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 Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 1019
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1019
cagagaatta gcagctat   18

<210> 1020
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1020
Gln Arg Ile Ser Ser Tyr
 1   5

<210> 1021
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1021
actgcatcc   9

<210> 1022
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1022
Thr Ala Ser
 1

<210> 1023
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1023
caacagagtt acagtacccc gctcact   27

<210> 1024
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1024
Gln Gln Ser Tyr Ser Thr Pro Leu Thr
 1   5

<210> 1025
<211> 375
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1025
caggtgcagc tggtacagtc tgggggaggc gtggtacagc ctgggggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatgcca tgcactgggt ccgtcaagct 120
ccagggaagg gtctggagtg ggtctctctt attagtgggg atggtggtag cacatactat 180
gcagactctg tgaagggccg attcaccatc tccagagaca acagcaaaaa ctccctgtat 240
ctgcaaatga acagtctgag aactgaggac accgccttgt attactgtgc aaaagatgat 300

agcagctcgt cctggtacta ctactactac ggtatggacg tctggggccg agggaccacg 360
gtcaccgtct cctca 375

<210> 1026
<211> 125
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1026
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Leu Ile Ser Gly Asp Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Asp Ser Ser Ser Ser Trp Tyr Tyr Tyr Tyr Tyr Gly Met
            100   105   110
Asp Val Trp Gly Arg Gly Thr Thr Val Thr Val Ser Ser
        115   120   125

<210> 1027
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1027
ggattcacct ttgatgatta tgcc 24

<210> 1028
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1028
Gly Phe Thr Phe Asp Asp Tyr Ala
 1   5

<210> 1029
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1029
attagtgggg atggtggtag caca 24

<210> 1030
<211> 8
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1030
Ile Ser Gly Asp Gly Gly Ser Thr
 1   5

<210> 1031
<211> 54
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1031
gcaaaagatg atagcagctc gtcctggtac tactactact acggtatgga cgtc   54

<210> 1032
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1032
Ala Lys Asp Asp Ser Ser Ser Ser Trp Tyr Tyr Tyr Tyr Tyr Gly Met
 1   5   10   15
Asp Val

<210> 1033
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1033
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atcacttgcc gggcaagtca gcgcattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaaggtgct gatctctgtt gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaggattttg catcttacta ctgtcaacag agttacaata ccccgctcac tttcggcgga 300
gggaccaagg tggagatcaa acga   324

<210> 1034
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1034
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Arg Ile Ser Ser Tyr
            20   25   30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile
        35   40   45
Ser Val Ala Ser Ser Leu Gln Ser 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 Ser Tyr Tyr Cys Gln Gln Ser Tyr Asn Thr Pro Leu
85 90 95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg
100 105

<210> 1035
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1035
cagcgcatta gcagctat 18

<210> 1036
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1036
Gln Arg Ile Ser Ser Tyr
1 5

<210> 1037
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1037
gttgcatcc 9

<210> 1038
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1038
Val Ala Ser
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<210> 1039
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1039
caacagagtt acaatacccc gctcact 27

<210> 1040
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1040
Gln Gln Ser Tyr Asn Thr Pro Leu Thr
 1   5

<210> 1041
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1041
gaggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttggt gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctccgat attagttgga atagtggtag caaagactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctctat 240
cttcaaatga acagtctgag aactgaggat acggcctttt attactgtgc aaaagatagt 300
aggggctacg gtctctacta ccacctcggt ttggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca   372

<210> 1042
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1042
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Gly Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Lys Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Phe Tyr Tyr Cys
                85   90   95
Ala Lys Asp Ser Arg Gly Tyr Gly Leu Tyr Tyr His Leu Gly Leu Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1043
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1043
ggattcacct ttggtgatta tacc   24

<210> 1044
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1044
Gly Phe Thr Phe Gly Asp Tyr Thr
 1   5

<210> 1045
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1045
attagttgga atagtggtag caaa   24

<210> 1046
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1046
Ile Ser Trp Asn Ser Gly Ser Lys
 1   5

<210> 1047
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1047
gcaaaagata gtaggggcta cggtctctac taccacctcg gtttggacgt c   51

<210> 1048
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1048
Ala Lys Asp Ser Arg Gly Tyr Gly Leu Tyr Tyr His Leu Gly Leu Asp
 1   5   10   15
Val

<210> 1049
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1049
gaggtgcagc tggtggagtc tgggggaggc ttggtgcagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgct gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcagat attagttgga atagtggtag tatagcctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctctat 240
cttcaaatga acagtctgag aactgaggac acggcctttt attactgtgc aaaagatagt 300
aggggctacg gtcactataa gtacctcggt ttggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 1050
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1050
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ala Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Ile Ala Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Phe Tyr Tyr Cys
                85   90   95
Ala Lys Asp Ser Arg Gly Tyr Gly His Tyr Lys Tyr Leu Gly Leu Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1051
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1051
ggattcacct ttgctgatta tacc 24

<210> 1052
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1052
Gly Phe Thr Phe Ala Asp Tyr Thr
 1   5

<210> 1053
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1053
attagttgga atagtggtag tata 24

<210> 1054
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1054
Ile Ser Trp Asn Ser Gly Ser Ile
 1 5

<210> 1055
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1055
gcaaaagata gtaggggcta cggtcactat aagtacctcg gtttggacgt c 51

<210> 1056
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1056
Ala Lys Asp Ser Arg Gly Tyr Gly His Tyr Lys Tyr Leu Gly Leu Asp
 1 5 10 15
Val

<210> 1057
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1057
gaggtgcagc tggtggagtc tgggggaggc atggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt ccccttcaat gattacacca tgcactgggt ccggcaagtc 120
ccagggaggg gcctggagtg ggtctcagat attagttgga atagcggcag taaaggctat 180
gcggactctg tgaagggtcg attcatcatc tccagagaca acgccaagaa ctccctgtac 240
ctgcaaatga acagtctgag agttgaagac acggccttgt attactgtgt aaaagatgga 300
agtggctacg ggaggttcca ttattacgct atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 1058
<211> 124
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 1058
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Met Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Pro Phe Asn Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Val Pro Gly Arg Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Lys Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Ile Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Val Lys Asp Gly Ser Gly Tyr Gly Arg Phe His Tyr Tyr Ala Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1059
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1059
ggattcccct tcaatgatta cacc   24

<210> 1060
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1060
Gly Phe Pro Phe Asn Asp Tyr Thr
 1   5

<210> 1061
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1061
attagttgga atagcggcag taaa   24

<210> 1062
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1062
Ile Ser Trp Asn Ser Gly Ser Lys
 1   5

<210> 1063
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1063
gtaaaagatg gaagtggcta cgggaggttc cattattacg ctatggacgt c 51

<210> 1064
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1064
Val Lys Asp Gly Ser Gly Tyr Gly Arg Phe His Tyr Tyr Ala Met Asp
 1   5   10   15
Val

<210> 1065
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1065
gaggtgcagc tggtggagtc tggtggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgct gattatacca tgcactgggt ccgccaagtt 120
ccagggaagg gcctggagtg ggtctcagat attagttgga atagtggtag caaagactat 180
gcggactctg tgaagggccg cttcaccatc tccagagaca acgccaagaa tttcctgtat 240
ctgcaaatga acagtctgag agctgaagac acggccttgt attactgtgt aaaatatgga 300
agtggctacg ggaaattcta cttctacgct atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 1066
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1066
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ala Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Val Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Lys Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Phe Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Val Lys Tyr Gly Ser Gly Tyr Gly Lys Phe Tyr Phe Tyr Ala Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser

115 120

<210> 1067
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1067
ggattcacct ttgctgatta tacc 24

<210> 1068
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1068
Gly Phe Thr Phe Ala Asp Tyr Thr
1 5

<210> 1069
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1069
attagttgga atagtggtag caaa 24

<210> 1070
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1070
Ile Ser Trp Asn Ser Gly Ser Lys
1 5

<210> 1071
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1071
gtaaaatatg gaagtggcta cgggaaattc tacttctacg ctatggacgt c 51

<210> 1072
<211> 17
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 1072
Val Lys Tyr Gly Ser Gly Tyr Gly Lys Phe Tyr Phe Tyr Ala Met Asp
 1   5   10   15
Val

<210> 1073
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1073
gaggtgcagc tggtgcagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgct gattatacca tgcactgggt ccggcaaact 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtggtag caaagactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag aactgaggac acggccttgt attactgtgc aaaatatgga 300
agtggctacg ggagatattt cttctacgct atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca   372

<210> 1074
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1074
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ala Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Thr Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Lys Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Tyr Gly Ser Gly Tyr Gly Arg Tyr Phe Phe Tyr Ala Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1075
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1075
ggattcacct ttgctgatta tacc   24

<210> 1076
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1076
Gly Phe Thr Phe Ala Asp Tyr Thr
 1   5

<210> 1077
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1077
attagttgga atagtggtag caaa   24

<210> 1078
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1078
Ile Ser Trp Asn Ser Gly Ser Lys
 1   5

<210> 1079
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1079
gcaaaatatg gaagtggcta cgggagatat ttcttctacg ctatggacgt c   51

<210> 1080
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1080
Ala Lys Tyr Gly Ser Gly Tyr Gly Arg Tyr Phe Phe Tyr Ala Met Asp
 1   5   10   15
Val

<210> 1081
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1081

gaggtgcagc tggtggagtc aaggggagcc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cgcctttaat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcagat attagttgga atagtaatag taaagactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca atgccaagaa ctccctctat 240
ctacaaatga acagtctgag agctgaggac acggccttgt attactgtgt aaaagatgga 300
agtggctacg ggaaattttc cctctacgct ttggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 1082
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1082
Glu Val Gln Leu Val Glu Ser Arg Gly Ala Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ala Phe Asn Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Asn Ser Lys Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Val Lys Asp Gly Ser Gly Tyr Gly Lys Phe Ser Leu Tyr Ala Leu Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1083
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1083
ggattcgcct ttaatgatta tacc 24

<210> 1084
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1084
Gly Phe Ala Phe Asn Asp Tyr Thr
 1   5

<210> 1085
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1085

attagttgga atagtaatag taaa 24

<210> 1086
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1086
Ile Ser Trp Asn Ser Asn Ser Lys
 1 5

<210> 1087
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1087
gtaaaagatg gaagtggcta cgggaaattt tccctctacg ctttggacgt c 51

<210> 1088
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1088
Val Lys Asp Gly Ser Gly Tyr Gly Lys Phe Ser Leu Tyr Ala Leu Asp
 1 5 10 15
Val

<210> 1089
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1089
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tcctgtgcag cctctggatt caaatttgat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctagagtg ggtctcagat attagttgga atagtggtag taaaggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagga ttccctatat 240
ctgcagatgg acagtctgag agctgcagac acggccttct attactgtgc aaaagataaa 300
agtggctacg gccacttcta ctactacgct atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 1090
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1090
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val His Pro Gly Arg

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 1               5                  10                  15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Lys Phe Asp Asp Tyr
            20                  25                  30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Lys Gly Tyr Ala Asp Ser Val
    50                  55                  60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asp Ser Leu Tyr
65                  70                  75                  80
Leu Gln Met Asp Ser Leu Arg Ala Ala Asp Thr Ala Phe Tyr Tyr Cys
                85                  90                  95
Ala Lys Asp Lys Ser Gly Tyr Gly His Phe Tyr Tyr Tyr Ala Met Asp
            100                 105                 110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115                 120
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<210> 1091
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1091
ggattcaaat ttgatgatta tacc 24

<210> 1092
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1092
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Gly Phe Lys Phe Asp Asp Tyr Thr
 1               5
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<210> 1093
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1093
attagttgga atagtggtag taaa 24

<210> 1094
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1094
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Ile Ser Trp Asn Ser Gly Ser Lys
 1               5
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<210> 1095
<211> 51
<212> DNA

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1095
gcaaaagata aaagtggcta cggccacttc tactactacg ctatggacgt c 51

<210> 1096
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1096
Ala Lys Asp Lys Ser Gly Tyr Gly His Phe Tyr Tyr Tyr Ala Met Asp
 1   5   10   15
Val

<210> 1097
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1097
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tcctgtacag cctctggatt caagtttgct gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcagat attagttgga atagtggtag taaaggctat 180
gcggactctg taaagggccg attcaccatc tccagagaca atgacaagaa ctccctgtat 240
ctgcaaatga acagtctgag aggtgaggac acggccttgt attactgtgc aaaagatgga 300
agtggctacg ggaggttcca cttctacgct atcgacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 1098
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1098
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val His Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Lys Phe Ala Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Lys Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Asp Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Gly Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Gly Ser Gly Tyr Gly Arg Phe His Phe Tyr Ala Ile Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1099

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1099
ggattcaagt ttgctgatta tacc 24

<210> 1100
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1100
Gly Phe Lys Phe Ala Asp Tyr Thr
1 5

<210> 1101
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
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<400> 1101
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<210> 1102
<211> 8
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<220>
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<400> 1102
Ile Ser Trp Asn Ser Gly Ser Lys
1 5

<210> 1103
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
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<400> 1103
gcaaaagatg gaagtggcta cgggaggttc cacttctacg ctatcgacgt c 51

<210> 1104
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1104
Ala Lys Asp Gly Ser Gly Tyr Gly Arg Phe His Phe Tyr Ala Ile Asp

 1   5   10   15
Val

<210> 1105
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
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<400> 1105
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tcctgtgtag cctctggatt cacctttgat gattattcca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtggtag caaagactat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agctgaagac acggccttgt attactgtgc aaaatatgga 300
agtggctacg ggaagttcta ccactacggt ttggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca   372

<210> 1106
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1106
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Lys Asp Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Tyr Gly Ser Gly Tyr Gly Lys Phe Tyr His Tyr Gly Leu Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1107
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1107
ggattcacct ttgatgatta ttcc   24

<210> 1108
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1108
Gly Phe Thr Phe Asp Asp Tyr Ser
 1   5

<210> 1109
<211> 24
<212> DNA
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<220>
<223> Synthetic

<400> 1109
attagttgga atagtggtag caaa   24

<210> 1110
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1110
Ile Ser Trp Asn Ser Gly Ser Lys
 1   5

<210> 1111
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
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<400> 1111
gcaaaatatg gaagtggcta cgggaagttc taccactacg gtttggacgt c   51

<210> 1112
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1112
Ala Lys Tyr Gly Ser Gly Tyr Gly Lys Phe Tyr His Tyr Gly Leu Asp
 1   5   10   15
Val

<210> 1113
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1113
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tcctgtgcag cctctggatt cacctttgct gattatacca tgcactgggt ccggcaggct 120
ccagggaagg gcctggagtg ggtctcagat attagttgga atagtggtag catgggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa atccctgtat 240

ctgcaaatga acagtctgag aactgaggac acggccttgt attactgtgc aaaagatgga 300
agtggctacg ggaaatactt cttctacgct atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 1114
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1114
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ala Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Met Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Gly Ser Gly Tyr Gly Lys Tyr Phe Phe Tyr Ala Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1115
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1115
ggattcacct ttgctgatta tacc 24

<210> 1116
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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<400> 1116
Gly Phe Thr Phe Ala Asp Tyr Thr
 1   5

<210> 1117
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1117
attagttgga atagtggtag catg 24

<210> 1118
<211> 8

<212> PRT
<213> Artificial Sequence

<220>
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<400> 1118
Ile Ser Trp Asn Ser Gly Ser Met
 1   5

<210> 1119
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
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<400> 1119
gcaaaagatg gaagtggcta cgggaaatac ttcttctacg ctatggacgt c   51

<210> 1120
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1120
Ala Lys Asp Gly Ser Gly Tyr Gly Lys Tyr Phe Phe Tyr Ala Met Asp
 1   5   10   15
Val

<210> 1121
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1121
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tcctgtgcag cctctggatt cacctttct gattatacta tgcattgggt ccggcaaggt 120
ccagggaagg gcctggagtg ggtctcagat attagttgga atagtggtag taaaggctat 180
acggactctg tgaagggccg attcaccatt tccagagaca acgccaagaa gtccctgtat 240
ctacaaatga acagtctgag agctgaggac acggccttgt actactgtgt aaaagatgga 300
agtggctacg ggaaatacca cttctacgct atggacgtct ggggccaagg gaccctggtc 360
accgtctcct ca   372

<210> 1122
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1122
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Gly Pro Gly Lys Gly Leu Glu Trp Val

35 40 45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Lys Gly Tyr Thr Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95
Val Lys Asp Gly Ser Gly Tyr Gly Lys Tyr His Phe Tyr Ala Met Asp
100 105 110
Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 1123
<211> 24
<212> DNA
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<220>
<223> Synthetic

<400> 1123
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<210> 1124
<211> 8
<212> PRT
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<220>
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<400> 1124
Gly Phe Thr Phe Ser Asp Tyr Thr
1 5

<210> 1125
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1125
attagttgga atagtggtag taaa 24

<210> 1126
<211> 8
<212> PRT
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<220>
<223> Synthetic

<400> 1126
Ile Ser Trp Asn Ser Gly Ser Lys
1 5

<210> 1127
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
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<400> 1127
gtaaaagatg gaagtggcta cgggaaatac cacttctacg ctatggacgt c 51

<210> 1128
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1128
Val Lys Asp Gly Ser Gly Tyr Gly Lys Tyr His Phe Tyr Ala Met Asp
 1   5   10   15
Val

<210> 1129
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1129
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tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggaatg ggtctcagat attagttgga atagtggtag cagaggctat 180
gcggactctg tgaagggccg attcaccatc tccagagata atgccgagaa ctccctgtac 240
ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgc aaaagataaa 300
agtggctacg gccactacta ctactacgct atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 1130
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1130
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val His Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Ser Arg Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Lys Ser Gly Tyr Gly His Tyr Tyr Tyr Tyr Ala Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1131
<211> 24
<212> DNA
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<220>
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<400> 1131
ggattcacct ttgatgatta tacc 24

<210> 1132
<211> 8
<212> PRT
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<220>
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<400> 1132
Gly Phe Thr Phe Asp Asp Tyr Thr
 1 5

<210> 1133
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<400> 1133
attagttgga atagtggtag caga 24

<210> 1134
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<400> 1134
Ile Ser Trp Asn Ser Gly Ser Arg
 1 5

<210> 1135
<211> 51
<212> DNA
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<220>
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<400> 1135
gcaaaagata aaagtggcta cggccactac tactactacg ctatggacgt c 51

<210> 1136
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
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<400> 1136
Ala Lys Asp Lys Ser Gly Tyr Gly His Tyr Tyr Tyr Tyr Ala Met Asp
 1 5 10 15
Val

<210> 1137
<211> 372
<212> DNA
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<220>
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<400> 1137
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tcctgtgaag cctctggatt cacctttgct gattatacct tgcactgggt ccggcaagct 120
ccagggaagg gcctggaatg ggtctcagat attagttgga atagtggcac cagaggctat 180
gcggactctg tgaggggccg attcaccatc tccagagaca acgccaagaa gtccctgtat 240
ctgcaaatga acagtctgag atctgaggac acggccttgt attactgtgt gaaagatgga 300
agtggctacg ggagatataa tttctacgct atggacgtct ggggccaagg gaccacggtc 360
accgtctcct ca 372

<210> 1138
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1138
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 Glu Ala Ser Gly Phe Thr Phe Ala Asp Tyr
            20   25   30
Thr Leu His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Asn Ser Gly Thr Arg Gly Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ser Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Val Lys Asp Gly Ser Gly Tyr Gly Arg Tyr Asn Phe Tyr Ala Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1139
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1139
ggattcacct ttgctgatta tacc 24

<210> 1140
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1140
Gly Phe Thr Phe Ala Asp Tyr Thr
 1   5

<210> 1141
<211> 24
<212> DNA
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<220>
<223> Synthetic

<400> 1141
attagttgga atagtggcac caga 24

<210> 1142
<211> 8
<212> PRT
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<220>
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<400> 1142
Ile Ser Trp Asn Ser Gly Thr Arg
1 5

<210> 1143
<211> 51
<212> DNA
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<220>
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<400> 1143
gtgaaagatg gaagtggcta cgggagatat aatttctacg ctatggacgt c 51

<210> 1144
<211> 17
<212> PRT
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<220>
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<400> 1144
Val Lys Asp Gly Ser Gly Tyr Gly Arg Tyr Asn Phe Tyr Ala Met Asp
1 5 10 15
Val

<210> 1145
<211> 369
<212> DNA
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<220>
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<400> 1145
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tcctgtgcag cctctggatt tacctttgct gactatacca tgcactgggt ccggcaaggt 120
ccagggaagg gcctggagtg ggtctcagat attggttgga atagtaatac tataggctat 180
gcggactctg tgaagggccg attcgccatc tccagagaca acgccaagaa ctccctgtat 240
cttcaaatga acagtctgcg acctgaggac acggccttat attactgtgt aaaggataaa 300
agtggctacg ggaaattcca atacggtttg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 1146
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
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<400> 1146
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ala Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Gly Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Gly Trp Asn Ser Asn Thr Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Ala Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Gln Tyr Gly Leu Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1147
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1147
ggatttacct ttgctgacta tacc   24

<210> 1148
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1148
Gly Phe Thr Phe Ala Asp Tyr Thr
 1   5

<210> 1149
<211> 24
<212> DNA
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<220>
<223> Synthetic

<400> 1149
attggttgga atagtaatac tata   24

<210> 1150
<211> 8
<212> PRT
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<220>

<223> Synthetic

<400> 1150
Ile Gly Trp Asn Ser Asn Thr Ile
 1   5

<210> 1151
<211> 48
<212> DNA
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<220>
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<400> 1151
gtaaaggata aaagtggcta cgggaaattc caatacggtt tggacgtc   48

<210> 1152
<211> 16
<212> PRT
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<220>
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<400> 1152
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Gln Tyr Gly Leu Asp Val
 1   5   10   15

<210> 1153
<211> 369
<212> DNA
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ccagggaagg gcctggagtg ggtctcagat attggttgga atagtaacag tataggctat 180
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ctccaaatga acagtctgag acctgaggac acggccttgt atttctgtgt aaaggataaa 300
agtggctacg ggaaattttt catcggtttg gacgtctggg gccaagggac aatggtcacc 360
gtctcttca   369

<210> 1154
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
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<400> 1154
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Gly Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Gly Trp Asn Ser Asn Ser Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Leu Tyr Phe Cys

85 90 95
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Phe Ile Gly Leu Asp Val
100 105 110
Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 1155
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1155
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<210> 1156
<211> 8
<212> PRT
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<220>
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<400> 1156
Gly Phe Thr Phe Asp Asp Tyr Thr
1 5

<210> 1157
<211> 24
<212> DNA
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<220>
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<400> 1157
attggttgga atagtaacag tata 24

<210> 1158
<211> 8
<212> PRT
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<220>
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<400> 1158
Ile Gly Trp Asn Ser Asn Ser Ile
1 5

<210> 1159
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1159
gtaaaggata aaagtggcta cgggaaattt ttcatcggtt tggacgtc 48

<210> 1160
<211> 16

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1160
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Phe Ile Gly Leu Asp Val
 1   5   10   15

<210> 1161
<211> 369
<212> DNA
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<220>
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ccagggaagg gcctggagtg ggtctcagat attggttgga atagtaatac taaaggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ttccctgtat 240
ctccaaatga acagtctgag acctgaggac acggccttgt atttctgtgt gaaggataaa 300
agtggctacg ggaaattttt catcggtttg gacgtctggg gccaagggac aatggtcacc 360
gtctcttca   369

<210> 1162
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1162
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 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Gly Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Gly Trp Asn Ser Asn Thr Lys Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Leu Tyr Phe Cys
                85   90   95
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Phe Ile Gly Leu Asp Val
            100   105   110
Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
        115   120

<210> 1163
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
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<400> 1163
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<210> 1164
<211> 8

<212> PRT
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<220>
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<400> 1164
Gly Phe Thr Phe Asp Asp Tyr Thr
 1   5

<210> 1165
<211> 24
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<400> 1165
attggttgga atagtaatac taaa   24

<210> 1166
<211> 8
<212> PRT
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<220>
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<400> 1166
Ile Gly Trp Asn Ser Asn Thr Lys
 1   5

<210> 1167
<211> 48
<212> DNA
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<220>
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<400> 1167
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<210> 1168
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
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<400> 1168
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Phe Ile Gly Leu Asp Val
 1   5   10   15

<210> 1169
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
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<400> 1169

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ccagggacgg gcctggagtg ggtctcagat attggttgga gtggtggtag tttaggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
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agtggctacg ggaaattcca gtacggtttg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 1170
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1170
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ala Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Gly Pro Gly Thr Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Gly Trp Ser Gly Gly Ser Leu Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Glu Met Asn Asn Leu Arg Pro Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Gln Tyr Gly Leu Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1171
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1171
ggattcacct ttgctgatta tacc 24

<210> 1172
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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<400> 1172
Gly Phe Thr Phe Ala Asp Tyr Thr
 1   5

<210> 1173
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1173

attggttgga gtggtggtag ttta 24

<210> 1174
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1174
Ile Gly Trp Ser Gly Gly Ser Leu
1 5

<210> 1175
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1175
gtaaaggata aaagtggcta cgggaaattc cagtacggtt tggacgtc 48

<210> 1176
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1176
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Gln Tyr Gly Leu Asp Val
1 5 10 15

<210> 1177
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1177
gaggtgcagc tggtggagtc tgggggaggc gtggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctgggtt taaatttgat ggttatacca tgcactgggt ccggcaaggt 120
ccagggaagg gcctggagtg ggtctcagat attggttgga atagtaacac tataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctccaaatga acagtctgag accagaggac acggccttgt atttctgtgt aaaggataaa 300
agtggctacg ggaaattttt catcggtttg gacgtctggg gccaagggac aatggtcacc 360
gtctcttca 369

<210> 1178
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1178
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Lys Phe Asp Gly Tyr

20 25 30
Thr Met His Trp Val Arg Gln Gly Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Asp Ile Gly Trp Asn Ser Asn Thr Ile Gly Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Leu Tyr Phe Cys
85 90 95
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Phe Ile Gly Leu Asp Val
100 105 110
Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
115 120

<210> 1179
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1179
gggtttaaat ttgatggtta tacc 24

<210> 1180
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1180
Gly Phe Lys Phe Asp Gly Tyr Thr
1 5

<210> 1181
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1181
attggttgga atagtaacac tata 24

<210> 1182
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1182
Ile Gly Trp Asn Ser Asn Thr Ile
1 5

<210> 1183
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1183
gtaaaggata aaagtggcta cgggaaattt ttcatcggtt tggacgtc 48

<210> 1184
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1184
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Phe Ile Gly Leu Asp Val
 1   5   10   15

<210> 1185
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1185
caggtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccggcaaggt 120
ccagggaagg gcctggagtg ggtctcagat attggttgga atagtaatac tataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaggaa ctccctgtat 240
ctgcaaatga acagtctgcg acctgaagac acggccttat attactgtgt aaaggataaa 300
agtggctacg ggaaattcca atacggtttg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 1186
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1186
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Gly Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Gly Trp Asn Ser Asn Thr Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Gln Tyr Gly Leu Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1187
<211> 24
<212> DNA
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<220>
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<400> 1187
ggattcacct ttgatgatta tacc 24

<210> 1188
<211> 8
<212> PRT
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<220>
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<400> 1188
Gly Phe Thr Phe Asp Asp Tyr Thr
 1 5

<210> 1189
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1189
attggttgga atagtaatac tata 24

<210> 1190
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1190
Ile Gly Trp Asn Ser Asn Thr Ile
 1 5

<210> 1191
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1191
gtaaaggata aaagtggcta cgggaaattc caatacggtt tggacgtc 48

<210> 1192
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1192
Val Lys Asp Lys Ser Gly Tyr Gly Lys Phe Gln Tyr Gly Leu Asp Val
 1 5 10 15

<210> 1193

<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1193
caggtgcaac tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt caagtttgat gattatacca tgcactgggt ccggcaaggt 120
ccagggaagg gcctggagtg ggtctcagac attagttgga gtggtggtag catagactat 180
acggactctg tgaagggccg attctccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agttgaagac acggccttgt attattgtgt aaaagataaa 300
agtggctacg ggaagtactc ttacggtttg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 1194
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1194
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Lys Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Gly Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Asp Ile Ser Trp Ser Gly Gly Ser Ile Asp Tyr Thr Asp Ser Val
    50   55   60
Lys Gly Arg Phe Ser Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Val Lys Asp Lys Ser Gly Tyr Gly Lys Tyr Ser Tyr Gly Leu Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1195
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1195
ggattcaagt ttgatgatta tacc 24

<210> 1196
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1196
Gly Phe Lys Phe Asp Asp Tyr Thr
 1   5

<210> 1197

<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1197
attagttgga gtggtggtag cata 24

<210> 1198
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1198
Ile Ser Trp Ser Gly Gly Ser Ile
 1 5

<210> 1199
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1199
gtaaaagata aaagtggcta cgggaagtac tcttacggtt tggacgtc 48

<210> 1200
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1200
Val Lys Asp Lys Ser Gly Tyr Gly Lys Tyr Ser Tyr Gly Leu Asp Val
 1 5 10 15

<210> 1201
<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1201
gaggtgcagc tggtggagtc tgggggaggc ttggtaaagc cgggggggtc ccttagaatc 60
tcctgtgcag cctctggatt ctctttcatt aacgcctgga tgaactgggt ccgccaggct 120
ccagggaagg ggctggagtg ggttggccgt attaaaagca taagtgatgg tgggacaaca 180
gactacgctg catccgtgaa aggcagattc accatctcaa gagaagattc aaaaaatatg 240
ctgtttctgg aaatgaatag tctgaaaacc gaggacacag ccgtgtttta ctgtaccaca 300
gaggtcgcta gaactccgaa ctactggggc cggggaaccc tggtcaccgt ctcctca 357

<210> 1202
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1202
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
 1   5   10   15
Ser Leu Arg Ile Ser Cys Ala Ala Ser Gly Phe Ser Phe Ile Asn Ala
            20   25   30
Trp Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Gly Arg Ile Lys Ser Ile Ser Asp Gly Gly Thr Thr Asp Tyr Ala Ala
    50   55   60
Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Glu Asp Ser Lys Asn Met
65   70   75   80
Leu Phe Leu Glu Met Asn Ser Leu Lys Thr Glu Asp Thr Ala Val Phe
                85   90   95
Tyr Cys Thr Thr Glu Val Ala Arg Thr Pro Asn Tyr Trp Gly Arg Gly
            100   105   110
Thr Leu Val Thr Val Ser Ser
        115

<210> 1203
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1203
ggattctctt tcattaacgc ctgg   24

<210> 1204
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1204
Gly Phe Ser Phe Ile Asn Ala Trp
 1   5

<210> 1205
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1205
attaaaagca taagtgatgg tgggacaaca   30

<210> 1206
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1206
Ile Lys Ser Ile Ser Asp Gly Gly Thr Thr
 1   5   10

<210> 1207
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1207
accacagagg tcgctagaac tccgaactac 30

<210> 1208
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1208
Thr Thr Glu Val Ala Arg Thr Pro Asn Tyr
1 5 10

<210> 1209
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1209
gaagtacagc ttgtagaatc cggcggagga ctggtacaac ctggaagaag tcttagactg 60
agttgcgcag ctagtgggtt tacattcgac gattacagca tgcattgggt gaggcaagct 120
cctggtaaag gattggaatg ggttagcggg atatcatgga actcaggaag caagggatac 180
gccgacagcg tgaaaggccg atttacaata tctagggaca acgcaaaaaa ctctctctac 240
cttcaaatga actctcttag ggcagaagac acagcattgt attattgcgc aaaatacggc 300
agtggttatg gcaagtttta tcattatgga ctggacgtgt ggggacaagg gacaacagtg 360
acagtgagta gc 372

<210> 1210
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1210
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Lys Gly Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95
Ala Lys Tyr Gly Ser Gly Tyr Gly Lys Phe Tyr His Tyr Gly Leu Asp
100 105 110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
115 120

<210> 1211
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1211
gggtttacat tcgacgatta cagc 24

<210> 1212
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1212
Gly Phe Thr Phe Asp Asp Tyr Ser
1 5

<210> 1213
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1213
atatcatgga actcaggaag caag 24

<210> 1214
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1214
Ile Ser Trp Asn Ser Gly Ser Lys
1 5

<210> 1215
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1215
gcaaaatacg gcagtggtta tggcaagttt tatcattatg gactggacgt g 51

<210> 1216
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1216
Ala Lys Tyr Gly Ser Gly Tyr Gly Lys Phe Tyr His Tyr Gly Leu Asp
 1   5   10   15
Val

<210> 1217
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1217
gaagtacaac tggtcgaatc tggaggaggt cttgttcaac ctggtcgatc acttcgcctt 60
tcttgtgccg cttctggttt cactttcgac gattatagca tgcattgggt acgacaggct 120
cccggaaaag ggctggaatg ggtgtcagga attagttgga actcaggaag tattggatac 180
gctgattcag tcaaaggacg cttcacaatc tcaagggaca acgctaaaaa ctcactttat 240
ttgcaaatga actctctccg cgctgaagat accgctctct attattgcgc caaagatggg 300
tctggttacg gttattttta ctactatgga atggacgttt ggggccaagg aacaactgtc 360
acagtatcat cc   372

<210> 1218
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1218
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Gly Ser Gly Tyr Gly Tyr Phe Tyr Tyr Tyr Gly Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1219
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1219
ggtttcactt tcgacgatta tagc   24

<210> 1220
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1220
Gly Phe Thr Phe Asp Asp Tyr Ser
 1   5

<210> 1221
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1221
attagttgga actcaggaag tatt   24

<210> 1222
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1222
Ile Ser Trp Asn Ser Gly Ser Ile
 1   5

<210> 1223
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1223
gccaaagatg ggtctggtta cggttatttt tactactatg gaatggacgt t   51

<210> 1224
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1224
Ala Lys Asp Gly Ser Gly Tyr Gly Tyr Phe Tyr Tyr Tyr Gly Met Asp
 1   5   10   15
Val

<210> 1225
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1225
gaagtgcaac tcgttgaaag cggaggagga ctggtccagc ccggcagatc tctcagattg 60

tcttgcgctg catccggatt tacatttgac gactattcaa tgcactgggt acggcaagcc 120
ccaggtaaag gactcgaatg ggtaagcggc atatcttgga actcaggcag tattggctac 180
gcagattcag taaaaggaag attcactatt tcaagggata atgctaagaa cagtctctac 240
ttgcaaatga atagcttgcg cgcagaagat acagcacttt attattgtgc aaaagatgga 300
agcggttatg ggaaatttta ttattatggt atggatgtat ggggtcaagg tacaacagtt 360
actgtgtcaa gt 372

<210> 1226
<211> 124
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1226
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Gly Ser Gly Tyr Gly Lys Phe Tyr Tyr Tyr Gly Met Asp
            100   105   110
Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1227
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1227
ggatttacat ttgacgacta ttca 24

<210> 1228
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1228
Gly Phe Thr Phe Asp Asp Tyr Ser
 1   5

<210> 1229
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1229
atatcttgga actcaggcag tatt 24

<210> 1230
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1230
Ile Ser Trp Asn Ser Gly Ser Ile
 1   5

<210> 1231
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1231
gcaaaagatg gaagcggtta tgggaaattt tattattatg gtatggatgt a   51

<210> 1232
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1232
Ala Lys Asp Gly Ser Gly Tyr Gly Lys Phe Tyr Tyr Tyr Gly Met Asp
 1   5   10   15
Val

<210> 1233
<211> 324
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1233
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattagc agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gatctatgct gcatccagtt tgcaaagtgg ggtcccgtca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttacagta cccctccgat caccttcggc 300
caagggacac gactggagat taaa   324

<210> 1234
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1234
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1   5   10   15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr

20 25 30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45
Tyr Ala Ala Ser Ser Leu Gln Ser 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 Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro
85 90 95
Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys
100 105

<210> 1235
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1235
cagagcatta gcagctat 18

<210> 1236
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1236
Gln Ser Ile Ser Ser Tyr
1 5

<210> 1237
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1237
gctgcatcc 9

<210> 1238
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1238
Ala Ala Ser
1

<210> 1239
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1239
caacagagtt acagtacccc tccgatcacc 30

<210> 1240
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1240
Gln Gln Ser Tyr Ser Thr Pro Pro Ile Thr
 1   5   10

<210> 1241
<211> 382
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1241
gaagtacagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgtag cctctggatt cacctttaat gattatgcca tgcactgggt ccggcaagct 120
ccagggaagg gcctggaatg ggtctcagtt attagttgga atagtgatag cataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatgc acagtctgag agctgaggac acggccttgt attactgtgc aaaagataat 300
cactatggtt cggggagtta ttactactac caatacggta tggacgtctg gggccaaggg 360
accacggtca ccgtctcctc ag 382

<210> 1242
<211> 127
<212> PRT
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<220>
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<400> 1242
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 1   5   10   15
Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe Asn Asp Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Val Ile Ser Trp Asn Ser Asp Ser Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met His Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Asn His Tyr Gly Ser Gly Ser Tyr Tyr Tyr Tyr Gln Tyr
            100   105   110
Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120   125

<210> 1243
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1243
ggattcacct ttaatgatta tgcc 24

<210> 1244
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1244
Gly Phe Thr Phe Asn Asp Tyr Ala
 1 5

<210> 1245
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1245
attagttgga atagtgatag cata 24

<210> 1246
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1246
Ile Ser Trp Asn Ser Asp Ser Ile
 1 5

<210> 1247
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1247
gcaaaagata atcactatgg ttcggggagt tattactact accaatacgg tatggacgtc 60

<210> 1248
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1248
Ala Lys Asp Asn His Tyr Gly Ser Gly Ser Tyr Tyr Tyr Tyr Gln Tyr
 1 5 10 15
Gly Met Asp Val
 20

<210> 1249
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1249
gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtggtag tataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa gtccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgc aaaagataat 300
agtggctacg gtcactacta ctacggaatg gacgtctggg gccaagggac cacggtcacc 360
gtcgcctca 369

<210> 1250
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1250
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Asn Ser Gly Tyr Gly His Tyr Tyr Tyr Gly Met Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ala Ser
        115   120

<210> 1251
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1251
ggattcacct ttgatgatta tacc 24

<210> 1252
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1252
Gly Phe Thr Phe Asp Asp Tyr Thr
 1   5

<210> 1253
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1253
attagttgga atagtggtag tata 24

<210> 1254
<211> 8
<212> PRT
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<220>
<223> Synthetic

<400> 1254
Ile Ser Trp Asn Ser Gly Ser Ile
 1 5

<210> 1255
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1255
gcaaaagata atagtggcta cggtcactac tactacggaa tggacgtc 48

<210> 1256
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1256
Ala Lys Asp Asn Ser Gly Tyr Gly His Tyr Tyr Tyr Gly Met Asp Val
 1 5 10 15

<210> 1257
<211> 320
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1257
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ctctcctgca gggccagtca gagtgttagc agcaacttag cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcac tatattaact ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa 320

<210> 1258
<211> 108
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1258
Ala Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro
 1   5   10   15
Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser
            20   25   30
Asn Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
        35   40   45
Ile Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser
    50   55   60
Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln
65   70   75   80
Ser Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Ile Asn Trp Pro
                85   90   95
Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 1259
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1259
cagagtgtta gcagcaac   18

<210> 1260
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1260
Gln Ser Val Ser Ser Asn
 1   5

<210> 1261
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1261
ggtgcatcc   9

<210> 1262
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1262
Gly Ala Ser
 1

<210> 1263
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1263
cagcactata ttaactggcc tctcact 27

<210> 1264
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1264
Gln His Tyr Ile Asn Trp Pro Leu Thr
 1   5

<210> 1265
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1265
gaagtgcaac tggtggagtc tgggggaggc ttagtacagc ctggcgggtc cctgagactc 60
tcctgtgcag ccactggatt cacctttgat gattttacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt atcagttgga atagtggtag cataggctat 180
gtggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttgt actactgtgc aaaagataat 300
agtggctacg gctattatta ctacggtatg gacgtctggg gccaagggac cacggtcacc 360
gtctcctca 369

<210> 1266
<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1266
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 Thr Gly Phe Thr Phe Asp Asp Phe
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Val Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Asn Ser Gly Tyr Gly Tyr Tyr Tyr Tyr Gly Met Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1267
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1267
ggattcacct ttgatgattt tacc 24

<210> 1268
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1268
Gly Phe Thr Phe Asp Asp Phe Thr
1 5

<210> 1269
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1269
atcagttgga atagtggtag cata 24

<210> 1270
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1270
Ile Ser Trp Asn Ser Gly Ser Ile
1 5

<210> 1271
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1271
gcaaaagata atagtggcta cggctattat tactacggta tggacgtc 48

<210> 1272
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1272
Ala Lys Asp Asn Ser Gly Tyr Gly Tyr Tyr Tyr Tyr Gly Met Asp Val
 1   5   10   15

<210> 1273
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1273
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca cagtgttagc aggaactcag cctggtacca gcagaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagaa ttcactctca ccatcagcag cctgcagtct 240
gaagattttg caatttatta ctgtcagcag tataataatt ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa a   321

<210> 1274
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1274
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser His Ser Val Ser Arg Asn
            20   25   30
Ser Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 1275
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1275
cacagtgtta gcaggaac   18

<210> 1276
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1276
His Ser Val Ser Arg Asn
 1   5

<210> 1277
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1277
ggtgcatcc 9

<210> 1278
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1278
Gly Ala Ser
1

<210> 1279
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1279
cagcagtata ataattggcc tctcact 27

<210> 1280
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1280
Gln Gln Tyr Asn Asn Trp Pro Leu Thr
1 5

<210> 1281
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1281
gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtggtag tataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa gtccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttgt attactgtgc aaaagataat 300
agtggctacg gtcactacta ctacggaatg gacgtctggg gccaagggac cacggtcacc 360
gtcgcctca 369

<210> 1282

<211> 123
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1282
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Asn Ser Gly Tyr Gly His Tyr Tyr Tyr Gly Met Asp Val
            100   105   110
Trp Gly Gln Gly Thr Thr Val Thr Val Ala Ser
        115   120

<210> 1283
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1283
ggattcacct ttgatgatta tacc   24

<210> 1284
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1284
Gly Phe Thr Phe Asp Asp Tyr Thr
 1   5

<210> 1285
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1285
attagttgga atagtggtag tata   24

<210> 1286
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1286
Ile Ser Trp Asn Ser Gly Ser Ile
 1   5

<210> 1287
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1287
gcaaaagata atagtggcta cggtcactac tactacggaa tggacgtc   48

<210> 1288
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1288
Ala Lys Asp Asn Ser Gly Tyr Gly His Tyr Tyr Tyr Gly Met Asp Val
 1   5   10   15

<210> 1289
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1289
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttagc agcaacttag cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcac tatattaact ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa a   321

<210> 1290
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1290
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Tyr Ile Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
                                Page 274

100 105

<210> 1291
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1291
cagagtgtta gcagcaac 18

<210> 1292
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1292
Gln Ser Val Ser Ser Asn
1 5

<210> 1293
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1293
ggtgcatcc 9

<210> 1294
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1294
Gly Ala Ser
1

<210> 1295
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1295
cagcactata ttaactggcc tctcact 27

<210> 1296
<211> 9
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 1296
Gln His Tyr Ile Asn Trp Pro Leu Thr
 1   5

<210> 1297
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1297
caggtgcagc tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
tcctgtgctg cgtctggatt taccttcaga agttatgcca tgcactgggt ccgccaggct 120
ccaggcaagg ggctggagtg ggtggcaatg gtatactatg atggaaataa tcaatactat 180
gcagactccg tgaggggccg attcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctgag agccgatgac acggctgtgt atttctgtgc gcgagggcct 300
gggtacaact ggctcgaccc ctggggccag ggaaccctgg tcaccgtctc ctca   354

<210> 1298
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1298
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Arg Ser Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ala Met Val Tyr Tyr Asp Gly Asn Asn Gln Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala Val Tyr Phe Cys
                85   90   95
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
            100   105   110
Leu Val Thr Val Ser Ser
        115

<210> 1299
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1299
ggatttacct tcagaagtta tgcc   24

<210> 1300
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1300
Gly Phe Thr Phe Arg Ser Tyr Ala
 1   5

<210> 1301
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1301
gtatactatg atggaaataa tcaa   24

<210> 1302
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1302
Val Tyr Tyr Asp Gly Asn Asn Gln
 1   5

<210> 1303
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1303
gcgcgagggc ctgggtacaa ctggctcgac ccc   33

<210> 1304
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1304
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 1305
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1305
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttagc aggaacttgg cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tatcccggcc 180
aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcag tataataact ggcctctcac tttcggcgga 300

gggaccaagg tggtgatcaa a 321

<210> 1306
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1306
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Arg Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Val Ile Lys
            100   105

<210> 1307
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1307
cagagtgtta gcaggaac 18

<210> 1308
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1308
Gln Ser Val Ser Arg Asn
 1   5

<210> 1309
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1309
ggtgcatcc 9

<210> 1310
<211> 3
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 1310
Gly Ala Ser
 1

<210> 1311
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1311
cagcagtata ataactggcc tctcact 27

<210> 1312
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1312
Gln Gln Tyr Asn Asn Trp Pro Leu Thr
 1   5

<210> 1313
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1313
caggtgcagt tggtggagtc tgggggaggc gtggtccagc ctgggaggtc cctgagactc 60
gcctgtgttg cgtctggatt caccttcaga agttatggca tgcactgggt ccgccaggct 120
ccaggcaagg gactgcagtg ggtggcaatg atttactatg atggtaagaa taaatattat 180
gcagactccg tgaggggccg attcaccatc tccagagaca attccaagaa cacactgtat 240
ctgcaaatga acaatctgag agtcgaggac acggctatgt atttctgtgc gcgagggcct 300
gggtacaatt ggctcgaccc ctggggccag ggaaccctgg tcactgtttc ctca 354

<210> 1314
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1314
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ala Cys Val Ala Ser Gly Phe Thr Phe Arg Ser Tyr
            20   25   30
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Gln Trp Val
        35   40   45
Ala Met Ile Tyr Tyr Asp Gly Lys Asn Lys Tyr Tyr Ala Asp Ser Val
    50   55   60
Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65   70   75   80
Leu Gln Met Asn Asn Leu Arg Val Glu Asp Thr Ala Met Tyr Phe Cys
                85   90   95

Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser
115

<210> 1315
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1315
ggattcacct tcagaagtta tggc 24

<210> 1316
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1316
Gly Phe Thr Phe Arg Ser Tyr Gly
1 5

<210> 1317
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1317
atttactatg atggtaagaa taaa 24

<210> 1318
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1318
Ile Tyr Tyr Asp Gly Lys Asn Lys
1 5

<210> 1319
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1319
gcgcgagggc ctgggtacaa ttggctcgac ccc 33

<210> 1320
<211> 11
<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1320
Ala Arg Gly Pro Gly Tyr Asn Trp Leu Asp Pro
 1   5   10

<210> 1321
<211> 321
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1321
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagaattagc agcaacttgg cctggtacca gcaaaaacct 120
ggccaggctc ccaggctcct catctatggt gcatccacca gggccactgg tagcccagcc 180
aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctgcagtct 240
gaggatgttg cagtttatta ctgtcagcaa catcataact ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa a   321

<210> 1322
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1322
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Arg Ile Ser Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ser Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln His His Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 1323
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1323
cagagaatta gcagcaac   18

<210> 1324
<211> 6
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic

<400> 1324
Gln Arg Ile Ser Ser Asn
 1   5

<210> 1325
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1325
ggtgcatcc   9

<210> 1326
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1326
Gly Ala Ser
 1

<210> 1327
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1327
cagcaacatc ataactggcc tctcact   27

<210> 1328
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1328
Gln Gln His His Asn Trp Pro Leu Thr
 1   5

<210> 1329
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1329
Asp 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 Tyr
            20   25   30

Thr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Ile
        35   40   45
Gly Tyr Ile Asn Pro Ser Arg Gly Tyr Thr Asn Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Thr Thr Asp Lys Ser Thr Ser Thr Ala Tyr
65   70   75   80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Thr Tyr Tyr Cys
                85   90   95
Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr Trp Gly Gln Gly
            100   105   110
Thr Thr Val Thr Val Ser Ser
        115

<210> 1330
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1330
Gly Tyr Thr Phe Thr Arg Tyr Thr
 1   5

<210> 1331
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1331
Ile Asn Pro Ser Arg Gly Tyr Thr
 1   5

<210> 1332
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1332
Ala Arg Tyr Tyr Asp Asp His Tyr Cys Leu Asp Tyr
 1   5   10

<210> 1333
<211> 106
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1333
Asp 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 Ser Tyr Met
            20   25   30
Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Trp Ile Tyr
        35   40   45

Asp Thr Ser Lys Val Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
    50   55   60
Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Asn Ser Leu Glu Ala Glu
65   70   75   80
Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Asn Pro Leu Thr
                85   90   95
Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 1334
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1334
Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Tyr
 1   5   10

<210> 1335
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1335
Asp Thr Ser
 1

<210> 1336
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1336
Gln Gln Trp Ser Ser Asn Pro Leu Thr
 1   5

<210> 1337
<211> 367
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1337
gaagtgcagc tggtggagtc tgggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttat gattatgcca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt attagctgga atagtgatac cataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttat attactgtac aaaagatggc 300
agctatggtc acttctactc cggtttggac gtctggggcc aagggaccac ggtcaccgtc 360
tcctcag   367

<210> 1338
<211> 122

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1338
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Tyr Asp Tyr
            20   25   30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Asp Thr Ile Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Thr Lys Asp Gly Ser Tyr Gly His Phe Tyr Ser Gly Leu Asp Val Trp
            100   105   110
Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120

<210> 1339
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1339
ggattcacct tttatgatta tgcc   24

<210> 1340
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1340
Gly Phe Thr Phe Tyr Asp Tyr Ala
 1   5

<210> 1341
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1341
attagctgga atagtgatac cata   24

<210> 1342
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1342
Ile Ser Trp Asn Ser Asp Thr Ile
 1   5

<210> 1343
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1343
acaaaagatg gcagctatgg tcacttctac tccggtttgg acgtc   45

<210> 1344
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1344
Thr Lys Asp Gly Ser Tyr Gly His Phe Tyr Ser Gly Leu Asp Val
 1   5   10   15

<210> 1345
<211> 322
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1345
gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttagc agcaacttag cctggtacca gcagaaacct 120
ggccaggctc cccgactcct catctatggt acatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcaacaa tataataact ggccgctcac tttcggcgga 300
gggaccaagg tggagatcaa ac   322

<210> 1346
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1346
Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1   5   10   15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
            20   25   30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Gly Thr Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 1347
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1347
cagagtgtta gcagcaac 18

<210> 1348
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1348
Gln Ser Val Ser Ser Asn
 1 5

<210> 1349
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1349
ggtacatcc 9

<210> 1350
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1350
Gly Thr Ser
 1

<210> 1351
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1351
caacaatata ataactggcc gctcact 27

<210> 1352
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1352
Gln Gln Tyr Asn Asn Trp Pro Leu Thr
 1   5

<210> 1353
<211> 379
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1353
gaagagcaac tggtggagtc tgggggagac ttggtacagc ctggcaggtc cctgaggctc 60
tcctgtgcag cctctggatt cacctttcat gattacacca tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtggaag tctaggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa gtccctgtat 240
ctgcaaatga acagtctgag agctgaggac acggccttat attactgtgc aaaagatccc 300
tcttatggtt cggggtcgta tcactcctac tacggaatgg acgtctgggg ccaagggacc 360
acggtcactg tctcctcag   379

<210> 1354
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1354
Glu Glu Gln Leu Val Glu Ser Gly Gly Asp Leu Val Gln Pro Gly Arg
 1   5   10   15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe His Asp Tyr
            20   25   30
Thr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45
Ser Gly Ile Ser Trp Asn Ser Gly Ser Leu Gly Tyr Ala Asp Ser Val
    50   55   60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr
65   70   75   80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
                85   90   95
Ala Lys Asp Pro Ser Tyr Gly Ser Gly Ser Tyr His Ser Tyr Tyr Gly
            100   105   110
Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
        115   120   125

<210> 1355
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1355
ggattcacct ttcatgatta cacc   24

<210> 1356
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1356
Gly Phe Thr Phe His Asp Tyr Thr
 1   5

<210> 1357
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1357
attagttgga atagtggaag tcta   24

<210> 1358
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1358
Ile Ser Trp Asn Ser Gly Ser Leu
 1   5

<210> 1359
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1359
gcaaaagatc cctcttatgg ttcggggtcg tatcactcct actacggaat ggacgtc   57

<210> 1360
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1360
Ala Lys Asp Pro Ser Tyr Gly Ser Gly Ser Tyr His Ser Tyr Tyr Gly
 1   5   10   15
Met Asp Val

<210> 1361
<211> 322
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1361
gaaattgtgt tgacacagtc tccagccacc ctgtctttgt ctccagggga aagagccacc 60
ctctcctgct gggccagtca gagtattagc aggtacttag tctggtacca acagaaatgt 120
ggccaggcac ccagactcct catctatgaa gcatctaaga gggccaccgg catcccagtc 180

aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctagagtct 240
gaagattttg cagtttatta ttgtcagcag cgtttcaatt ggcctctcac tttcggcgga 300
gggaccaagg tggagatcaa ac 322

<210> 1362
<211> 107
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1362
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 Trp Ala Ser Gln Ser Ile Ser Arg Tyr
            20   25   30
Leu Val Trp Tyr Gln Gln Lys Cys Gly Gln Ala Pro Arg Leu Leu Ile
        35   40   45
Tyr Glu Ala Ser Lys Arg Ala Thr Gly Ile Pro Val Arg Phe Ser Gly
    50   55   60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Glu Ser
65   70   75   80
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Arg Phe Asn Trp Pro Leu
                85   90   95
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 1363
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1363
cagagtatta gcaggtac 18

<210> 1364
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1364
Gln Ser Ile Ser Arg Tyr
 1   5

<210> 1365
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1365
gaagcatct 9

<210> 1366
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1366
Glu Ala Ser
 1

<210> 1367
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1367
cagcagcgtt tcaattggcc tctcact 27

<210> 1368
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1368
Gln Gln Arg Phe Asn Trp Pro Leu Thr
 1   5

<210> 1369
<211> 297
<212> PRT
<213> Artificial Sequence

<220>
<223> hCD20

<400> 1369
Met Thr Thr Pro Arg Asn Ser Val Asn Gly Thr Phe Pro Ala Glu Pro
 1   5   10   15
Met Lys Gly Pro Ile Ala Met Gln Ser Gly Pro Lys Pro Leu Phe Arg
            20   25   30
Arg Met Ser Ser Leu Val Gly Pro Thr Gln Ser Phe Phe Met Arg Glu
        35   40   45
Ser Lys Thr Leu Gly Ala Val Gln Ile Met Asn Gly Leu Phe His Ile
    50   55   60
Ala Leu Gly Gly Leu Leu Met Ile Pro Ala Gly Ile Tyr Ala Pro Ile
65   70   75   80
Cys Val Thr Val Trp Tyr Pro Leu Trp Gly Gly Ile Met Tyr Ile Ile
                85   90   95
Ser Gly Ser Leu Leu Ala Ala Thr Glu Lys Asn Ser Arg Lys Cys Leu
            100   105   110
Val Lys Gly Lys Met Ile Met Asn Ser Leu Ser Leu Phe Ala Ala Ile
        115   120   125
Ser Gly Met Ile Leu Ser Ile Met Asp Ile Leu Asn Ile Lys Ile Ser
    130   135   140
His Phe Leu Lys Met Glu Ser Leu Asn Phe Ile Arg Ala His Thr Pro
145   150   155   160
Tyr Ile Asn Ile Tyr Asn Cys Glu Pro Ala Asn Pro Ser Glu Lys Asn
                165   170   175
Ser Pro Ser Thr Gln Tyr Cys Tyr Ser Ile Gln Ser Leu Phe Leu Gly
            180   185   190
Ile Leu Ser Val Met Leu Ile Phe Ala Phe Phe Gln Glu Leu Val Ile
        195   200   205

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Ala Gly Ile Val Glu Asn Glu Trp Lys Arg Thr Cys Ser Arg Pro Lys
    210                 215                 220
Ser Asn Ile Val Leu Leu Ser Ala Glu Glu Lys Lys Glu Gln Thr Ile
225                 230                 235                 240
Glu Ile Lys Glu Glu Val Val Gly Leu Thr Glu Thr Ser Ser Gln Pro
                245                 250                 255
Lys Asn Glu Glu Asp Ile Glu Ile Ile Pro Ile Gln Glu Glu Glu Glu
            260                 265                 270
Glu Glu Thr Glu Thr Asn Phe Pro Glu Pro Pro Gln Asp Gln Glu Ser
        275                 280                 285
Ser Pro Ile Glu Asn Asp Ser Ser Pro
    290                 295


<210> 1370
<211> 104
<212> PRT
<213> Artificial Sequence

<220>
<223> hCD3 epsilon

<400> 1370
Asp Gly Asn Glu Glu Met Gly Gly Ile Thr Gln Thr Pro Tyr Lys Val
 1               5                  10                  15
Ser Ile Ser Gly Thr Thr Val Ile Leu Thr Cys Pro Gln Tyr Pro Gly
            20                  25                  30
Ser Glu Ile Leu Trp Gln His Asn Asp Lys Asn Ile Gly Gly Asp Glu
        35                  40                  45
Asp Asp Lys Asn Ile Gly Ser Asp Glu Asp His Leu Ser Leu Lys Glu
    50                  55                  60
Phe Ser Glu Leu Glu Gln Ser Gly Tyr Tyr Val Cys Tyr Pro Arg Gly
65                  70                  75                  80
Ser Lys Pro Glu Asp Ala Asn Phe Tyr Leu Tyr Leu Arg Ala Arg Val
                85                  90                  95
Ser Glu Asn Ser Met Glu Met Asp
            100


<210> 1371
<211> 79
<212> PRT
<213> Artificial Sequence

<220>
<223> hCD3 delta

<400> 1371
Phe Lys Ile Pro Ile Glu Glu Leu Glu Asp Arg Val Phe Val Asn Cys
 1               5                  10                  15
Asn Thr Ser Ile Thr Trp Val Glu Gly Thr Val Gly Thr Leu Leu Ser
            20                  25                  30
Asp Ile Thr Arg Leu Asp Leu Gly Lys Arg Ile Leu Asp Pro Arg Gly
        35                  40                  45
Ile Tyr Arg Cys Asn Gly Thr Asp Ile Tyr Lys Asp Lys Glu Ser Thr
    50                  55                  60
Val Gln Val His Tyr Arg Met Ser Gln Ser Ser Val Glu Leu Asp
65                  70                  75


<210> 1372
<211> 227
<212> PRT
<213> Artificial Sequence

<220>
<223> hFc-delta-Adp
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<400> 1372
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
 1   5   10   15
Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
            20   25   30
Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
        35   40   45
Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
    50   55   60
His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
65   70   75   80
Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
                85   90   95
Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
            100   105   110
Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
        115   120   125
Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser
    130   135   140
Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
145   150   155   160
Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
                165   170   175
Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
            180   185   190
Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
        195   200   205
His Glu Ala Leu His Asn Arg Phe Thr Gln Lys Ser Leu Ser Leu Ser
    210   215   220
Pro Gly Lys
225

<210> 1373
<211> 227
<212> PRT
<213> Artificial Sequence

<220>
<223> hFc

<400> 1373
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly
 1   5   10   15
Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met
            20   25   30
Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His
        35   40   45
Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val
    50   55   60
His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr
65   70   75   80
Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
                85   90   95
Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile
            100   105   110
Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val
        115   120   125
Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser
    130   135   140
Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
145   150   155   160
Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
                165   170   175
Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val
            180   185   190
Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met
        195   200   205

His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser
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Pro Gly Lys
225

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

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Gln Asp Trp Met Ser Gly Lys Glu Phe Lys Cys Lys Val Asn Asn Lys
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Asp Leu Pro Ala Pro Ile Glu Arg Thr Ile Ser Lys Pro Lys Gly Ser
        115                 120                 125
Val Arg Ala Pro Gln Val Tyr Val Leu Pro Pro Pro Glu Glu Glu Met
    130                 135                 140
Thr Lys Lys Gln Val Thr Leu Thr Cys Met Val Thr Asp Phe Met Pro
145                 150                 155                 160
Glu Asp Ile Tyr Val Glu Trp Thr Asn Asn Gly Lys Thr Glu Leu Asn
                165                 170                 175
Tyr Lys Asn Thr Glu Pro Val Leu Asp Ser Asp Gly Ser Tyr Phe Met
            180                 185                 190
Tyr Ser Lys Leu Arg Val Glu Lys Lys Asn Trp Val Glu Arg Asn Ser
        195                 200                 205
Tyr Ser Cys Ser Val Val His Glu Gly Leu His Asn His His Thr Thr
    210                 215                 220
Lys Ser Phe Ser Arg Thr Pro Gly Lys
225                 230
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